SOUTHEAST SUPPLY ENHANCEMENT PROJECT – EDEN LOOP – VA PORTION and COMPRESSOR STATION 165

Pittsylvania County, Virginia

WSSI # P.WSI0000778

Waters of the U.S. (Including Wetlands) Delineation

September 16, 2024
Updated April 22, 2025

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Waters of the U.S. (Including Wetlands) Delineation

Southeast Supply Enhancement Project – Eden Loop – VA Portion and Compressor Station 165 (±1,633 acres) WSSI # P.WSI0000778

Introduction

Wetland Studies and Solutions, Inc. (WSSI) has determined the boundaries of the wetlands and other waters of the U.S. (WOTUS, i.e., streams and ponds) on the Virginia portion of the Southeast Supply Enhancement Project – Eden Loop (SSEP) survey area, which includes Compressor Station 165. As discussed in this report, wetlands and other WOTUS are present within the survey area including ephemeral, intermittent, and perennial tributaries to Sandy River, Hardys Creek, Trayner Branch, Sandy Creek, Banister River, White Oak Creek, Trotters Creek, Cherrystone Creek, and Little Cherrystone Creek. Other WOTUS found within the Virginia portion of the survey area include palustrine forested (PFO), palustrine scrub-shrub (PSS), and palustrine emergent (PEM) wetlands as well as open water ponds (POW) associated with the above-mentioned waterbodies. Our findings are depicted (as a surveyed map) on the updated Waters of the U.S. (Including Wetlands) Delineation Map (Attachment I) and are discussed briefly below.

This report and associated mapping have been updated to incorporate survey area revisions and agency comments. On November 19-21, 2024, the Virginia Department of Environmental Quality (DEQ) conducted field site visits with WSSI staff as part of the State Surface Water Determination (SSWD) request. Additionally, on February 26 and 27, 2025, the U.S. Army Corps of Engineers (COE) and DEQ conducted joint field site visits with WSSI staff as part of the Preliminary Jurisdictional Determination (PJD) and SSWD requests. The results of the agency site visits are summarized in Exhibit 15.

Project Location

The survey area extends from the Virginia/North Carolina border near the Berry Hill Road (U.S. Hwy 311)/Buffalo Road intersection to north of the Transco Pipeline compressor station (Compressor Station 165) located on Transco Road (U.S. Route 692) in Pittsylvania County, Virginia. Exhibit 1 is a vicinity map depicting the updated survey area's approximate boundaries and general location. Note that WSSI only delineated the portion of Eden Loop located in Virginia. The surrounding land use comprises residential properties, farms, forests, paved and unpaved roads, and a landfill.

Methodology

This wetland delineation was performed pursuant to the "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1 (1987 Manual) and subsequent guidance, and modified by the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region,* Version 2.0 dated April 2012 (EMP Manual). Because the survey area consists of a linear corridor, transects were not established, and the survey area was systematically searched for jurisdictional wetlands and other WOTUS. The wetland delineation was performed in the field utilizing the three-parameter approach (hydrophytic vegetation, hydric soils, and wetland hydrology) as set forth in the 1987 Manual and streams were delineated at their ordinary high water mark (OHWM). The following paragraphs provide additional general information as outlined in the EMP Manual regarding the wetland parameters that were investigated in the field:

1. Hydrophytic Vegetation:

   Hydrophytic vegetation occurs where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present. Under normal circumstances, vegetation is hydrophytic when the plant community is dominated by species that have a wetland indicator status of facultative (FAC) or wetter, which indicates they can tolerate prolonged inundation or soil saturation during the growing season.

   Per the U.S. Army Corps of Engineers Engineer Research and Development Center's *National Wetland Plant List Indicator Rating Definitions* dated July 2012[1], the following definitions represent the short version of the wetland indicator status ratings. These short definitions represent the longer version, which is more descriptive and includes examples of plant species from various habitats; however, the short version is applicable for "daily" use.

   - OBL (Obligate Wetland Plants) – Almost always occur in wetlands.
   - FACW (Facultative Wetland Plants) – Usually occur in wetlands, but may occur in non-wetlands.
   - FAC (Facultative Wetland Plants) – Occur in wetlands and non-wetlands.
   - FACU (Facultative Upland Plants) – Usually occur in non-wetlands, but may occur in wetlands
   - UPL (Upland Plants) – Almost never occur in wetlands.

[1] *Lichvar R.W., N.C. Melvin, M.L. Butterwick, and W.N. Kirchner. 2012. National Wetland Plant List Indicator Rating Definitions. ERDC/CRREL TN-12-1. Hanover, NH: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory*

2. Hydric Soils:

The National Technical Committee for Hydric Soils (NTCHS) defines a hydric soil as a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part.[2] Soil color can reflect the long-term effect of anaerobic conditions due to saturated soil conditions and is one of the more common factors used to determine whether or not a soil is hydric. Soil color is determined in the field by the Munsell Soil Chart. Other field evidence of hydric soil includes sulfidic odor, accumulation of organic material, and concretions (or localized concentrations) of iron and/or manganese oxides at or near the soil surface.

3. Hydrology:

According to the 1987 Manual, wetland hydrology encompasses all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface at some time during the growing season. Areas with evident characteristics of wetland hydrology are those where the presence of water has an overriding influence on characteristics of vegetation and soils due to anaerobic and reducing conditions, respectively. Such characteristics are usually present in areas that are inundated or have soils that are saturated to the surface for sufficient duration to develop hydric soils and support vegetation typically adapted for life in periodically anaerobic soil conditions.

As stated in the EMP Manual, hydrology indicators are evidence that a site has a continuous wetland hydrologic regime; however, they are often the most transitory of the wetland indicators. Seasonal, temporary, and long-term weather conditions can have a direct impact on field observations. Additionally, hydrology indicators may be impacted by natural processes or human activities.

Wetland hydrology indicators are divided into two categories, primary and secondary, and are based on the level of reliability in the region. One primary indicator is sufficient to assume the presence of wetland hydrology. Without a primary indicator, two or more secondary indicators are required to meet the wetland hydrology parameter. Examples of primary indicators of wetland hydrology include but are not limited to visual observation of inundation or soil saturation within major portions of the root zone (usually within 12 inches of the surface) during the growing season, water marks, sediment deposits, and oxidized rhizospheres along living roots. Examples of secondary indicators of wetland

[2] https://www.nrcs.usda.gov/conservation-basics/natural-resource-concerns/soil/national-technical-committee-for-hydric-soils

hydrology include but are not limited to drainage patterns, FAC-neutral test, surface cracks, and sparsely vegetated concave surfaces.

Fieldwork was performed by Kyle Zinn, WPIT, CFA[3], Michael Smith[4], Jennifer Feese, PWD, PWS, VSWD[5], Michaela Moss, WPIT[6], Lindsey Shortt, WPIT, Abby Spotswood, Alex Bailey[7], Alex Thorpe, Autumn Thomas, and Dan Wilson from March 18, 2024 – August 21, 2024. Additional fieldwork was performed by WSSI staff on October 7-9, 15, 16, and 28, 2024, November 13-15 and 19-21, 2024, January 8-10 and 14, 2025, February 24-27, 2025, and March 31, 2025.

The delineation was completed by flagging the entire boundary of each distinct Cowardin classified wetland area within all wetland complexes to accurately capture their size and extent. Wetlands and data points were delineated in the field with yellow-glo flagging tape and streams were delineated with blue-glo flagging tape. WSSI employed the Leica FLX100 GPS unit to locate wetland and stream flags. The FLX100 integrates with Leica's SmartNet RTK network, which allows for positioning in real time. WSSI also utilized ESRI's Field Maps software running on iPads, which integrates directly with the Leica FLX100. The GPS data and Field Maps were used to create a digital sketch map, which enabled WSSI staff to track progress and plan fieldwork. Additionally, the Field Maps app containing the digital sketch map was provided (viewing access only) to Williams (the project's client) to aid in the survey-location of the delineated features by others. After others surveyed the delineated features, the data was processed and supplied to WSSI as Coordinate Geometry (COGO) points in a .dwg (drawing) file format. These COGO points were then extracted and analyzed using ESRI ArcPro software to maintain both spatial and attribute information. From this processed data, WSSI generated point, polyline, and polygon features for data points, wetlands, and streams, which were subsequently compared to the field sketch map and reviewed by field staff scientists. The surveyed features are depicted in the updated Waters of the U.S. (Including Wetlands) Delineation Maps, which can be found in Attachment I.

Prior to conducting fieldwork, relevant background information was reviewed, including site topography, the Brosville, NC VA 1990, Northeast Eden, NC VA 2000, Mount Hermon, VA 1990, Whitmell, VA 1990, Spring Garden, VA 1990, and Chatham, VA 1994 USGS quadrangles (Exhibit 2) and Digital National Wetlands Inventory (Exhibit 3; downloaded October 2024) maps, U.S. Department of Agriculture 2024 Digital Data Soils Map (Exhibit 4), Sulfide Hazard Risk Map from Virginia Tech Department of Crop and Soil Environmental Sciences (Exhibit 5),

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[3] *Wetland Professional in Training, Society of Wetlands Scientists Certification Program, Inc. Certified Fertilizer Applicator #CFA-5436183271, Virginia Department of Agriculture and Consumer Services*

[4] *ISA Certified Arborist MA-6370A, TRAQ*

[5] *Professional Wetland Scientist #1871, Society of Wetlands Scientists Certification Program, Inc.; Virginia Certified Professional Wetland Delineator #3402-000095; Certified Virginia State Water Delineator #VSWD0061; ISA Certified Arborist MA-5134A, TRAQ*

[6] *Wetland Professional in Training, Society of Wetlands Scientists Certification Program, Inc.*

[7] *ISA Certified Arborist MA-6574A, TRAQ*

and Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, Panels 51143C0510E; 51143C0610E; 51143C0495E; 51143C0615E; 51143C0605E; 51143C0515E, 51143C0505E, 51143C0395E; 51143C0415E; 51143C0405E; and 51143C0595E (Exhibit 6, Effective: 09/29/2010). Aerial photographs of the survey area, including a Spring 2015 Near Color Infrared Imagery from Virginia Base Mapping Program (VBMP) (Exhibit 7) and a Spring 2023 Natural Color Imagery from VBMP (Exhibit 8), were also examined to investigate whether signatures indicative of wetlands are found on the survey area. The VBMP Spring 2023 Natural Color Imagery is also used as a base on the Waters of the U.S. (Including Wetlands) Delineation Map (Attachment I). The output from the Virginia Department of Environmental Quality (DEQ) wetland condition assessment tool (WetCAT), which documents soil properties, is included in Exhibit 9.

The COE Antecedent Precipitation Tool (APT) was generated to evaluate precipitation conditions prior to and during fieldwork. The APT indicates that the area was under "wetter than normal" to "drier than normal" conditions during the time fieldwork was conducted and 30 days prior to fieldwork. The APT results can be found in Exhibit 10.

The DEQ Stream Identification Field Data Forms (SIF) that document the presence or absence of stream bed, bank, and OHWM data are provided in Exhibit 11. The DEQ SIFs were completed in areas where there was a transition from a stream to a non-stream (i.e., wetland or upland), where streams changed classification (i.e., intermittent to ephemeral), and along ephemeral streams to document OHWM.

The North Carolina Division of Water Quality (NCDWQ)[8] Stream evaluation method was applied in the field to determine whether the streams within the Virginia portion of the survey area were ephemeral, intermittent, or perennial. Application of this stream evaluation method results in numeric scores generated through the qualitative evaluation of the stream's geomorphological, hydrological, and biological characteristics, and the scores are used, in combination with the best professional judgment of the evaluator, to determine the stream's flow regime.

Based on the NCDWQ method, streams scoring below 19 are generally considered to be ephemeral, while streams scoring 19 or greater are at least intermittent. Based on the NCDWQ methodology's "NC DWQ Policy for the Definition of Perennial Stream Origins", a stream is considered perennial if any of the following criteria are met:

1. Biological indicators such as fish (except Gambusia), crayfish (in channel), amphibians (larval salamanders and large, multi-year tadpoles), or clams are present. If only crayfish or fingernail clams are present, a numerical value of at

[8] *NC Division of Water Quality. 2010. Methodology for Identification of Intermittent and Perennial Streams and their Origins, Version 4.11. North Carolina Department of Environment and Natural Resources, Division of Water Quality. Raleigh, NC.*

least 18 on the geomorphology section of the most current version of the NC DWQ stream classification form is required.

OR

2. A numerical value of at least 30 points is determined from the most recent version of the NCDWQ stream identification form.

OR

3. More than one benthic macroinvertebrate that requires water for their entire life cycles are present as later instar larvae.[9]

Stream evaluation data forms that provide the results of the stream evaluation method and summarize WSSI's stream-flow determinations are provided in Exhibit 12.

Observations of vegetation, soils and hydrology were recorded, using Ecobot[10], at representative locations in the wetlands and adjacent non-wetland areas to determine the wetland boundaries. Routine Wetland Determination data forms generated through Ecobot describing representative plant communities, hydrology indicators, and soil characteristics for each Cowardin classification observed within respective systems are included in Exhibit 13. The *Field Indicators of Hydric Soils in the United States, A Guide for Identifying and Delineating Hydric Soils*, Version 8.2, 2018[11], was used for this delineation. Additionally, the four-strata sampling method was used with the following plot sizes and stratum definitions as outlined in the EMP Manual:

1. Tree stratum – 30-ft (9.1 m) radius; defined as woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
2. Sapling/shrub stratum – 15-ft (4.6-m) radius; defined as woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
3. Herb stratum – 5-ft (1.5-m) radius; defined as all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.
4. Woody vines – 30-ft (9.1-m) radius; defined as all woody vines greater than 3.28 ft in height.

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9 *Lists of benthic macroinvertebrates that NCDWQ considers perennial stream indicators are provided in Tables 2 and 3 of the NCDWQ assessment methodology.*

10 *Ecobot is a cloud-based platform for environmental assessments (including the COE's wetland determination data forms) and permitting. Ecobot has two components: a mobile application for field data collection, Ecobot Collector, and a web-based interface, Ecobot Manager, for project management, collaboration, QA/QC, and report generation.* https://ecobot.com/

11 *United States Department of Agriculture, Natural Resources Conservation Service. 2018. Field Indicators of Hydric Soils in the United States, Version 8.2. L.M. Vasilas, G.W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.*

Photographs of the data point locations, representative streams, wetland and non-wetland communities, and other existing site conditions are included in Exhibit 14. The surveyed locations of delineated wetlands, other waters of the U.S., and the approximate locations of photographs and DEQ SIF locations are depicted on Attachment I. Data Points 318-325 and 484-487 are excluded from this report and Attachment I as they were conducted as part of the Cherrystone PRM Site delineation as described in the report entitled "Waters of the U.S. (Including Wetlands) Delineation" prepared by WSSI on April 11, 2025. This delineation overlaps a portion of SSEP but is a standalone site and report.

The wetlands discussed throughout the report and associated exhibits are described in terms of their "Cowardin classification." In the publication *Classification of Wetlands and Deepwater Habitats of the United States*[12] (Deepwater Habitats), wetlands and associated deepwater habitats are divided into five systems: marine, estuarine, riverine, lacustrine, and palustrine. Within the SSEP survey area, riverine and palustrine systems were identified. These two systems are discussed briefly below:

> Riverine – As defined in the *Classification of Wetlands and Deepwater Habitats of the United States*, the Riverine System includes all wetlands and deepwater habitats contained within a channel excluding: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean-derived salts of 0.5 ppt or greater. The Riverine System is bounded on the landward side by upland, the channel bank, or by wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens. While not always, water typically flows within a Riverine System.
>
> Palustrine – As defined in the *Classification of Wetlands and Deepwater Habitats of the United States*, the Palustrine System includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5%. It also includes small, shallow, permanent, or intermittent water bodies often called ponds. Also included are wetlands lacking such vegetation, but with all of the following characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5 m (8.2 ft) at low water; and (4) salinity due to ocean derived salts less than 0.5%. The limits of the Palustrine System are bounded by upland or any of the other four systems.

The following table describes the different classes of palustrine and riverine features identified in the SSEP survey area.

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[12] *Cowardin, L. et al. 1979. Classification of Wetlands and Deepwater Habitats of the United States. US Department of the Interior Fish and Wildlife Service Office of Biological Services Washington, D.C. December 1979.*

Table 1. Cowardin Classifications

Symbol	*Feature Classification*	*Description of Wetland Category*
PFO	Palustrine Forested	Trees are the dominant life form—i.e., the tallest life form with at least 30 percent areal coverage. Trees are defined as woody plants at least 6 m (20 ft) in height.
PSS	Palustrine Scrub-Shrub	Woody plants less than 6 m (20 ft) tall are the dominant life form—i.e., the tallest life form with at least 30 percent areal coverage. The "shrub" life form includes true shrubs, young specimens of tree species that have not yet reached 6 m in height, and woody plants (including tree species) that are stunted because of adverse environmental conditions.
PEM	Palustrine Emergent	Emergent plants—i.e., erect, rooted, herbaceous hydrophytes, excluding mosses and lichens—are the tallest life form with at least 30% areal coverage. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.
POW	Palustrine Open Water	While not found in the Deepwater Habitat document, it is referenced as a Cowardin Classification in the COE's Operations and Maintenance Business Information Regulatory Module (ORM) [13] table. POWs are typically defined as areas of open water within a Palustrine wetland system that are characterized by having no, or minimal, vegetation and are less than 20 acres in size. These open water areas are typically shallow, with depths less than 6.6 feet (2 meters) at low water.
R3	Riverine, Upper Perennial	A stream channel with an ordinary high water mark and characterized by a high gradient. There is no tidal influence, and some water flows all year, except during years of extreme drought.
R4	Riverine, Intermittent	A stream channel with an ordinary high water mark that contains non-tidal flowing water only

[13] COE's Operations and Maintenance Business Information Regulatory Module (ORM). https://www.spa.usace.army.mil/Portals/16/docs/civilworks/regulatory/Bulk%20Upload/Bulk%20Data%20Cowardin.pdf

		part of the year. When the water is not flowing, it may remain in isolated pools or surface water may be absent.
R6	Riverine, Ephemeral	While not found in the Deepwater Habitat document, it is referenced as a Cowardin Classification in the COE's ORM table. An ephemeral stream is a stream channel with an ordinary high water mark with flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Runoff from rainfall is the primary source of water for stream flow. There is no tidal influence.

Waters of the U.S. Delineation Findings

In WSSI's opinion, jurisdictional wetlands and other WOTUS (i.e., streams and ponds) are present within the Virginia portion of the SSEP survey area. These jurisdictional waters of the U.S. include Sandy River, Hardys Creek, Trayner Branch, Sandy Creek, Banister River, White Oak Creek, Trotters Creek, Cherrystone Creek, and Little Cherrystone Creek (all USGS-mapped perennial streams). Additionally, ephemeral, intermittent, and perennial tributaries to the above-mentioned named waterbodies are present, as are PFO, PSS, and PEM wetlands and POWs.

On November 19-21, 2024, the DEQ conducted field site visits with WSSI staff as part of the SSWD request. Additionally, on February 26 and 27, 2025, the COE and DEQ conducted joint field site visits with WSSI staff as part of the PJD and SSWD requests. The results of the agency site visits are summarized in Exhibit 15 and have been incorporated into Attachment I.

Aquatic resources, as quantified on Attachment I and updated based upon the COE and DEQ site visits, include:

- 380,439 sf (8.73 ac) and 27,926 linear feet (lf) of perennial stream;
- 47,450 sf (1.09 ac) and 10,269 lf of intermittent stream;
- 27,194 sf (0.62 ac) and 7,008 lf of ephemeral stream;
- 1,095,315 sf (25.15 ac) of PFO wetland;
- 34,782 sf (0.80 ac) of PSS wetland;
- 1,714,051 sf (39.35 ac) of PEM wetland; and
- 298,020 sf (6.84 ac) of POW.

The remaining approximately 1,550.56 acres of the survey area were classified as uplands.

Summary

In WSSI's opinion, jurisdictional wetlands and other WOTUS are present within the Virginia portion of the SSEP survey area, based on our site observations, as described above and depicted on Attachment I.

The WOTUS in the survey area (i.e., the wetlands, streams, and jurisdictional ponds) are regulated by Sections 401 and 404 of the Clean Water Act and by state wetlands laws and cannot be disturbed without the appropriate permits. Such permits may include permits from local agencies, as well as the COE and the DEQ, depending upon the extent and type of impacts.

Limitations

This study is based on an examination of the vegetation, soils, and hydrology and available reference documents. Field indicators can change with variations in hydrology and other factors. Therefore, our conclusions may vary from future observations by others. This report assesses the potential for wetlands on the survey area at the time of our review and does not address conditions at a given time in the future.

WSSI's review and report have been prepared in accordance with generally accepted guidelines for the conduct of a survey for potential Waters of the U.S. Conclusions presented herein are based upon our review of available information, the results of our field studies, and/or professional judgement. We make no other warranties, either expressed or implied, and our report is not a recommendation to buy, sell, manage, or develop the property.

WSSI offers no opinion and does not purport to opine on the possible application of various building codes, zoning ordinances, other land use or platting regulations, environmental or health laws and other similar statutes, laws, ordinances, code and regulations affecting the possible use and occupancy of the survey area for the purpose for which it is being used, except as specifically provided above.

The foregoing opinions are based on applicable laws, ordinances, and regulations in effect as of the date hereof and should not be construed to be an opinion as to the matters set out herein should such laws, ordinances or regulations be modified, repealed or amended.

Any reuse or modification of any of this document (whether hard copies or electronic transmittals) prepared by WSSI without written verification or adaptation by WSSI will be at the sole risk of the individual or entity utilizing said document and such use is without the authorization of WSSI. WSSI shall have no legal liability resulting from any and all claims, damages, losses, and expenses, including attorney's fees arising out of the unauthorized reuse or modification of this document. Client shall indemnify WSSI from any claims arising out of unauthorized use or modification of the document whether hard copy or electronic.

This report does not constitute a jurisdictional determination of WOTUS since such determinations must be verified by the COE or the Natural Resources Conservation Service (as applicable) and are subject to review by the U.S. Environmental Protection Agency. This report does not constitute a stream characterization determination.



WETLAND STUDIES AND SOLUTIONS, INC.

Kyle Zinn, WPIT, CFA
Environmental Scientist

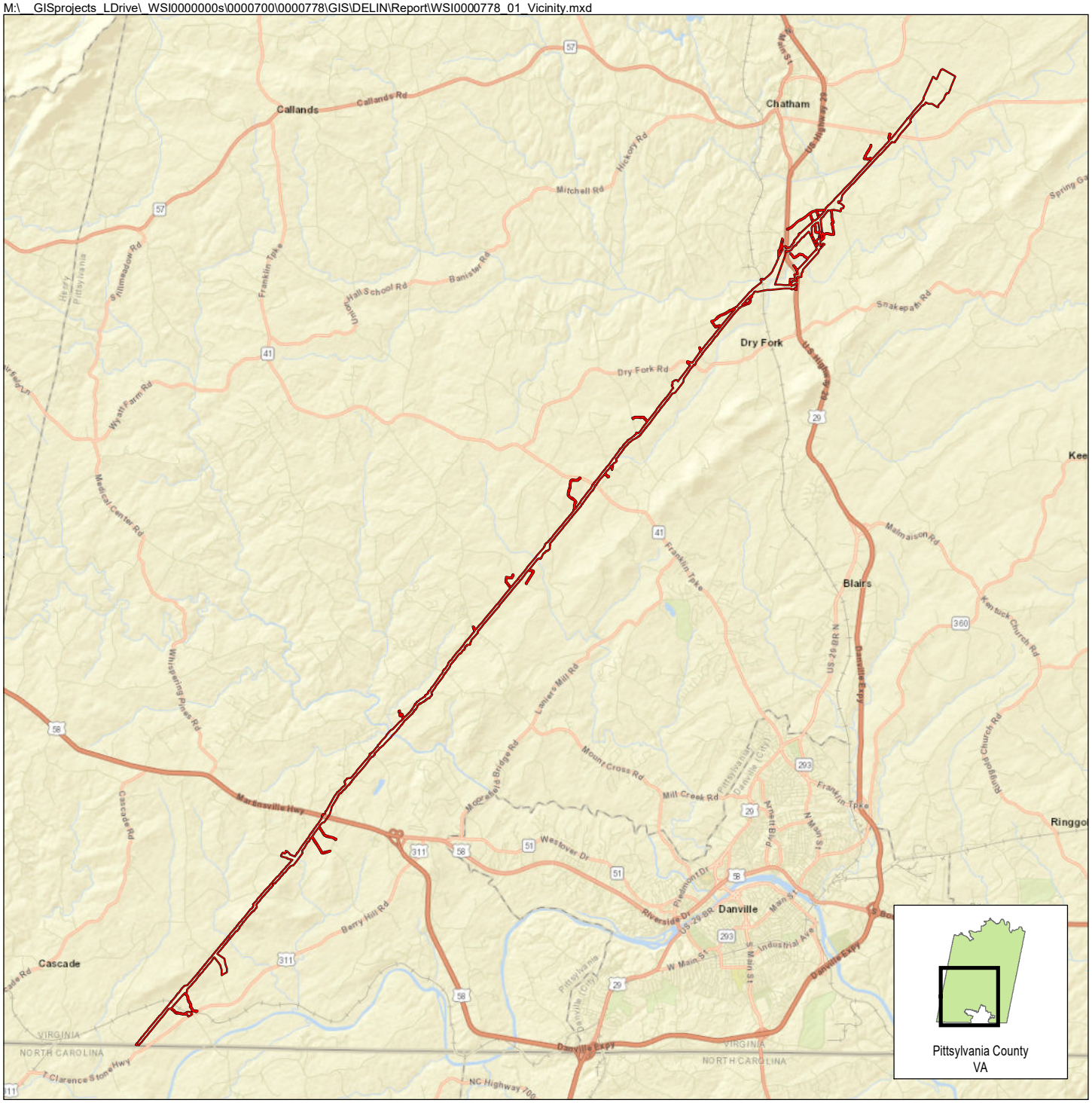
Michael C. Smith
ROW Environmental Stewardship and
Sustainability Manager - Energy

Jennifer D. Feese, PWS, PWD, VSWD
Environmental Resources Manager – Energy

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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Survey Area (±1633 acres)

Vicinity Map
Southeast Supply Enhancement Project
Eden Loop - VA Portion and Compressor Station 165
WSI0000778

NORTH

0 3

Miles

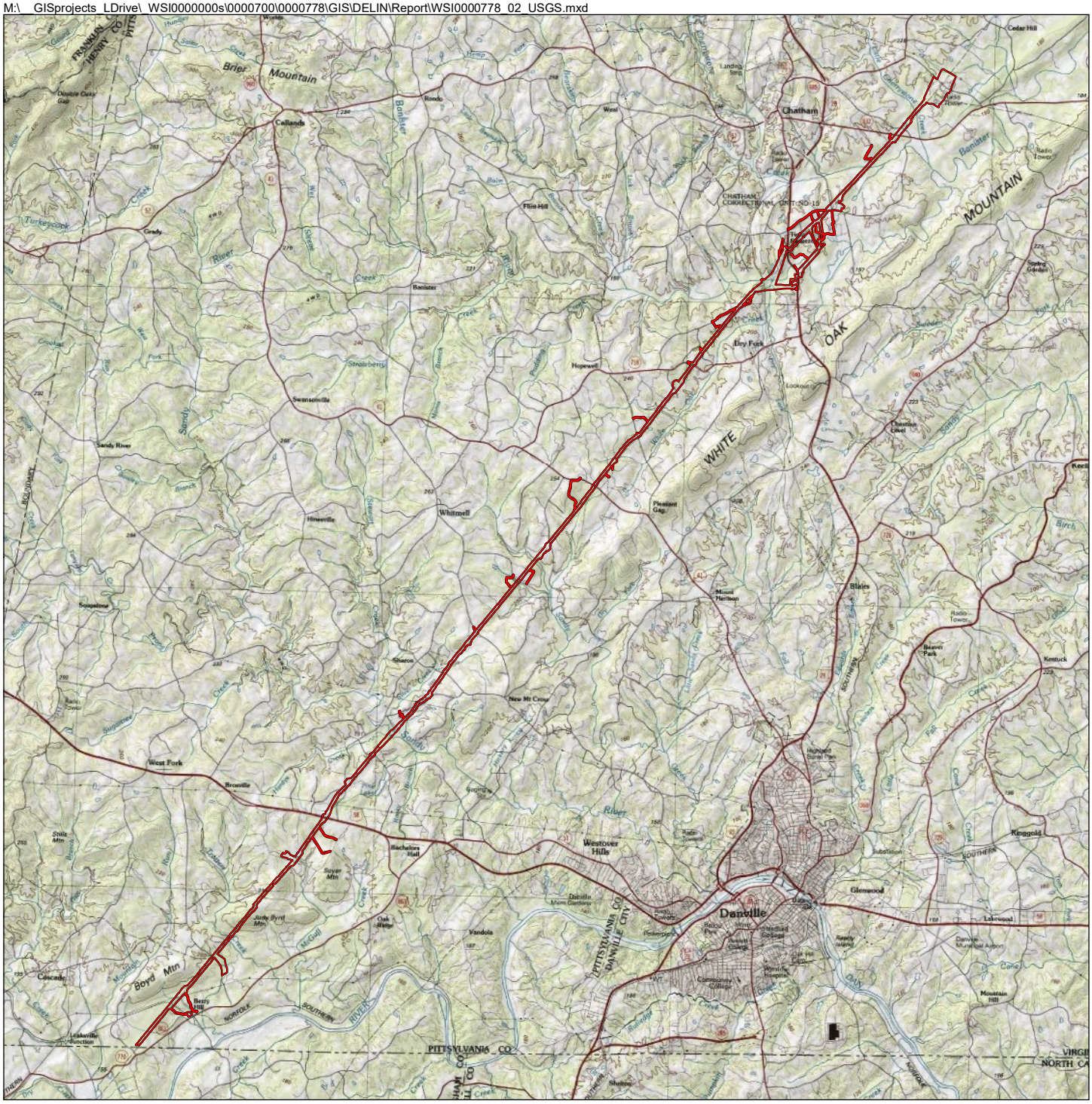
Original Scale:
1 " = 3 miles

Source: World Street Map - ESRI

Wetland Studies and Solutions, Inc.
a DAVEY company

Exhibit 1

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Survey Area

USGS 7.5' Quadrangle Map
Southeast Supply Enhancement Project
Eden Loop - VA Portion and Compressor Station 165
WSI0000778

NORTH
0 3
Miles
Original Scale:
1 " = 3 miles

Brosville, NC VA 1990
Northeast Eden, NC VA 2000
Mount Hermon, VA 1990
Whitmell, VA 1990
Spring Garden, VA 1990
Chatham, VA 1994
Latitude: 36°41'36"N
Longitude: 79°28'57"W
Hydrologic Unit Code (HUC): 030101031003; 030101031004; 030101050203; 030101050103; 030101050104; 030101030903
HUC12 Name: Lower Sandy River; Sandy Creek (West)-Dan River; Shockoe Creek-Banister River; White Oak Creek-Banister River; Cherrystone Creek; Trotters Creek-Dan River
COE Region: Eastern Mountains and Piedmont

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Survey Area

Wetland Type

- Open Water
- Freshwater Forested/Shrub Wetland
- Freshwater Emergent Wetland
- Estuarine and Marine Wetland
- Other

Source: U.S. Fish and Wildlife Service; October 2024

Digital National Wetlands Inventory Map
Southeast Supply Enhancement Project
Eden Loop - VA Portion and Compressor Station 165
WSI0000778

NORTH

0 4,000
Feet

Original Scale:
1 " = 4,000 feet

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Exhibit 3

M:_ GISprojects_LDrive_WSI0000000s\0000700\0000778\GIS\DELIN\Report\WSI0000778_04_Soils.mxd

North Carolina

Survey Area
Hydric Soil
Soil with Hydric Inclusion
Non-Hydric Soil
Water

Soils Map
Southeast Supply Enhancement Project
Eden Loop - VA Portion and Compressor Station 165
WSI0000778

NORTH

0 4,000
Feet

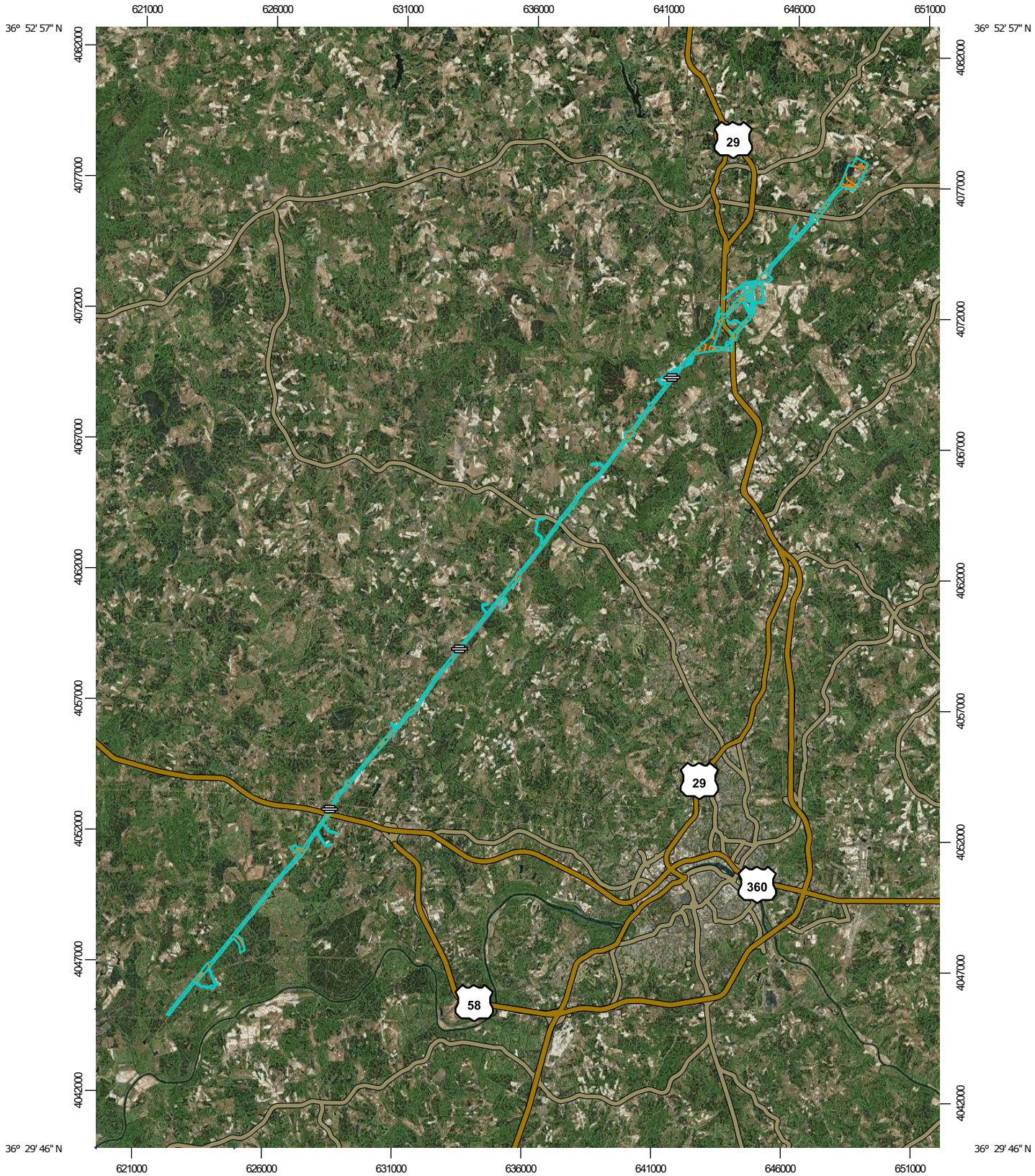
Original Scale:
1 " = 4,000 feet

Major Land Resource Area: Southern Piedmont, 136
Land Resource Region: South Atlantic and Gulf Slope Cash Crops, Forest, and Livestock Region, P
Source: Pittsylvania County Digital Data, U.S. Department of Agriculture, 2024

Wetland Studies and Solutions, Inc.
a DAVEY company

Exhibit 4

Soil Map—Pittsylvania County and the City of Danville, Virginia, and Rockingham County, North Carolina
(REV19_SurveyArea)



Map Scale: 1:209,000 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 3000 6000 12000 18000

Feet
0 10000 20000 40000 60000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Pittsylvania County and the City of Danville, Virginia
Survey Area Data: Version 17, Aug 30, 2024

Soil Survey Area: Rockingham County, North Carolina
Survey Area Data: Version 26, Sep 9, 2024

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 1, 1999—Dec 31, 2003

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1B	Nathalie sandy loam, 2 to 7 percent slopes	23.9	1.5%
1C	Nathalie sandy loam, 7 to 15 percent slopes	33.2	2.0%
3B	Delanco fine sandy loam, 2 to 7 percent slopes	6.0	0.4%
4B	Clifford sandy loam, 2 to 7 percent slopes	108.3	6.6%
4C	Clifford sandy loam, 7 to 15 percent slopes	16.7	1.0%
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	318.5	19.5%
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	242.6	14.9%
7A	Codorus loam, 0 to 2 percent slopes, occasionally flooded	19.2	1.2%
8A	Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded	57.0	3.5%
9B	Lackstown fine sandy loam, 2 to 7 percent slopes	46.6	2.9%
9C	Lackstown fine sandy loam, 7 to 15 percent slopes	10.7	0.7%
11B3	Minnieville clay loam, 2 to 7 percent slopes, severely eroded	21.6	1.3%
11C3	Minnieville clay loam, 7 to 15 percent slopes, severely eroded	10.4	0.6%
16B	Halifax sandy loam, 2 to 7 percent slopes	2.8	0.2%
17B	Yadkin loam, 2 to 7 percent slopes	34.0	2.1%
18C3	Yadkin clay loam, 7 to 15 percent slopes, severely eroded	16.4	1.0%
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	71.2	4.4%
21E	Poplar Forest fine sandy loam, 25 to 45 percent slopes	6.7	0.4%
22B	Bentley sandy loam, 2 to 7 percent slopes	5.2	0.3%
23B	Clover fine sandy loam, 2 to 7 percent slopes	271.7	16.6%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
23C	Clover fine sandy loam, 7 to 15 percent slopes	201.4	12.3%
23D	Clover fine sandy loam, 15 to 25 percent slopes	32.0	2.0%
28C	Pinkston cobbly sandy loam, 7 to 15 percent slopes	11.9	0.7%
29C	Pinkston-Clover complex, 7 to 15 percent slopes, very stony	15.2	0.9%
29D	Pinkston-Clover complex, 15 to 35 percent slopes, very stony	4.1	0.2%
29E	Pinkston-Clover complex, 35 to 50 percent slopes, very stony	5.0	0.3%
34B	Sheva fine sandy loam, 2 to 7 percent slopes	19.8	1.2%
34C	Sheva fine sandy loam, 7 to 15 percent slopes	0.0	0.0%
39	Udorthents, loamy, 0 to 15 percent slopes	6.0	0.4%
41A	Hatboro silt loam, 0 to 2 percent slopes, frequently flooded	8.0	0.5%
42B	Elsinboro sandy loam, 2 to 7 percent slopes	0.8	0.0%
W	Water	6.0	0.4%
Subtotals for Soil Survey Area		**1,632.9**	**100.0%**
Totals for Area of Interest		**1,633.1**	**100.0%**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CmB	Clover sandy loam, 2 to 8 percent slopes	0.2	0.0%
Subtotals for Soil Survey Area		**0.2**	**0.0%**
Totals for Area of Interest		**1,633.1**	**100.0%**

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Sulfide Hazard Risk Map
Southeast Supply Enhancement Project
Eden Loop - VA Portion and Compressor Station 165
WSI0000778

Survey Area

Estimated acid producing risk potential of sulfide bearing materials

- Low-mod risk
- Mod risk
- Mod-high risk
- High risk
- No documented risk
- Unknown. Sulfides documented in literature.
- Water

NORTH

0 3

Miles

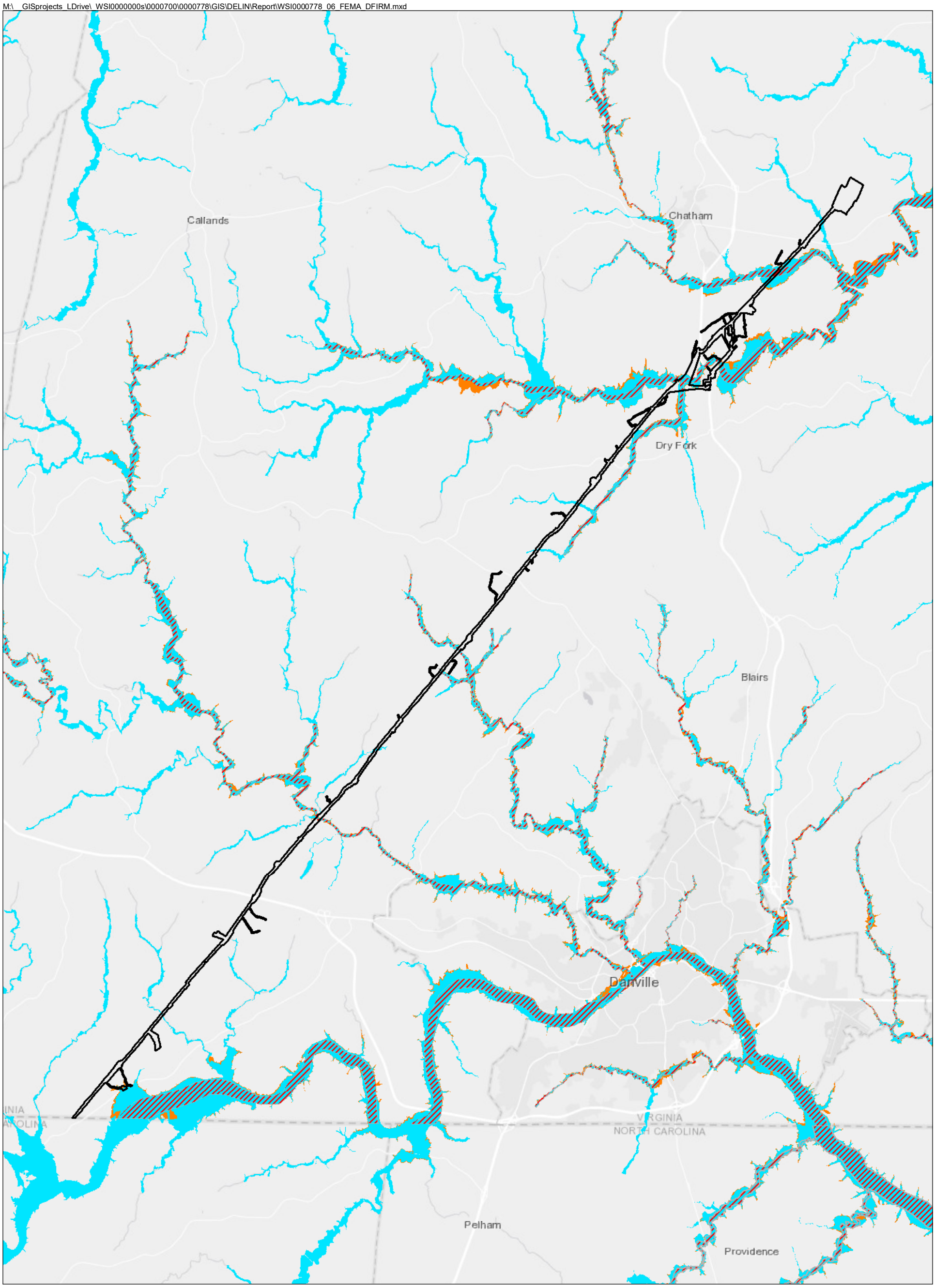
Original Scale:
1 " = 3 miles

Source: Virginia Tech Department of Crop and Soil Environmental Sciences. Zenah W. Orndoff and W. Lee Daniels

Wetland Studies and Solutions, Inc.
a DAVEY company

Exhibit 5

M:__GISprojects_LDrive_WSI0000000s\0000700\0000778\GIS\DELIN\Report\WSI0000778_06_FEMA_DFIRM.mxd



Survey Area
Regulatory Floodway
1% Annual Chance Flood Hazard
0.5% Annual Chance Flood Hazard

FEMA Digital Flood Insurance Rate Map
Southeast Supply Enhancement Project
Eden Loop - VA Portion and Compressor Station 165
WSI0000778

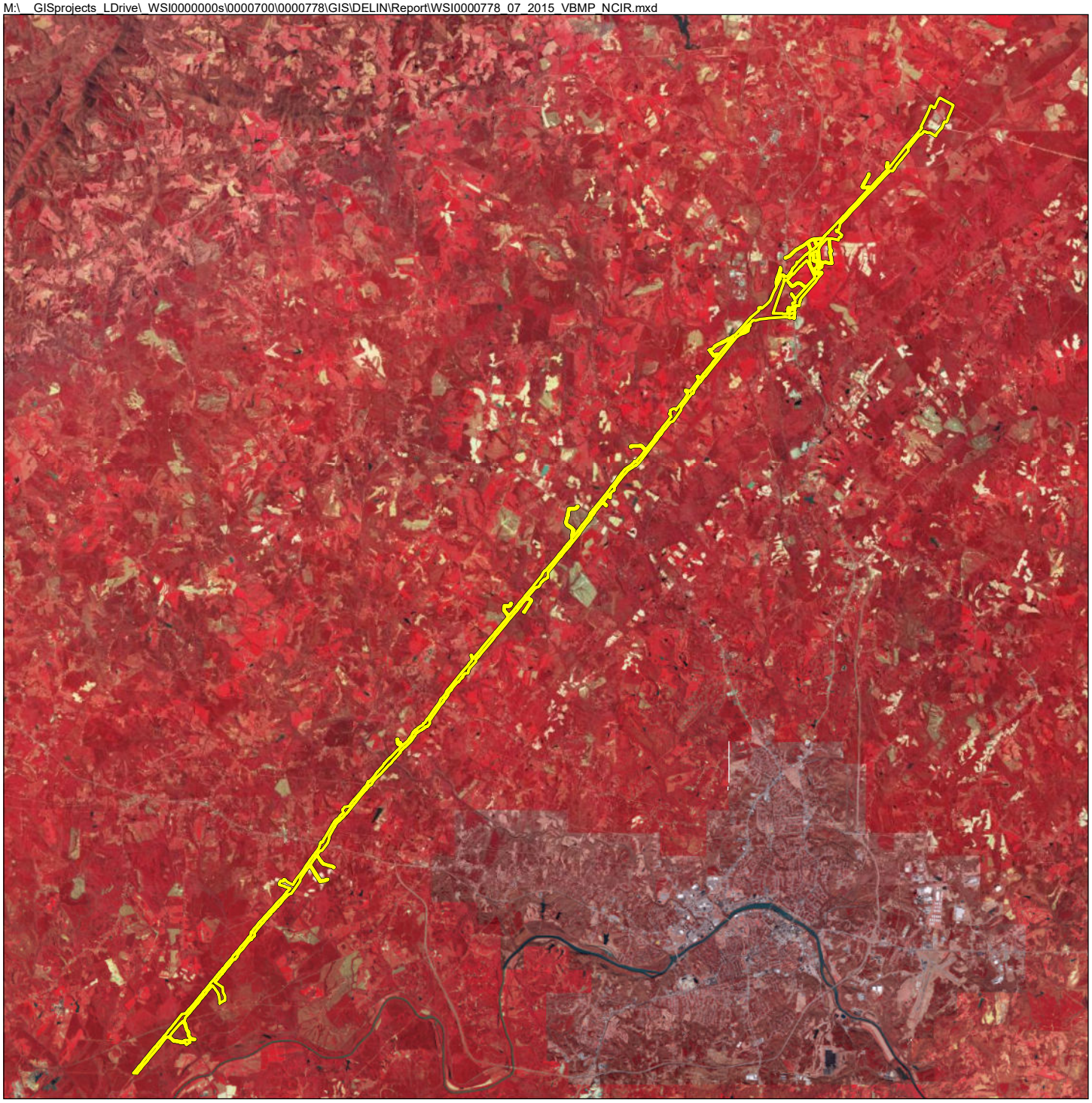
NORTH
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Miles
Original Scale:
1 " = 2 miles

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Panel: 51143C0610E, Effective: 09/29/2010
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Panel: 51143C0605E, Effective: 09/29/2010
Panel: 51143C0515E, Effective: 09/29/2010
Panel: 51143C0505E, Effective: 09/29/2010
Panel: 51143C0395E, Effective: 09/29/2010
Panel: 51143C0415E, Effective: 09/29/2010
Panel: 51143C0405E, Effective: 09/29/2010
Panel: 51143C0595E, Effective: 09/29/2010
Source: FEMA, ESRI

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Exhibit 6

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Survey Area

Spring 2015 Near Color Infrared Imagery
Southeast Supply Enhancement Project
Eden Loop - VA Portion and Compressor Station 165
WSI0000778

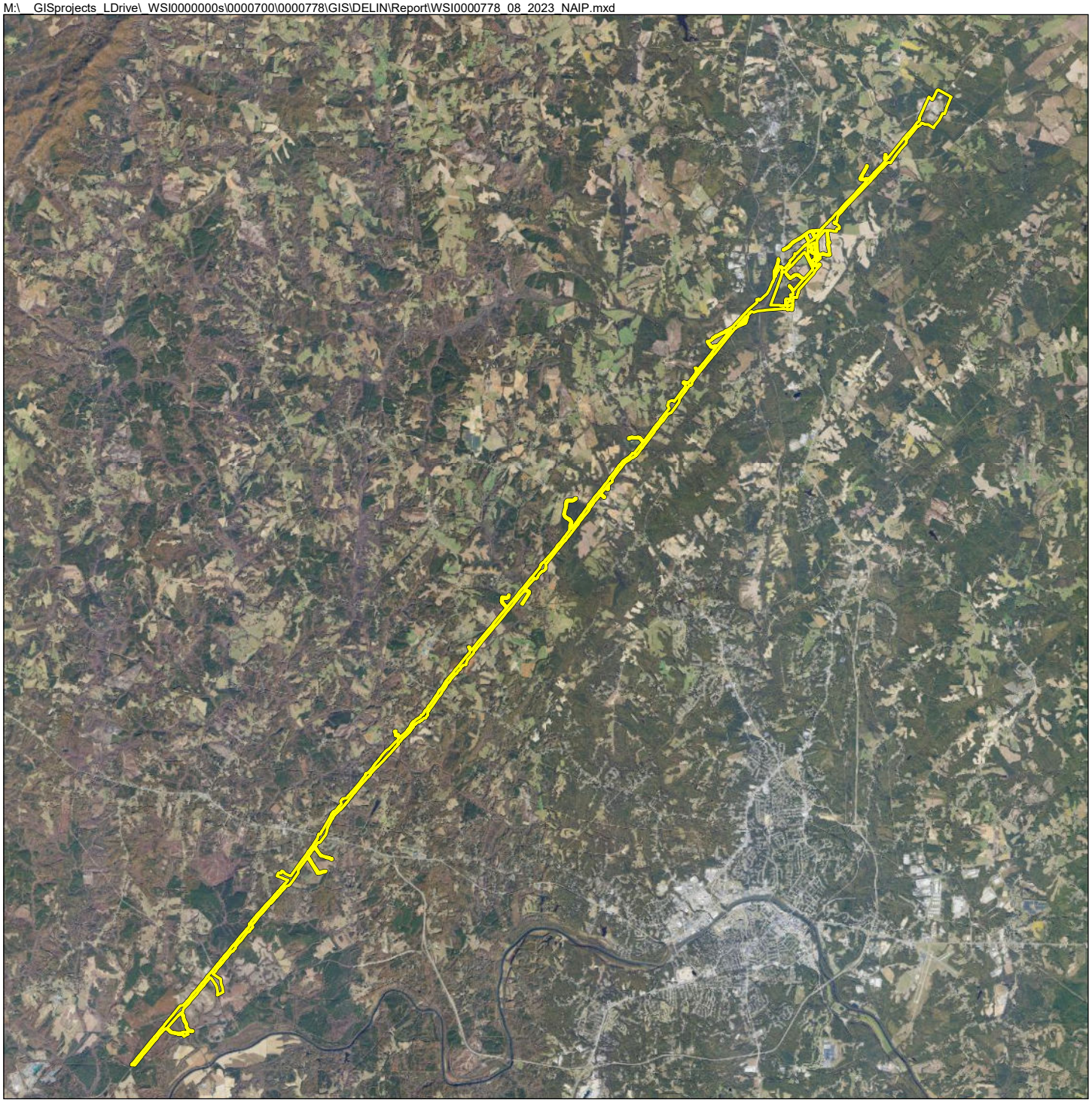
NORTH
0 3
Miles
Original Scale:
1 " = 3 miles

Source: Virginia Base Mapping Program (VBMP)

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Exhibit 7

M:__GISprojects_LDrive_WSI0000000s\0000700\0000778\GIS\DELIN\Report\WSI0000778_08_2023_NAIP.mxd



Survey Area

Spring 2023 Natural Color Imagery
Southeast Supply Enhancement Project
Eden Loop - VA Portion and Compressor Station 165
WSI0000778

NORTH
0 3
Miles
Original Scale:
1 " = 3 miles

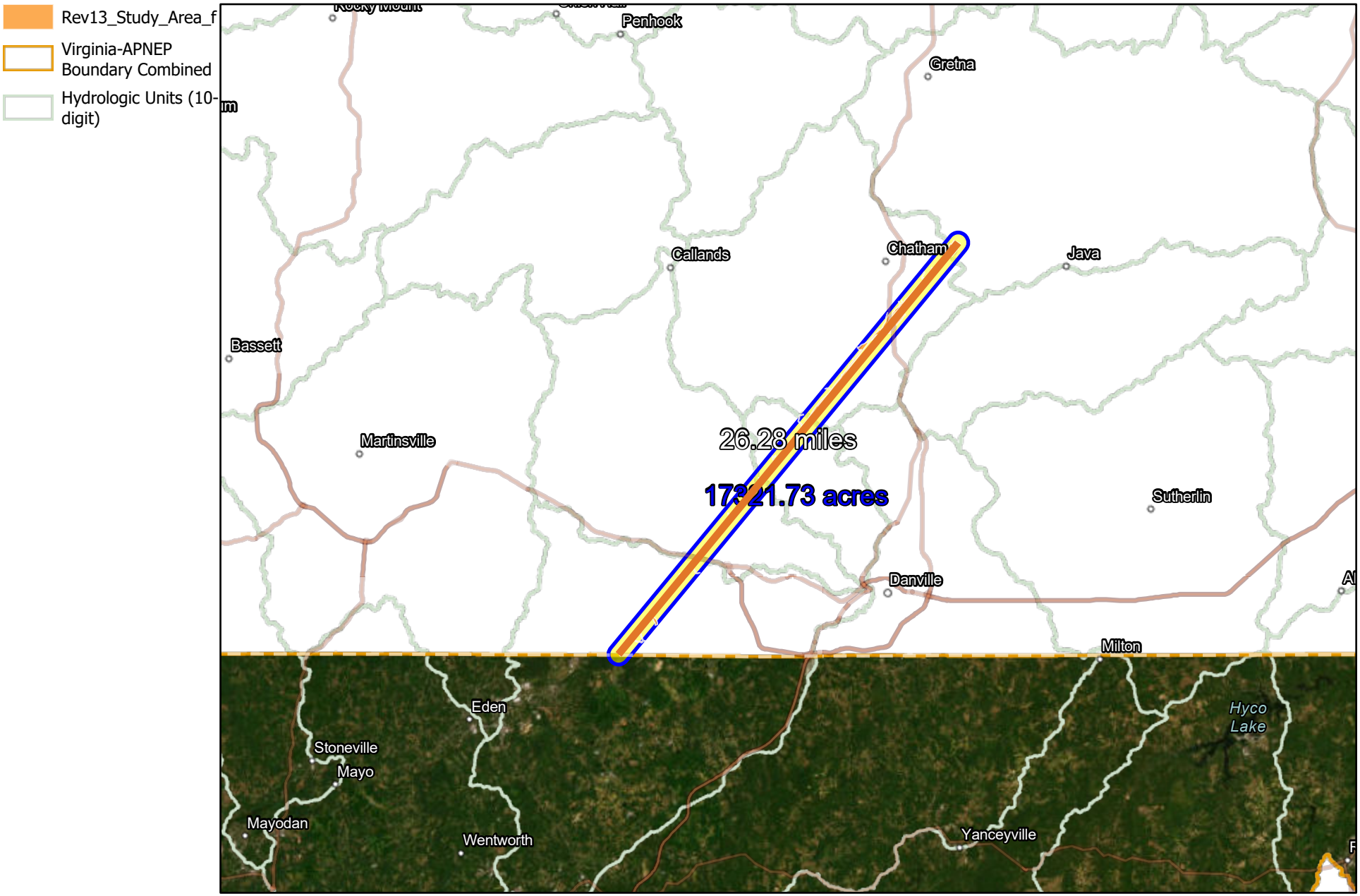
Source: National Agriculture Imagery Program (NAIP)

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a DAVEY company

Exhibit 8

EXHIBIT 9 - WETCAT

SSEP WetCAT



September 13, 2024
Created from the Wetland Condition Assessment Tool Viewer (WetCAT)

0 3.5 7 14 mi
0 5 10 20 km

Earthstar Geographics
VGIN, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS

VIMS | William & Mary
Virginia Institute of Marine Science
Center for Coastal Resources Management

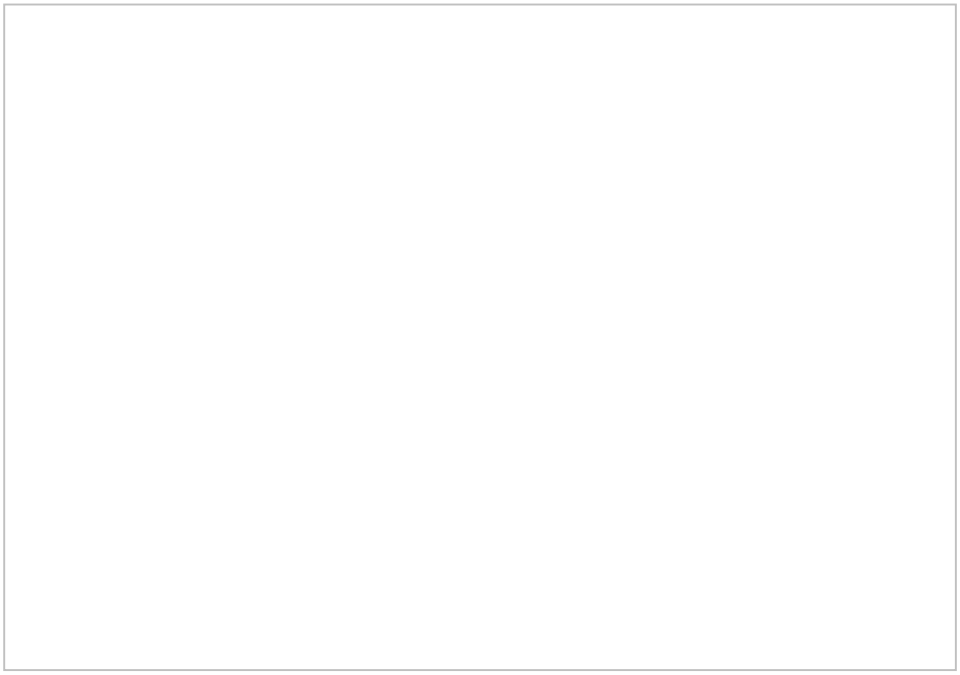
DEQ
Virginia Department of Environmental Quality

WetCAT Cumulative Results summarizing data within user defined boundary

The following is a summary of selected data within a 17299.23 acre polygon (center point longitude: -79.483890 latitude: 36.689641). This analysis was run in the Wetland Condition Assessment Tool (WetCAT) on Fri Sep 13 2024.

Located in the following jurisdiction(s): Pittsylvania County, Virginia

10-Digit Hydrologic Unit(s): Cherrystone Creek-Banister River (0301010501); Stinking River-Banister River (0301010502); Cascade Creek-Dan River (0301010309); Sandy River (0301010310)



NWI Summary - Scores

Score Type	Score	Minimum	Maximum
Habitat (average) *is Somewhat Stressed*	0.71	0.32	0.94
Habitat Restoration Potential (average %)	18	0	75
Water Quality (mode) *is Somewhat Stressed*	0.7	0.1	1.0
Water Quality Restoration Potential (mode)	0	0	300

NWI Summary - Stress Level

Stress Level	# Wetlands (Habitat)	# Wetlands (Water Quality)
Slightly Stressed	4	17
Somewhat Stressed	51	28
Somewhat Severely Stressed	14	17
Severely Stressed	0	7

NWI Summary - Classes

Wetland Class	Acres	# Wetlands	Ave Habitat Score	Min Habitat Score	Max Habitat Score	Ave Habitat Restoration Potential (%)	Mode WQ Score	Min WQ Score	Max WQ Score	Mode WQ Restoration Potential (%)
PEM	22.25	23	0.64	0.32	0.87	26	0.4	0.1	0.7	75

PFO	165.55	33	0.75	0.46	0.94	13	0.7	0.4	1	0
PSS	34.12	13	0.77	0.42	0.94	15	0.7	0.1	1	0

Tidal Marsh is not present within this user defined area.

DEQ Permits:

Permit Name	Permit Type	Facility Name	Classification	Activity Type	DEQ Region Name	Project Locality
22-001547	Non-Permit	Transco Groundbed 160-9-5-A&B	History	Industrial	Blue Ridge	Pittsylvania County
22-001553	Non-Permit	Transco Groundbed 160-8-4	History	Industrial	Blue Ridge	Pittsylvania County
WP3-17-4153	General	VDOT 00875-071-22548091	History	Municipal	Central	Pittsylvania County

Virginia Water Protection Program (VWP) Boundaries

Project Name	Permit Number	Region	Boundary Type
Berry Hill Commerce Center, Phase I	WP4-15-1114	BRRO	Project Boundary
Berry Hill Commerce Center, Phase I	WP4-19-0656	BRRO	Project Boundary
Southern Virginia Solar	WP4-22-2208	BRRO	Project Boundary

USACE Permits

Permit Name	No. Impact Records	No. Mitgation Records
NAO-2015-02191-jcr	1	0

North Carolina Permit Points are not present within this user defined area.

Soils

Soil Name	Drainage Class	Hydric Class	Soil Order	Percent of Buffer
Bannertown fine sandy loam, 15 to 35 percent slopes	Excessively drained	Not Hydric (0%)	Inceptisols	0.01
Bentley sandy loam, 2 to 7 percent slopes	Moderately well drained	Not Hydric (0%)	Ultisols	0.18
Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	Well drained	Not Hydric (0%)	Ultisols	13.34
Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	Well drained	Not Hydric (0%)	Ultisols	14.54
Clifford sandy loam, 2 to 7 percent slopes	Well drained	Not Hydric (0%)	Ultisols	5.53
Clifford sandy loam, 7 to 15 percent slopes	Well drained	Not Hydric (0%)	Ultisols	1.81
Clover fine sandy loam, 15 to 25 percent slopes	Well drained	Hydric (1-32%)	Ultisols	3.71
Clover fine sandy loam, 2 to 7 percent slopes	Well drained	Hydric (1-32%)	Ultisols	12.90
Clover fine sandy loam, 7 to 15 percent slopes	Well drained	Hydric (1-32%)	Ultisols	15.36
Clover sandy loam, 15 to 25 percent slopes	Well drained	Not Hydric (0%)	Ultisols	0.09
Clover sandy loam, 2 to 8 percent slopes	Well drained	Not Hydric (0%)	Ultisols	0.89

Clover sandy loam, 8 to 15 percent slopes	Well drained	Not Hydric (0%)	Ultisols	0.34
Codorus loam, 0 to 2 percent slopes, occasionally flooded	Somewhat poorly drained	Hydric (1-32%)	Inceptisols	1.35
Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded	Somewhat poorly drained	Hydric (1-32%)	Inceptisols	4.23
Comus fine sandy loam, 0 to 2 percent slopes, occasionally flooded	Well drained	Not Hydric (0%)	Inceptisols	0.14
Delanco fine sandy loam, 2 to 7 percent slopes	Moderately well drained	Not Hydric (0%)	Ultisols	0.06
Elsinboro sandy loam, 2 to 7 percent slopes	Well drained	Not Hydric (0%)	Ultisols	0.02
Enott fine sandy loam, 7 to 15 percent slopes	Well drained	Not Hydric (0%)	Alfisols	0.07
Fairview fine sandy loam, 15 to 25 percent slopes	Well drained	Not Hydric (0%)	Ultisols	0.04
Halifax sandy loam, 2 to 7 percent slopes	Moderately well drained	Not Hydric (0%)	Ultisols	0.40
Hatboro silt loam, 0 to 2 percent slopes, frequently flooded	Poorly drained	Hydric (66-99%)	Inceptisols	1.44
Lackstown fine sandy loam, 2 to 7 percent slopes	Moderately well drained	Hydric (1-32%)	Ultisols	2.24
Lackstown fine sandy loam, 7 to 15 percent slopes	Moderately well drained	Hydric (1-32%)	Ultisols	0.52
Minnieville clay loam, 2 to 7 percent slopes, severely eroded	Well drained	Not Hydric (0%)	Ultisols	1.36
Minnieville clay loam, 7 to 15 percent slopes, severely eroded	Well drained	Not Hydric (0%)	Ultisols	2.09
Minnieville loam, 2 to 7 percent slopes	Well drained	Not Hydric (0%)	Ultisols	1.22
Nathalie sandy loam, 2 to 7 percent slopes	Well drained	Not Hydric (0%)	Ultisols	0.61
Nathalie sandy loam, 7 to 15 percent slopes	Well drained	Not Hydric (0%)	Ultisols	0.84
Pfafftown sandy loam, 0 to 4 percent slopes, rarely flooded	Well drained	Not Hydric (0%)	Ultisols	0.01
Pinkston cobbly sandy loam, 15 to 35 percent slopes	Excessively drained	Not Hydric (0%)	Inceptisols	0.31
Pinkston cobbly sandy loam, 7 to 15 percent slopes	Excessively drained	Not Hydric (0%)	Inceptisols	0.57
Pinkston-Clover complex, 15 to 35 percent slopes, very stony	Excessively drained	Not Hydric (0%)	Inceptisols	1.07
Pinkston-Clover complex, 35 to 50 percent slopes, very stony	Excessively drained	Not Hydric (0%)	Inceptisols	0.42
Pinkston-Clover complex, 7 to 15 percent slopes, very stony	Excessively drained	Not Hydric (0%)	Inceptisols	0.42
Poplar Forest fine sandy loam, 15 to 25 percent slopes	Well drained	Not Hydric (0%)	Ultisols	7.70
Poplar Forest fine sandy loam, 25 to 45 percent slopes	Well drained	Not Hydric (0%)	Ultisols	0.56
Sheva fine sandy loam, 2 to 7 percent slopes	Moderately well drained	Hydric (1-32%)	Ultisols	0.89

Sheva fine sandy loam, 7 to 15 percent slopes	Moderately well drained	Not Hydric (0%)	Ultisols	0.19
Siloam gravelly fine sandy loam, 15 to 25 percent slopes	Well drained	Not Hydric (0%)	Alfisols	0.06
Siloam gravelly fine sandy loam, 7 to 15 percent slopes	Well drained	Not Hydric (0%)	Alfisols	0.04
Udorthents, loamy, 0 to 15 percent slopes	not classified	Not Hydric (0%)	Entisols	0.16
Water	Water	Water	Unranked or Not Available	0.47
Yadkin clay loam, 2 to 7 percent slopes, severely eroded	Well drained	Not Hydric (0%)	Ultisols	0.13
Yadkin clay loam, 7 to 15 percent slopes, severely eroded	Well drained	Not Hydric (0%)	Ultisols	0.55
Yadkin loam, 2 to 7 percent slopes	Well drained	Not Hydric (0%)	Ultisols	1.13

Soils Summary Data - Most Common

Most Common Soil within Buffer	**Drainage Class**	**Hydric Class**	**Soil Order**	**Percent of Buffer**
Clover fine sandy loam, 7 to 15 percent slopes	Well drained	Hydric (1-32%)	Ultisols	15.36

Soils Summary Data - Soil Order

Soil Order	**Frequency**	**Percent of Buffer**
Alfisols	6	0.17
Entisols	1	0.16
Inceptisols	46	9.97
Ultisols	553	89.23
Unranked or Not Available	30	0.47

Soils Summary Data - Drainage Classification

Drainage Class	**Frequency**	**Percent of Buffer**
Excessively drained	25	2.82
Moderately well drained	41	4.48
Poorly drained	7	1.44
Somewhat poorly drained	12	5.57
Water	30	0.47
Well drained	520	85.06
not classified	1	0.16

Soils Summary Data - Hydric Frequency

Hydric Class	**Frequency**	**Percent of Buffer**
Hydric (1-32%)	207	41.18
Hydric (66-99%)	7	1.44
Not Hydric (0%)	392	56.92
Water	30	0.47

Water Quality Assessment 305(b)/303(d) Waters (2022)

Assessment Unit ID	**Water Name**	**Type of Impaired Water**	**Assessment Classification**

VAW-L65R_BAN01A00	Banister River	river	Indeterminate
	Category 3A: There is no data available within the data window of the current assessment to determine if any designated use is attained and the water was not previously listed as impaired. **Impairment Causes:** Not Applicable **Sources:** Not Applicable		
VAW-L58R_ZZZ01A00	Unsegmented Portion of Watershed L58	river	Indeterminate
	Category 3A: There is no data available within the data window of the current assessment to determine if any designated use is attained and the water was not previously listed as impaired. **Impairment Causes:** Not Applicable **Sources:** Not Applicable		
VAW-L57R_ZZZ01A00	Unsegmented Portion of Watershed L57	river	Indeterminate
	Category 3A: There is no data available within the data window of the current assessment to determine if any designated use is attained and the water was not previously listed as impaired. **Impairment Causes:** Not Applicable **Sources:** Not Applicable		
VAW-L65R_ZZZ01A00	Unsegmented Portion of Watershed L65	river	Indeterminate
	Category 3A: There is no data available within the data window of the current assessment to determine if any designated use is attained and the water was not previously listed as impaired. **Impairment Causes:** Not Applicable **Sources:** Not Applicable		
VAW-L66R_CRR01A00	Cherrystone Creek	river	Indeterminate
	Category 3B: Some data exists but are insufficient to determine support of any designated use. Such waters will be prioritized for follow up monitoring as needed. **Impairment Causes:** Not Applicable **Sources:** Not Applicable		
VAW-L67R_ZZZ01C14	Unsegmented Portion of Watershed L67R	river	Indeterminate
	Category 3A: There is no data available within the data window of the current assessment to determine if any designated use is attained and the water was not previously listed as impaired. **Impairment Causes:** Not Applicable **Sources:** Not Applicable		
VAW-L66R_ZZZ01A00	Unsegmented Portion of Watershed L66	river	Indeterminate
	Category 3A: There is no data available within the data window of the current assessment to determine if any designated use is attained and the water was not previously listed as impaired. **Impairment Causes:** Not Applicable **Sources:** Not Applicable		
VAW-L66R_LCC01A08	Little Cherrystone Creek	river	Impaired
	Category 4A: The water is impaired or threatened for one or more designated uses but does not require a TMDL because the TMDL for specific pollutant(s) is complete and US EPA approved. **Impairment Causes:** Escherichia coli (E. coli) **Sources:** Wastes from Pets, Wildlife Other than Waterfowl, Livestock (Grazing or Feeding Operations), Unspecified Domestic Waste		

VAW-L58R_SRV02A04	Sandy River	river	Indeterminate
	Category 3A: There is no data available within the data window of the current assessment to determine if any designated use is attained and the water was not previously listed as impaired. **Impairment Causes:** Not Applicable **Sources:** Not Applicable		
VAW-L59R_SCR02A02	Sandy Creek	river	Impaired
	Category 4A: The water is impaired or threatened for one or more designated uses but does not require a TMDL because the TMDL for specific pollutant(s) is complete and US EPA approved. **Impairment Causes:** Escherichia coli (E. coli) **Sources:** Wastes from Pets, Wildlife Other than Waterfowl, Livestock (Grazing or Feeding Operations), Unspecified Domestic Waste		
VAW-L65R_WOA01A10	White Oak Creek	river	Impaired
	Category 4A: The water is impaired or threatened for one or more designated uses but does not require a TMDL because the TMDL for specific pollutant(s) is complete and US EPA approved. **Impairment Causes:** Escherichia coli (E. coli) **Sources:** Wastes from Pets, Wildlife Other than Waterfowl, Livestock (Grazing or Feeding Operations), Unspecified Domestic Waste		
VAW-L59R_ZZZ01A00	Unsegmented Portion of Watershed L59	river	Indeterminate
	Category 3A: There is no data available within the data window of the current assessment to determine if any designated use is attained and the water was not previously listed as impaired. **Impairment Causes:** Not Applicable **Sources:** Not Applicable		
VAW-L57R_TRO01A08	Trotters Creek	river	Fully Supporting
	Category 2A: The water is supporting all designated uses for which it is monitored. **Impairment Causes:** Not Applicable **Sources:** Not Applicable		

There are no Class VII Waters present within this user defined area.

WetCAT Caveat

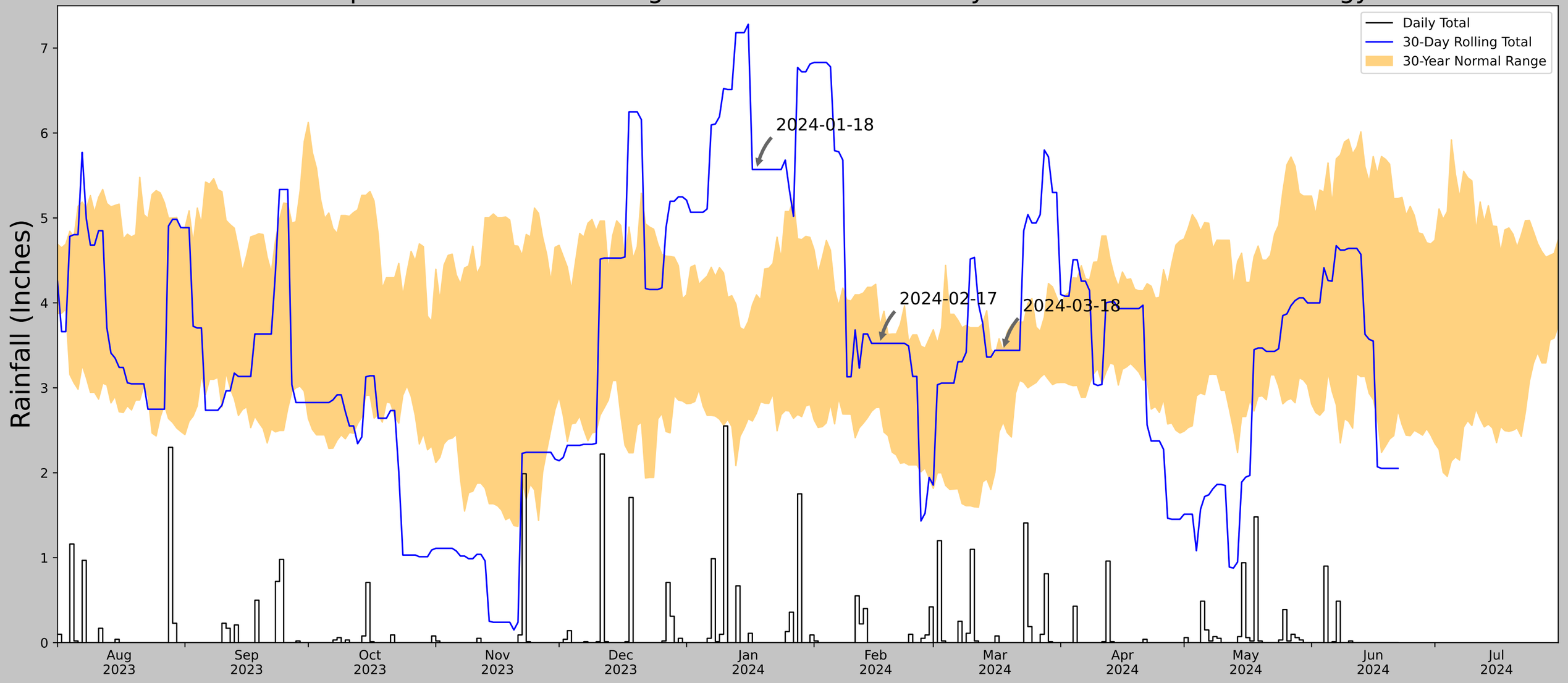
Data, maps, and reports generated through the Virginia Wetland Condition Assessment Tool (WetCAT) do not contain real-time data. Content provided via the viewer is subject to change without notice. The Center for Coastal Resources Management (CCRM) and the Virginia Department of Environmental Quality make no warranty, express or implied, as to the accuracy, completeness, or utility of this information.

EXHIBIT 10 – ANTECEDENT PRECIPITATION TOOL

Table 1. APT results at the time of fieldwork and 30 days prior to fieldwork.

Date	APT Results
3/18/2024	“wetter than normal”
3/19/2024 through 3/22/2024	“normal conditions”
3/25/2024 through 3/27/2024	“wetter than normal”
3/28/2024 & 3/29/2024	“normal conditions”
4/1/2024	“wetter than normal”
4/2/2024 & 4/3/2024	“normal conditions”
4/4/2024 & 4/5/2024	“wetter than normal”
4/8/2024 through 4/12/2024	“normal conditions”
4/15/2024 through 4/19/2024	“normal conditions”
4/22/2024 through 4/26/2024	“normal conditions”
4/29/2024 & 4/30/2024	“normal conditions”
5/1/2024	“normal conditions”
5/2/2024 & 5/3/2024	“drier than normal”
5/4/2024	“normal conditions”
5/6/2024 through 5/10/2024	“drier than normal”
5/13/2024 & 5/14/2024	“drier than normal”
5/15/2024	“normal conditions”
5/16/2024	“drier than normal”
5/17/2024	“normal conditions”
5/20/2024 through 5/24/2024	“normal conditions”
5/28/2024 through 5/31/2024	“normal conditions”
6/13/2024 & 6/14/2024	“normal conditions”
7/7/2024 & 7/8/2024	“drier than normal”
7/25/2024 & 7/26/2024	“normal conditions”
8/13/2024 & 8/14/2024	“normal conditions”
8/15/2024	“wetter than normal”
8/16/2024	“normal conditions”
8/19/2024 & 8/20/2024	“normal conditions”
8/21/2024	“wetter than normal”
10/07/2024	“wetter than normal”
10/08/2024 & 10/09/2024	“normal conditions”
10/15/2024 & 10/16/2024	“normal conditions”
10/28/2024	“normal conditions”
11/13/2024 through 11/15/2024	“normal conditions”
11/19/2024 through 11/21/2024	“normal conditions”
1/8/2025 through 1/10/2025	“drier than normal”
1/14/2025	“drier than normal”
2/24/2025 through 2/27/2025	“normal conditions”
3/31/2025	“normal conditions”

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-03-18
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-03-18	2.598819	3.436614	3.440945	Wet	3	3	9
2024-02-17	2.771654	3.726772	3.523622	Normal	2	2	4
2024-01-18	2.700787	4.094095	5.570866	Wet	3	1	3
Result							Wetter than Normal - 16

US Army Corps of Engineers

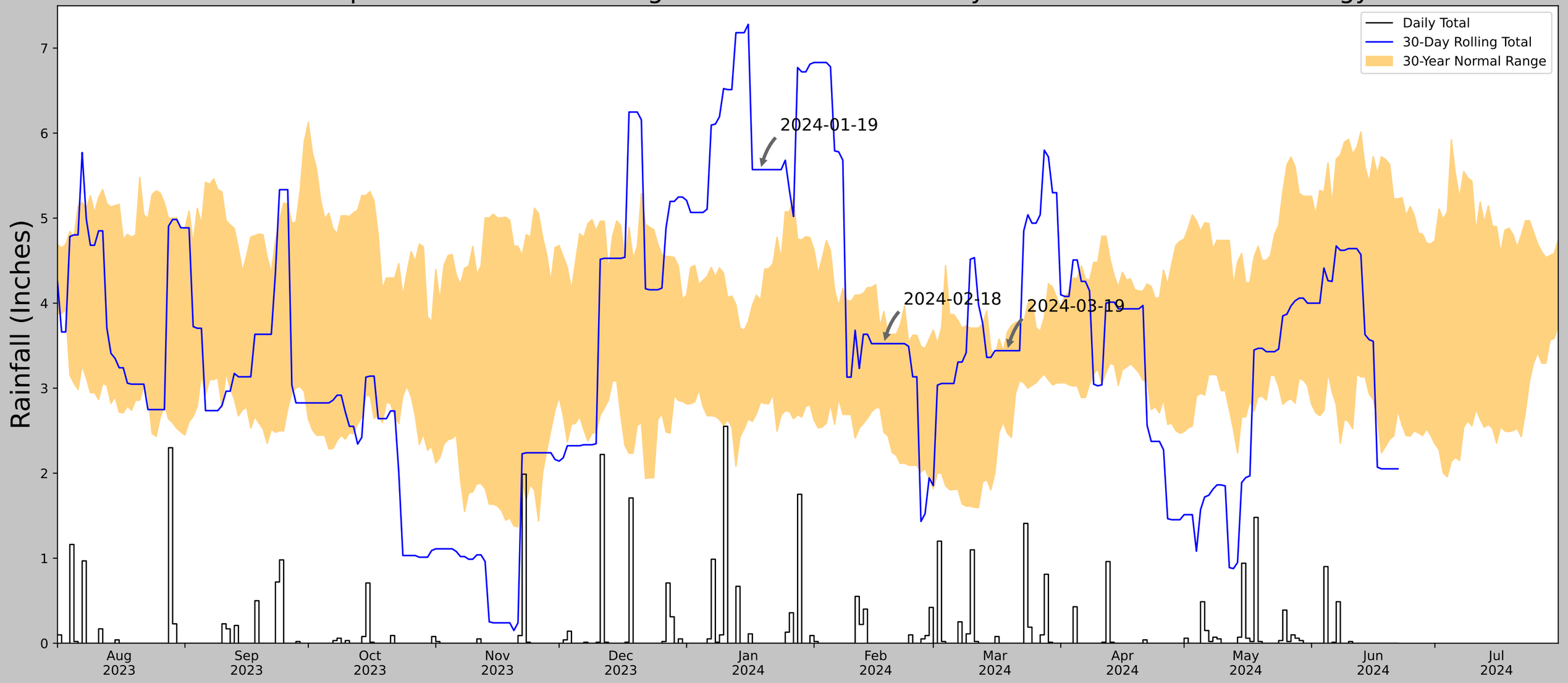
ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-03-19
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-03-19	2.472047	3.657874	3.440945	Normal	2	3	6
2024-02-18	2.47874	3.902362	3.523622	Normal	2	2	4
2024-01-19	2.836614	4.036221	5.570866	Wet	3	1	3
Result							Normal Conditions - 13

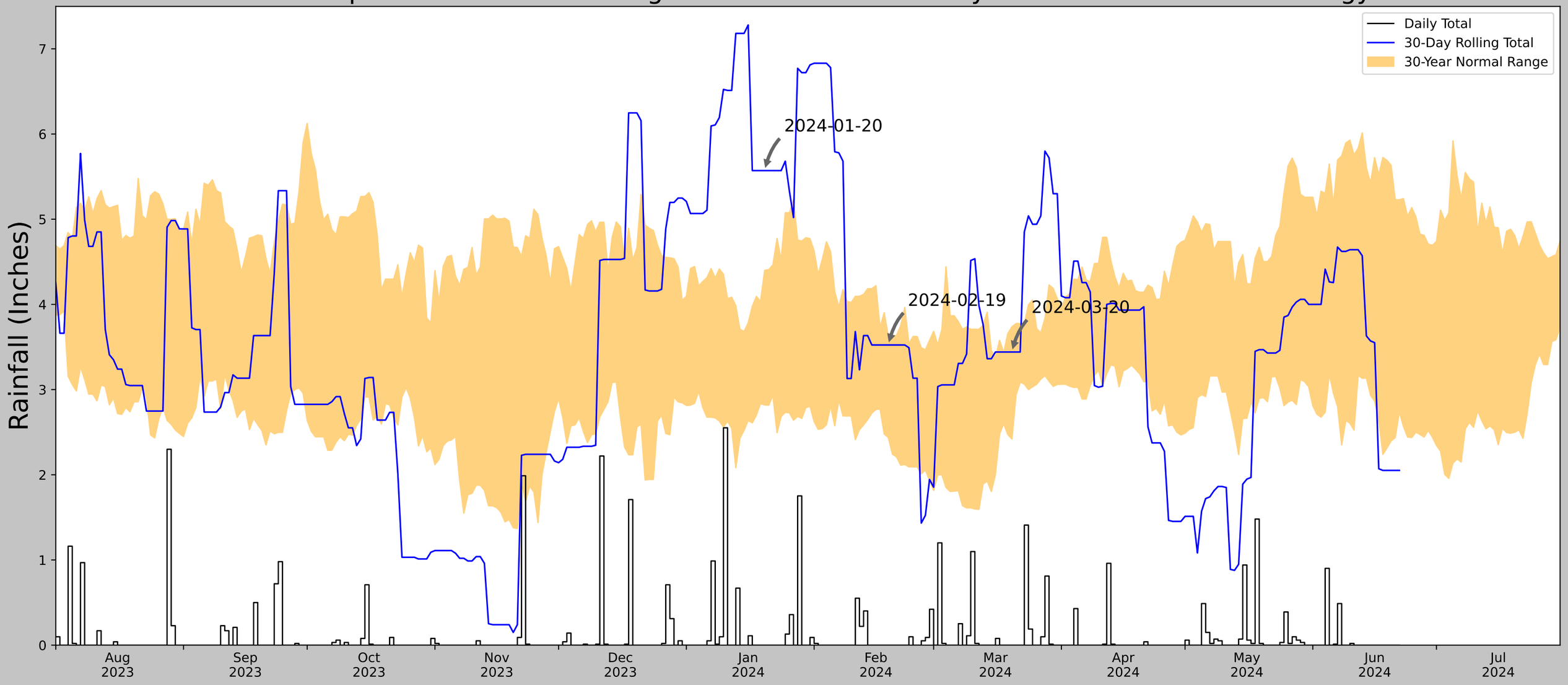
US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.711389, -79.465278
Observation Date	2024-03-20
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-03-20	2.420079	3.737795	3.440945	Normal	2	3	6
2024-02-19	2.437402	3.629134	3.523622	Normal	2	2	4
2024-01-20	2.818898	4.4	5.570866	Wet	3	1	3
Result							Normal Conditions - 13

US Army Corps of Engineers

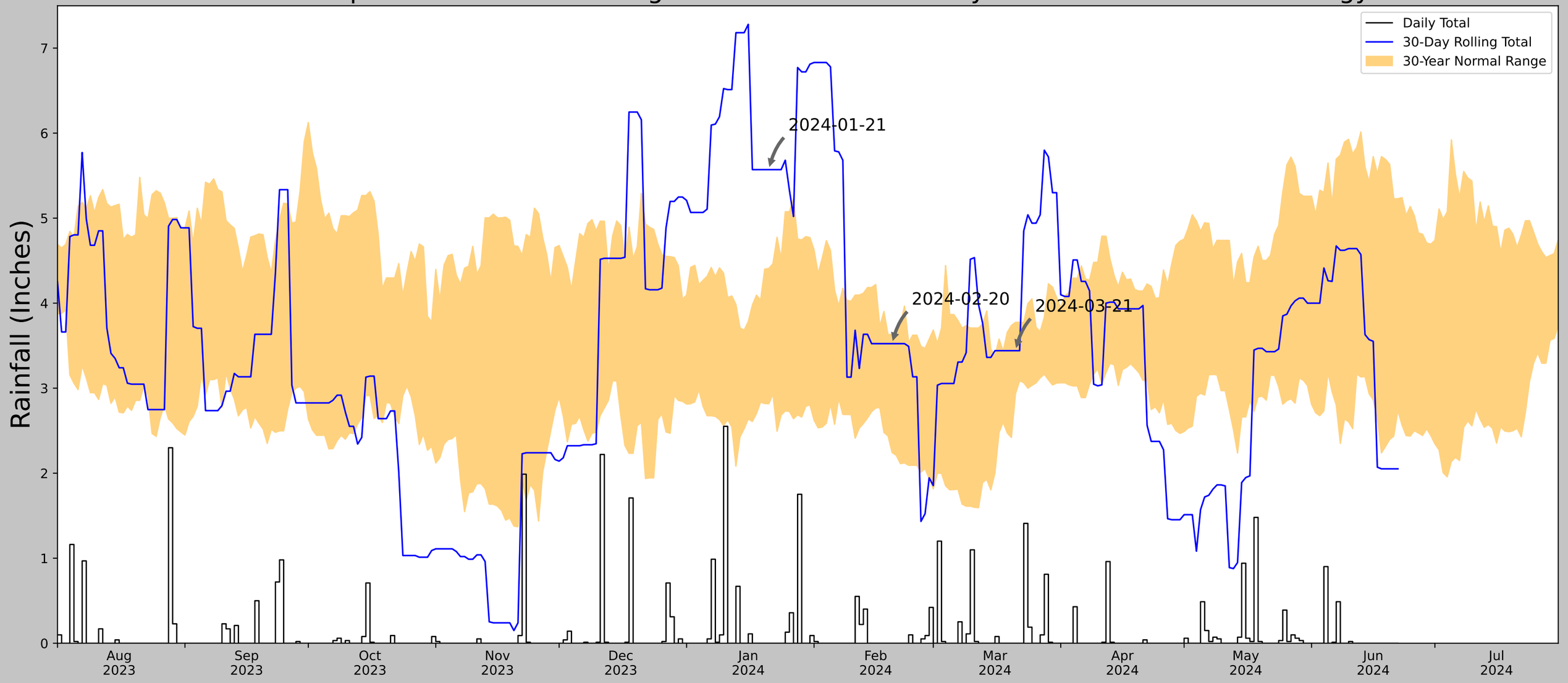
ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-03-21
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-03-21	2.935039	3.77441	3.440945	Normal	2	3	6
2024-02-20	2.24252	3.634252	3.523622	Normal	2	2	4
2024-01-21	2.816536	4.408268	5.570866	Wet	3	1	3
Result							Normal Conditions - 13

US Army Corps of Engineers

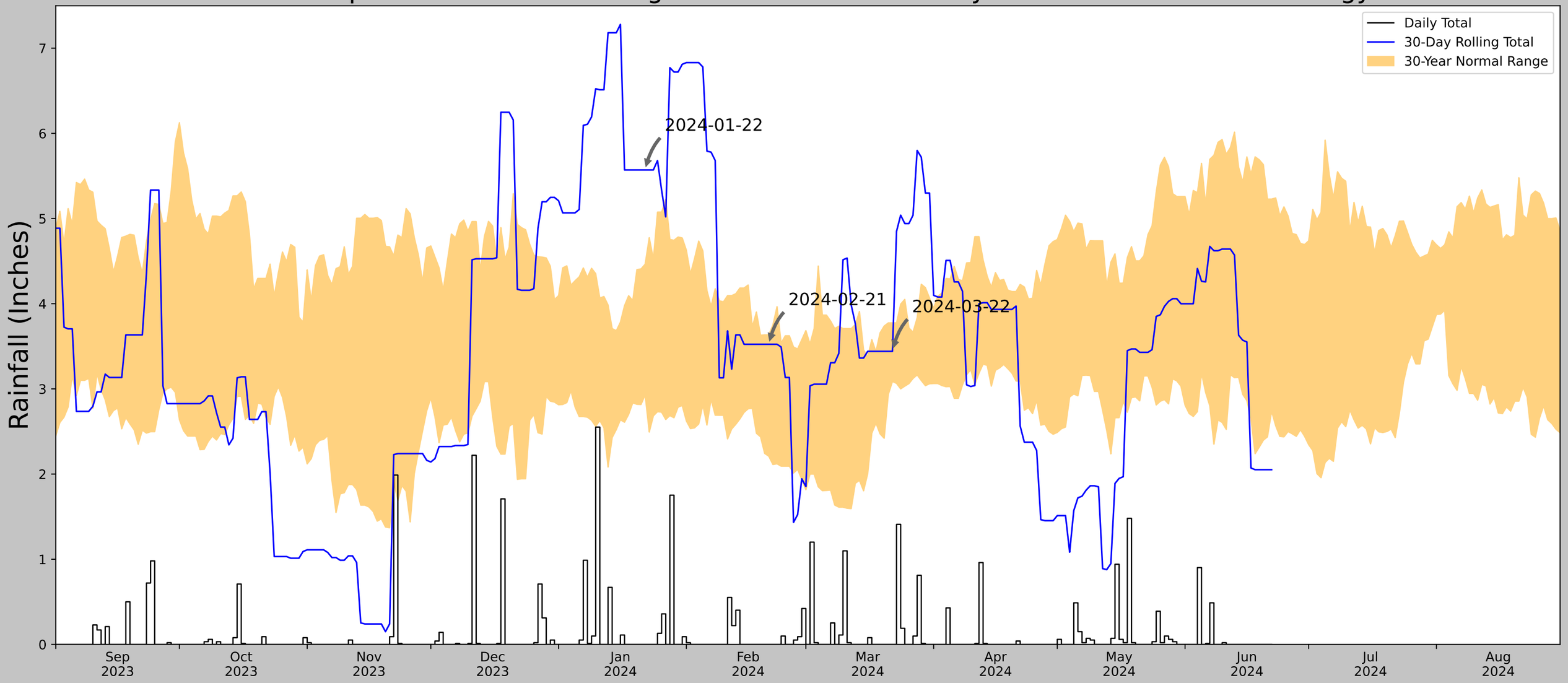
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-03-22
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-03-22	3.086614	3.77441	3.440945	Normal	2	3	6
2024-02-21	2.209449	3.634252	3.523622	Normal	2	2	4
2024-01-22	2.930315	4.46378	5.570866	Wet	3	1	3
Result							Normal Conditions - 13

US Army Corps of Engineers

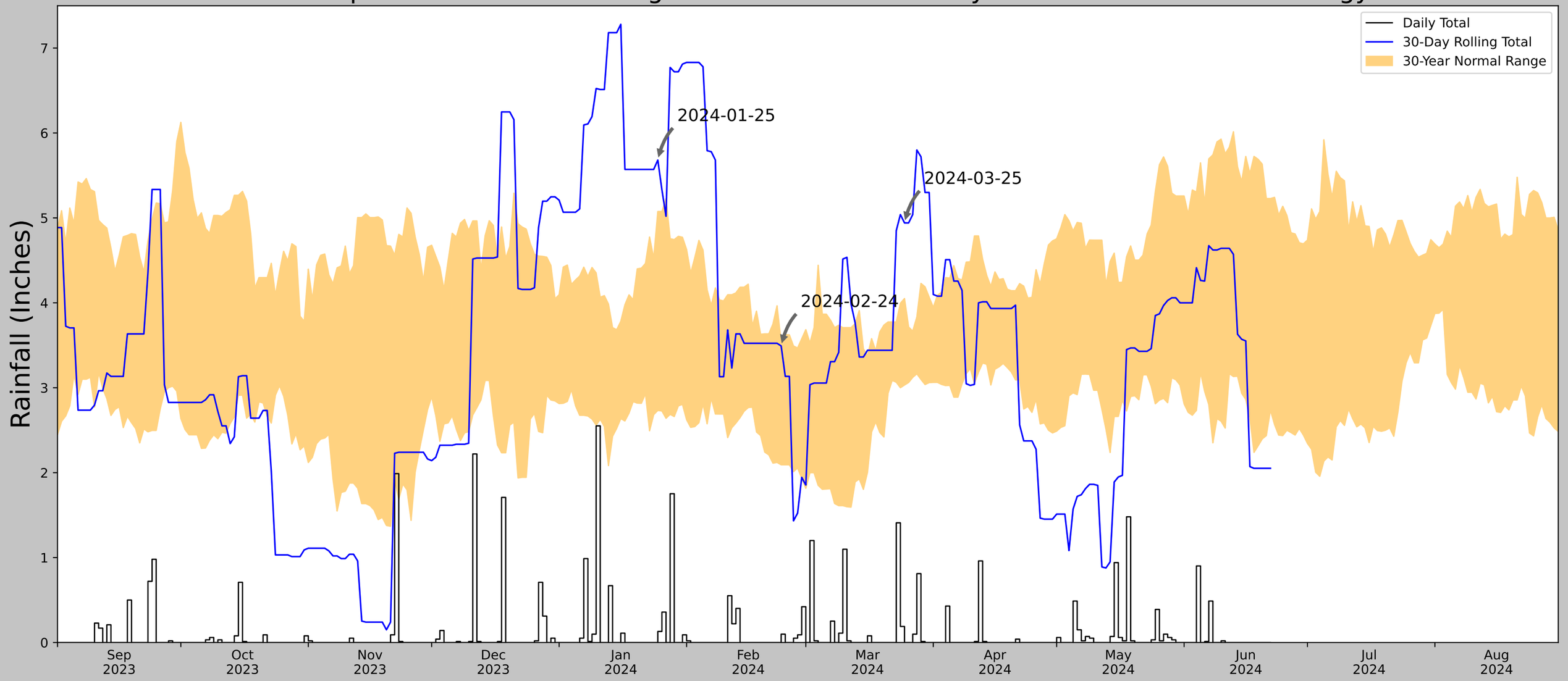
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-03-25
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-03-25	3.03189	4.050788	4.940945	Wet	3	3	9
2024-02-24	2.09252	3.537402	3.492126	Normal	2	2	4
2024-01-25	2.732677	5.075591	5.681103	Wet	3	1	3
Result							Wetter than Normal - 16

US Army Corps of Engineers

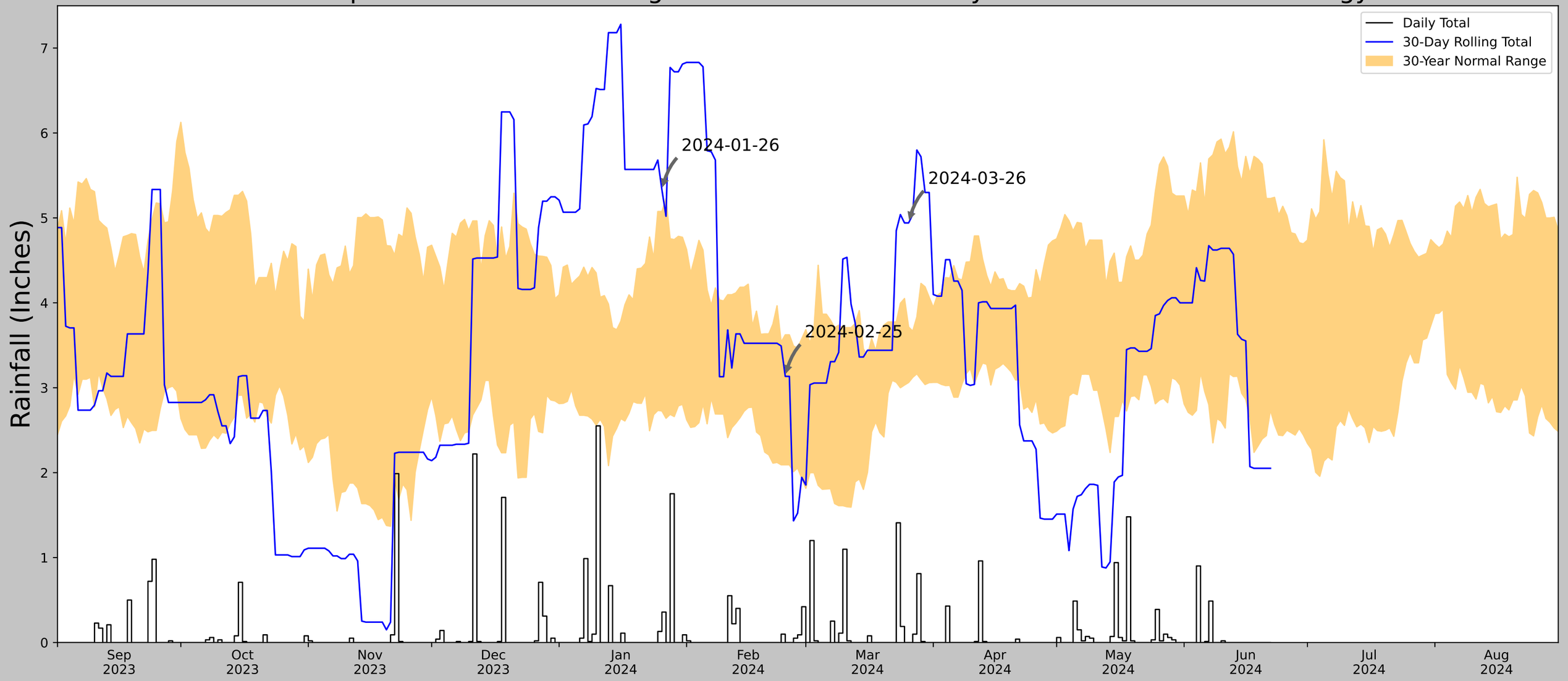
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-03-26
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-03-26	3.061811	3.715354	4.940945	Wet	3	3	9
2024-02-25	2.09252	3.623622	3.133858	Normal	2	2	4
2024-01-26	2.726772	5.075591	5.330709	Wet	3	1	3
Result							Wetter than Normal - 16

US Army Corps of Engineers

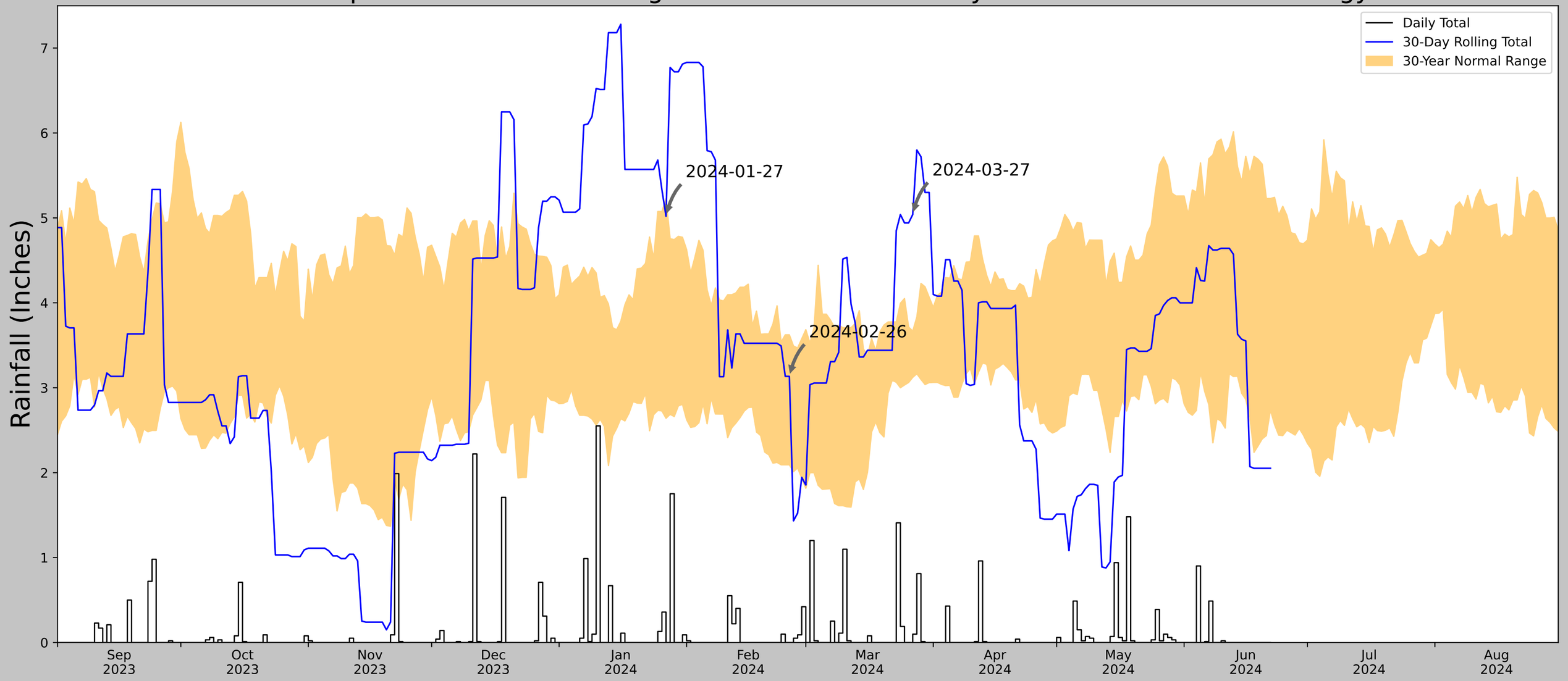
ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-03-27
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-03-27	3.122047	3.666536	5.03937	Wet	3	3	9
2024-02-26	2.09252	3.623622	3.133858	Normal	2	2	4
2024-01-27	2.640158	5.225197	5.019685	Normal	2	1	2
Result							Wetter than Normal - 15

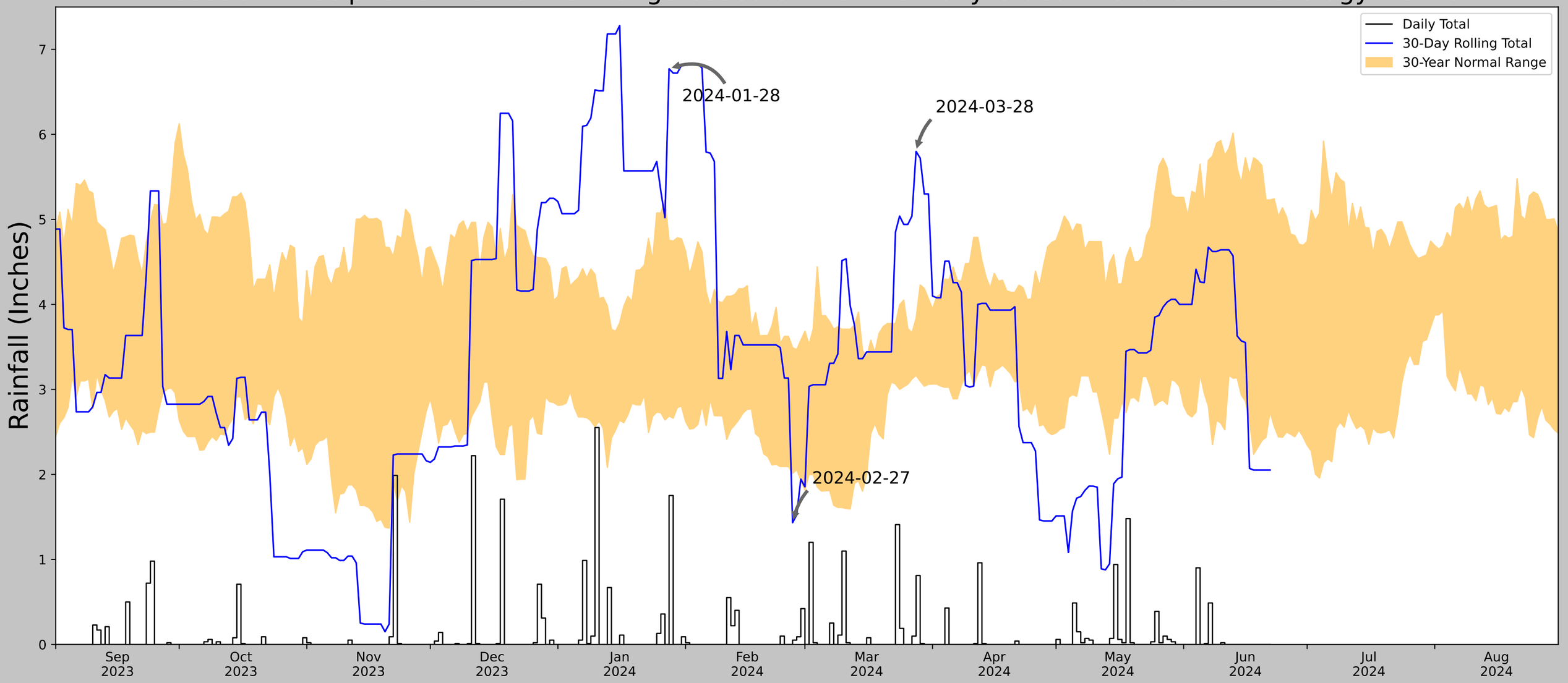
US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.711389, -79.465278
Observation Date	2024-03-28
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-03-28	3.164173	3.833465	5.799213	Wet	3	3	9
2024-02-27	2.011417	3.491339	1.433071	Dry	1	2	2
2024-01-28	2.686614	4.754725	6.771654	Wet	3	1	3
Result							Normal Conditions - 14

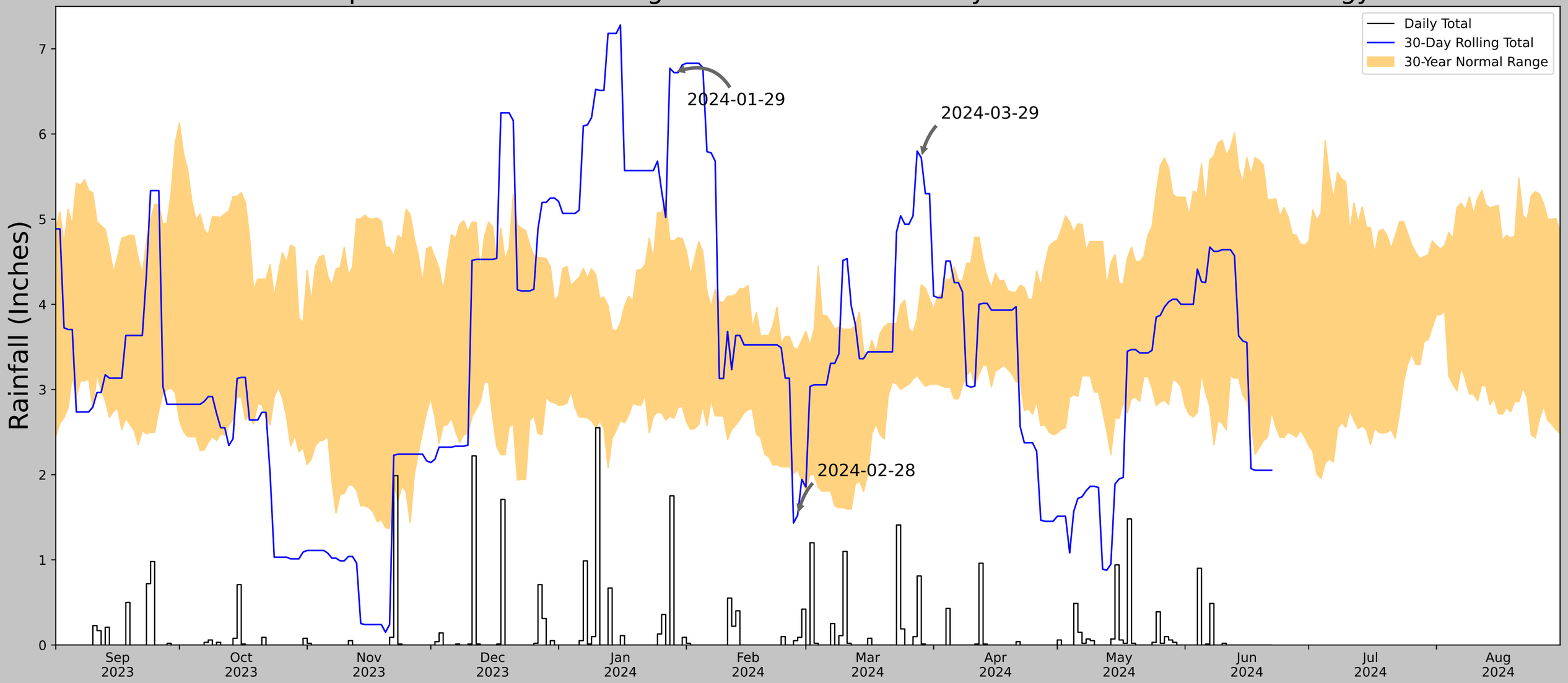
US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.711389, -79.465278
Observation Date	2024-03-29
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-03-29	3.098425	4.22874	5.720473	Wet	3	3	9
2024-02-28	2.055512	3.468504	1.523622	Dry	1	2	2
2024-01-29	2.66063	4.744488	6.720473	Wet	3	1	3
Result							Normal Conditions - 14

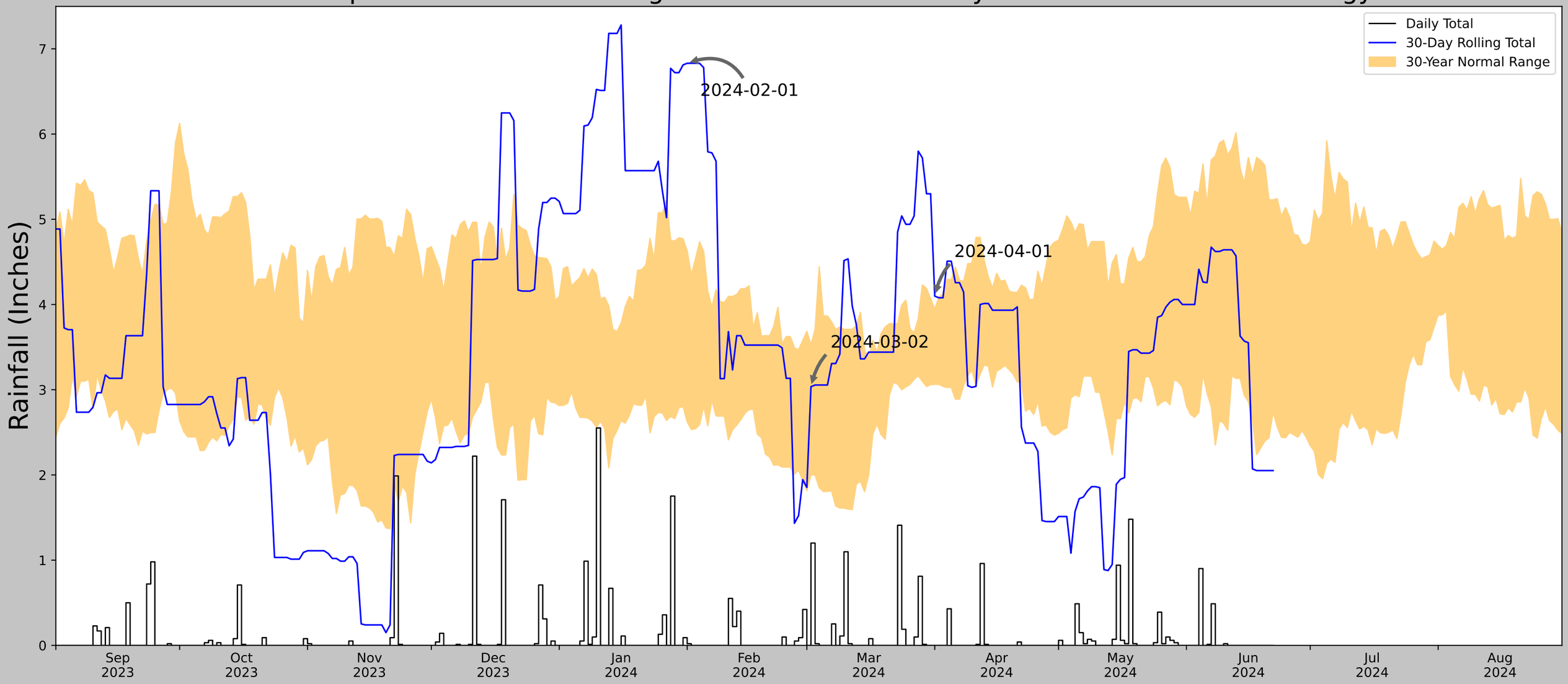
US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.711389, -79.465278
Observation Date	2024-04-01
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-01	3.062992	3.946063	4.098425	Wet	3	3	9
2024-03-02	1.999606	3.526772	3.035433	Normal	2	2	4
2024-02-01	2.624016	4.62874	6.830709	Wet	3	1	3
Result							Wetter than Normal - 16

US Army Corps of Engineers

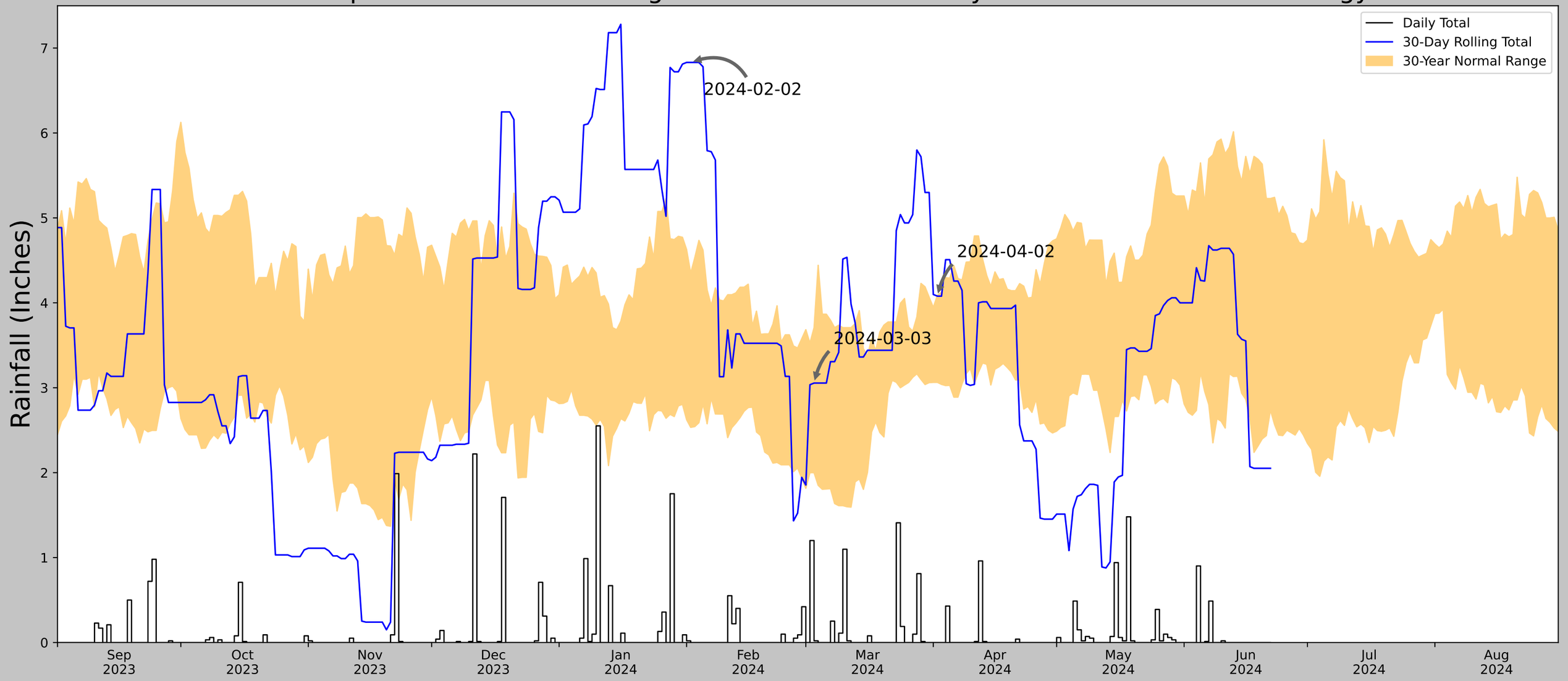
ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-04-02
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-02	3.062992	4.088583	4.07874	Normal	2	3	6
2024-03-03	1.999606	3.70748	3.055118	Normal	2	2	4
2024-02-02	2.533071	4.349213	6.830709	Wet	3	1	3
Result							Normal Conditions - 13

US Army Corps of Engineers

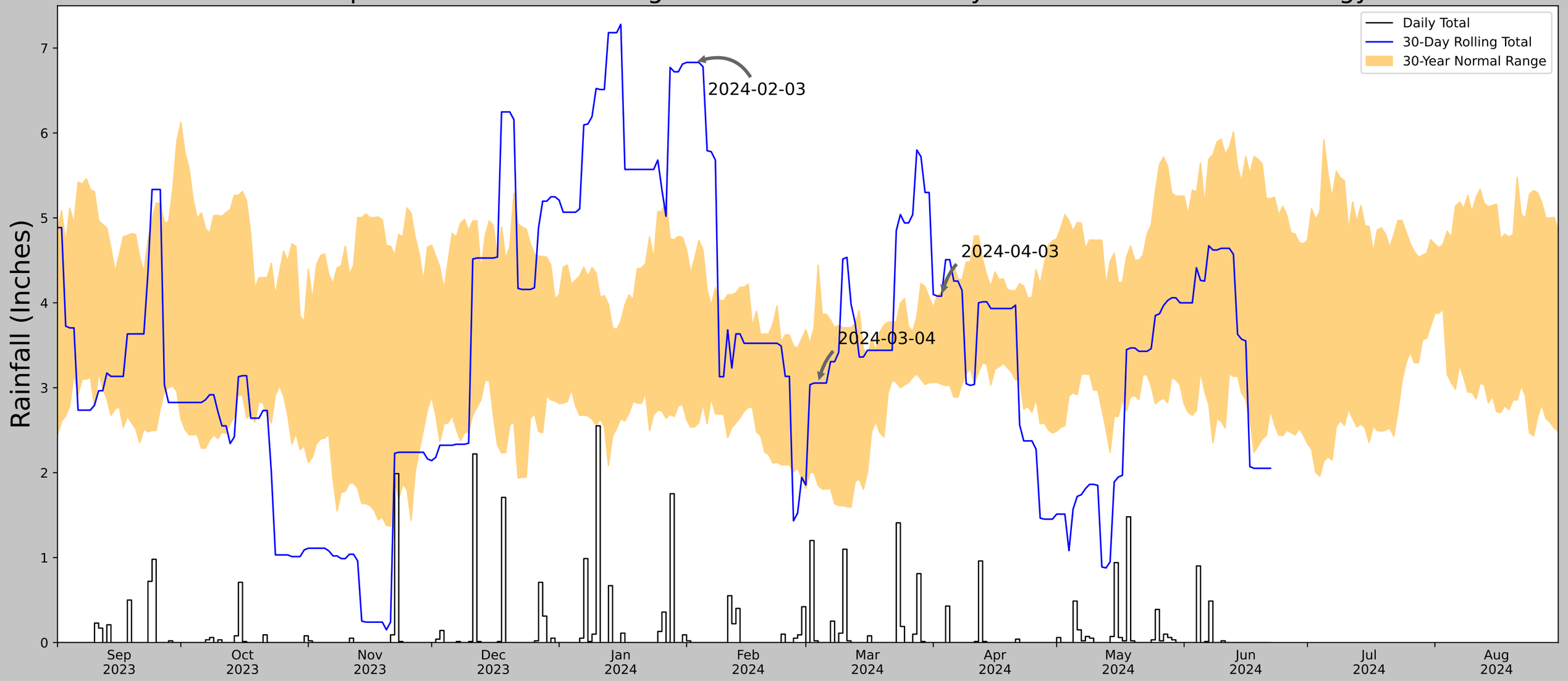
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-04-03
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-03	3.03937	4.124016	4.07874	Normal	2	3	6
2024-03-04	1.850787	4.44252	3.055118	Normal	2	2	4
2024-02-03	2.54252	4.533071	6.830709	Wet	3	1	3
Result							Normal Conditions - 13

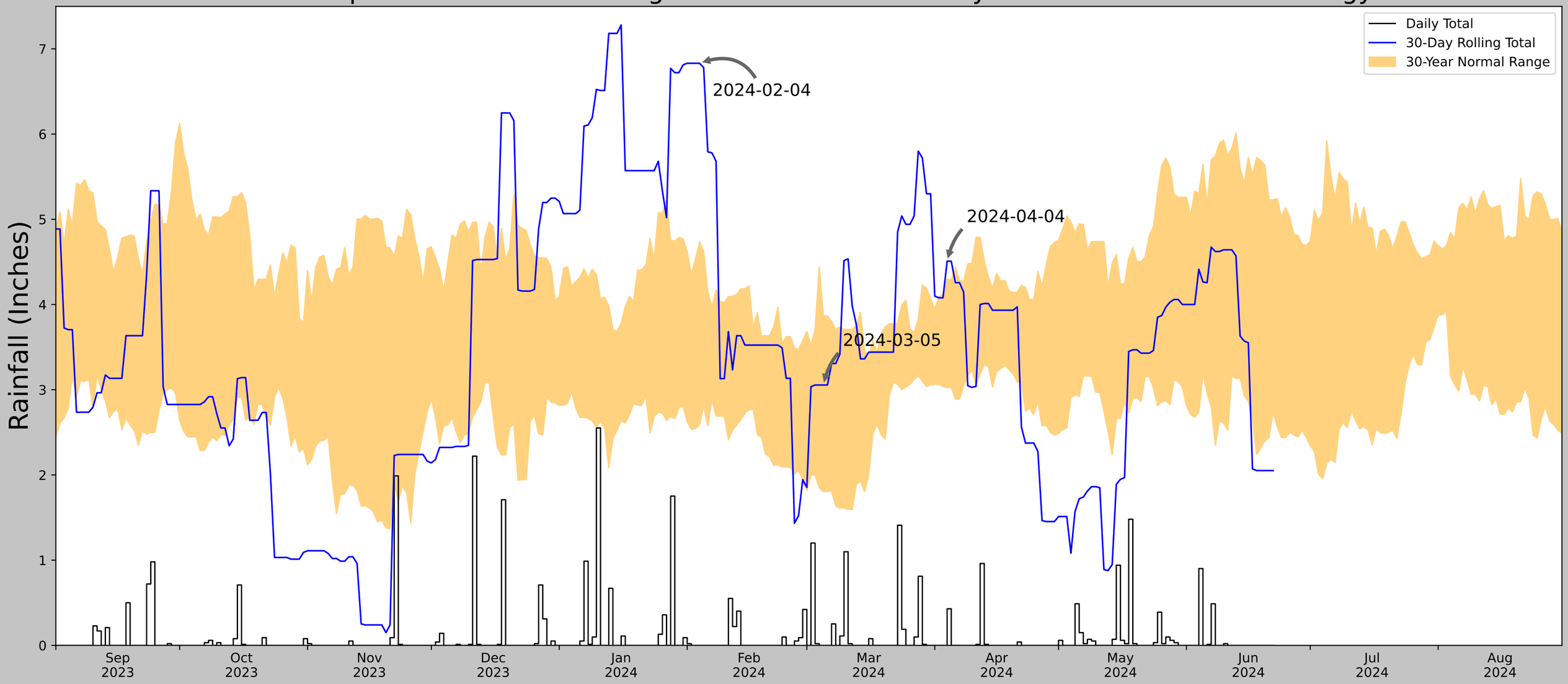
US Army Corps of Engineers

ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.711389, -79.465278
Observation Date	2024-04-04
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-04	3.025197	4.296851	4.507874	Wet	3	3	9
2024-03-05	1.804724	3.866142	3.055118	Normal	2	2	4
2024-02-04	2.588189	4.735827	6.830709	Wet	3	1	3
Result							Wetter than Normal - 16

US Army Corps of Engineers

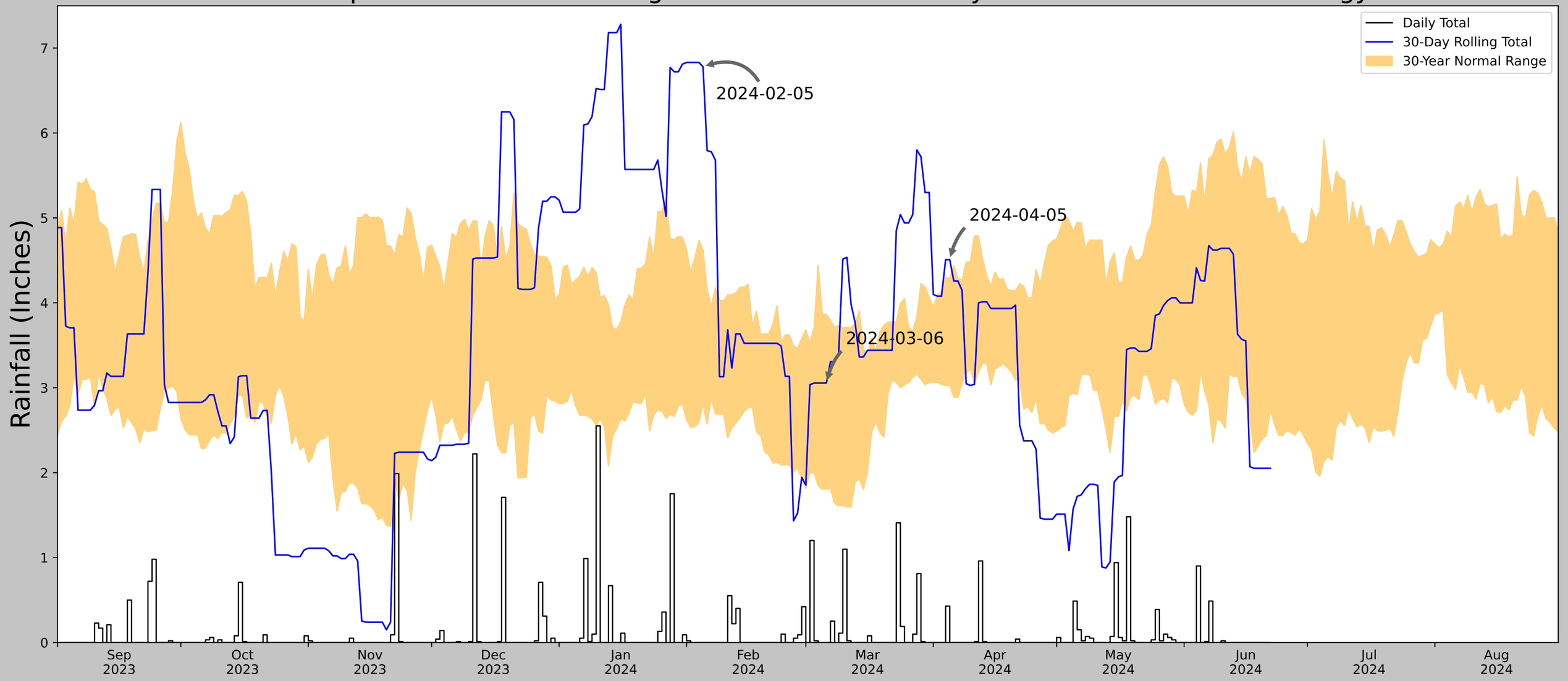
ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-04-05
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-05	3.027953	4.290945	4.507874	Wet	3	3	9
2024-03-06	1.80748	3.866142	3.055118	Normal	2	2	4
2024-02-05	2.809055	4.620079	6.779528	Wet	3	1	3
Result							Wetter than Normal - 16

US Army Corps of Engineers

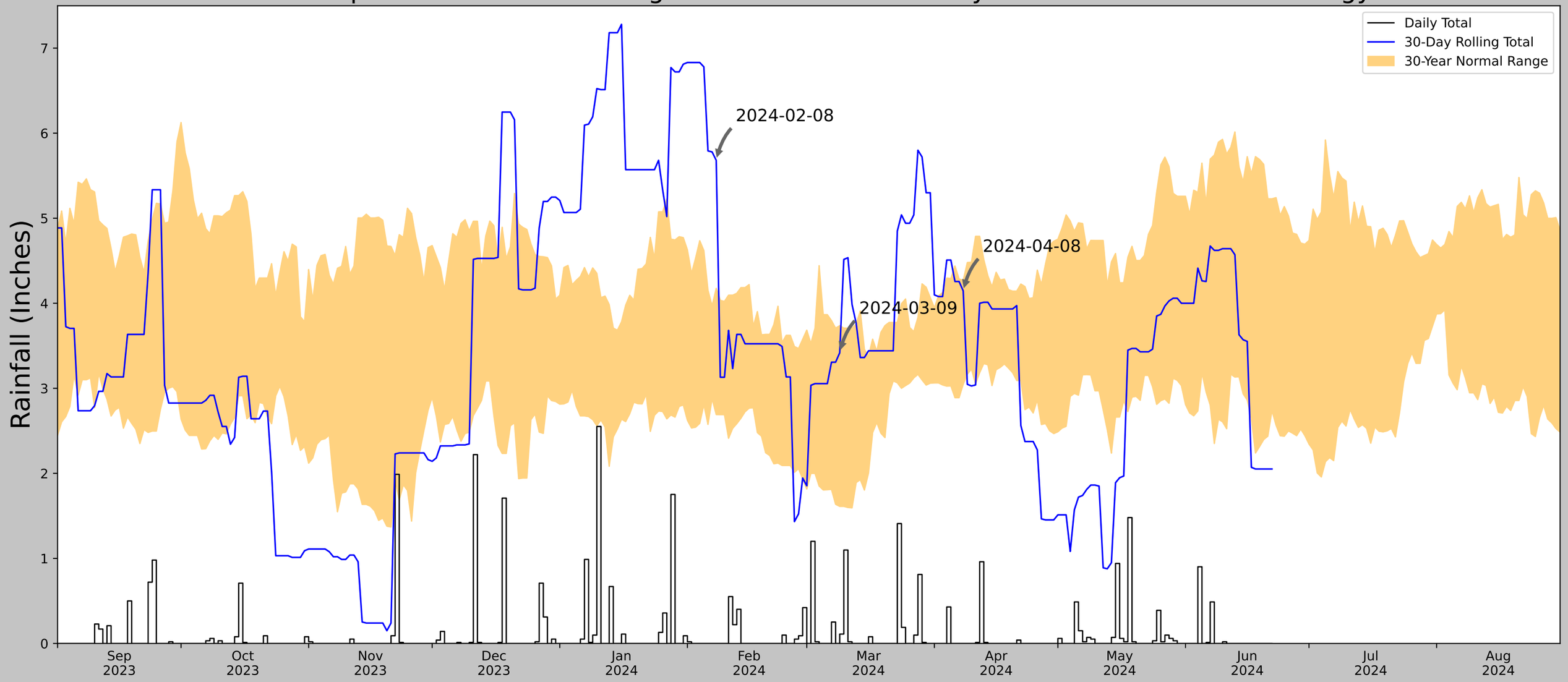
ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-04-08
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-08	3.04685	4.268898	4.145669	Normal	2	3	6
2024-03-09	1.611417	3.736221	3.417323	Normal	2	2	4
2024-02-08	2.690945	4.175591	5.681103	Wet	3	1	3
Result							Normal Conditions - 13

US Army Corps of Engineers

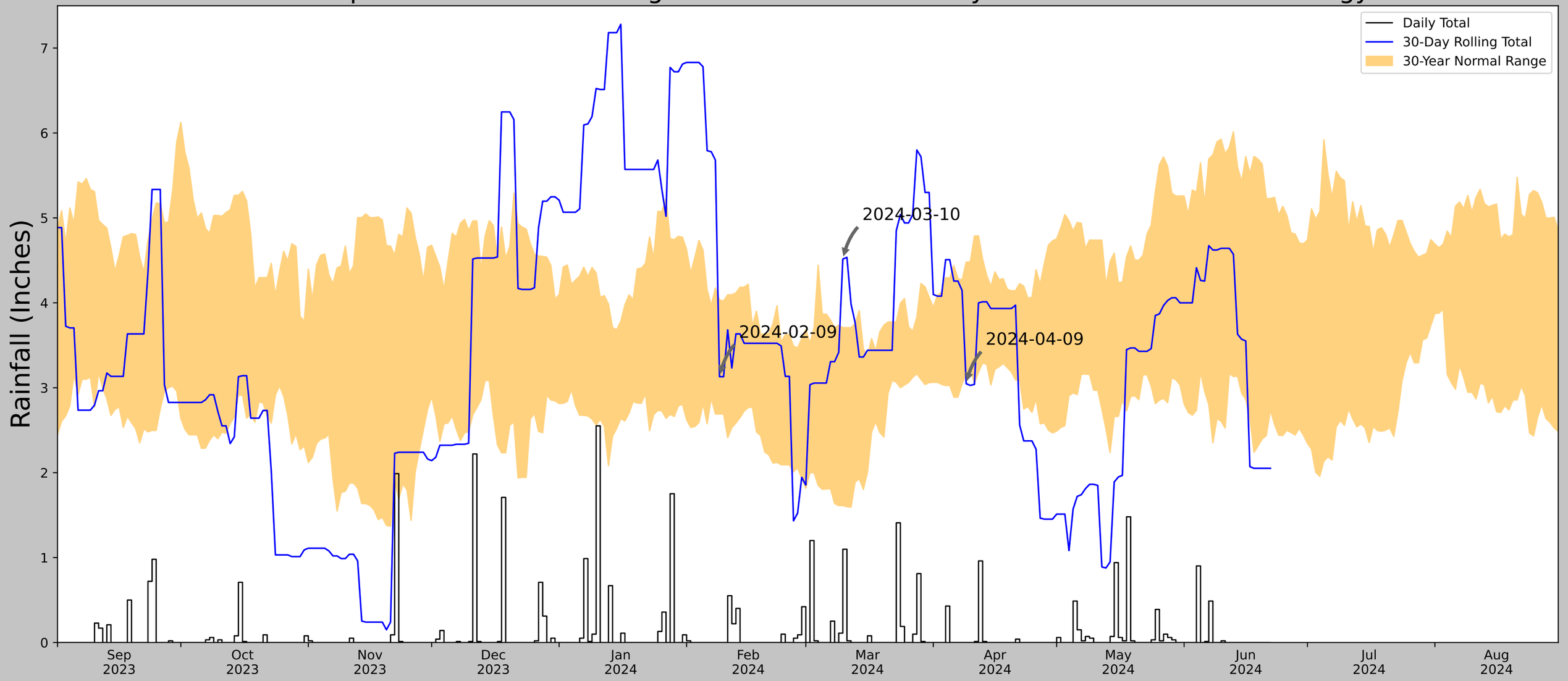
ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-04-09
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-09	3.164961	4.479134	3.047244	Dry	1	3	3
2024-03-10	1.611417	3.707874	4.515748	Wet	3	2	6
2024-02-09	2.690158	4.033858	3.129921	Normal	2	1	2
Result							Normal Conditions - 11

US Army Corps of Engineers

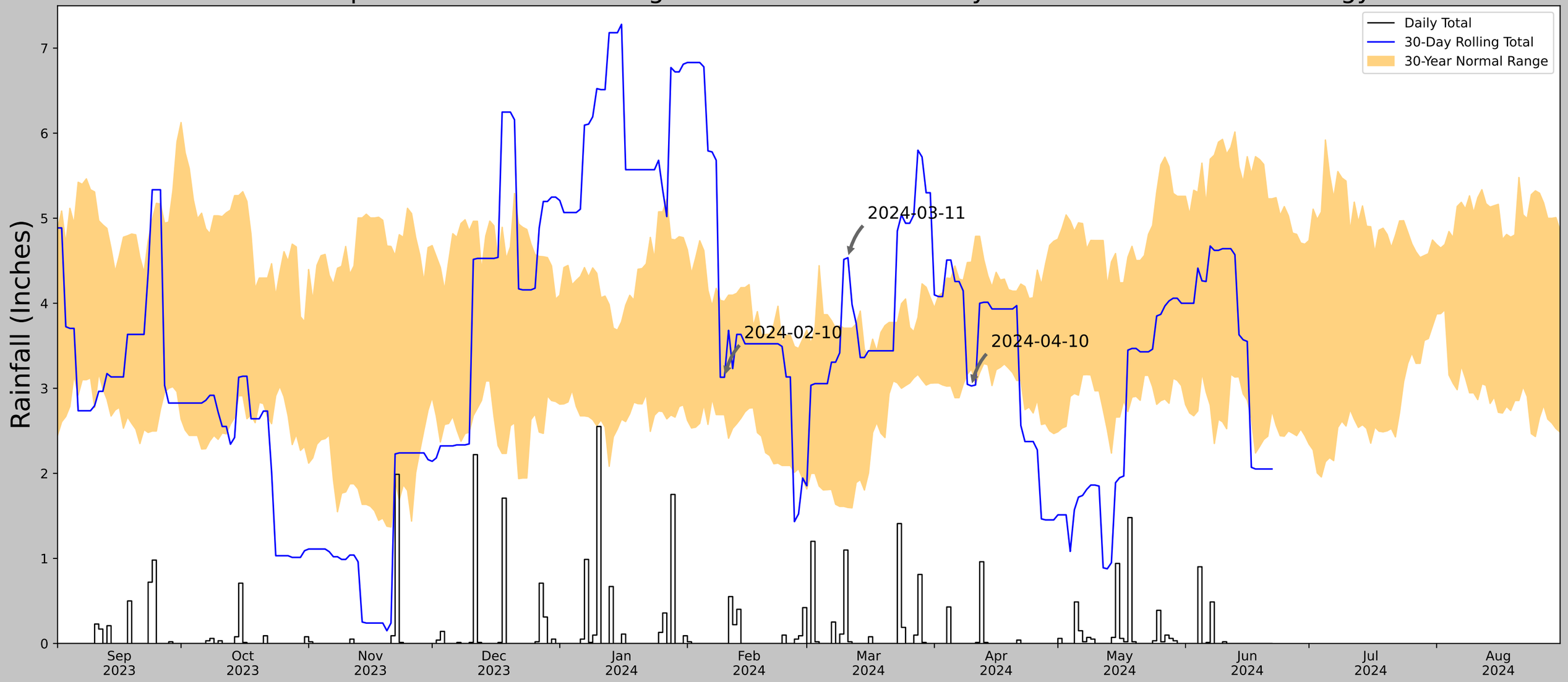
ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-04-10
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-10	3.227165	4.482677	3.027559	Dry	1	3	3
2024-03-11	1.598425	3.707874	4.535433	Wet	3	2	6
2024-02-10	2.690158	4.022047	3.129921	Normal	2	1	2
Result							Normal Conditions - 11

US Army Corps of Engineers

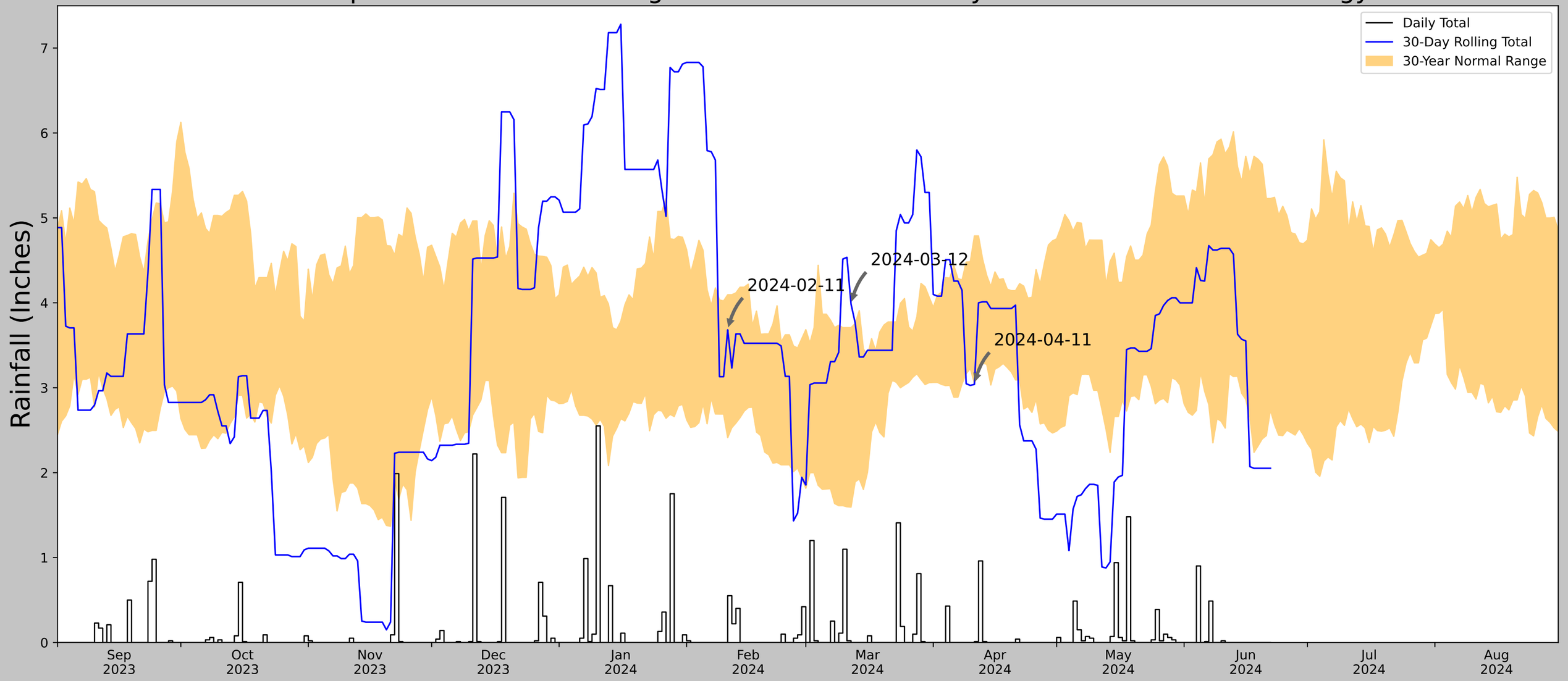
ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-04-11
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-11	3.051181	4.787795	3.03937	Dry	1	3	3
2024-03-12	1.594095	3.707874	3.984252	Wet	3	2	6
2024-02-11	2.412205	4.095276	3.681102	Normal	2	1	2
Result							Normal Conditions - 11

US Army Corps of Engineers

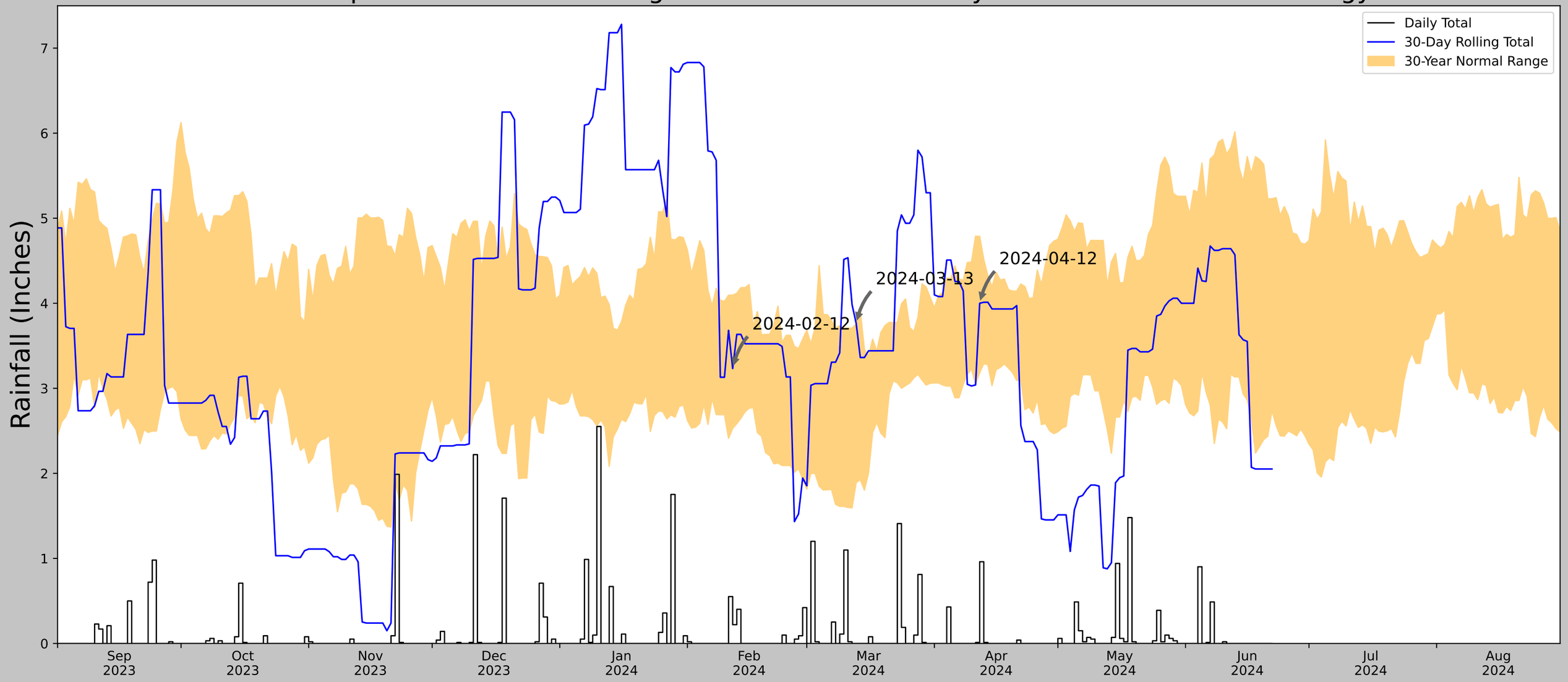
ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-04-12
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-12	3.183465	4.787795	4.0	Normal	2	3	6
2024-03-13	1.891732	3.756299	3.76378	Wet	3	2	6
2024-02-12	2.529134	4.095276	3.232284	Normal	2	1	2
Result							Normal Conditions - 14

US Army Corps of Engineers

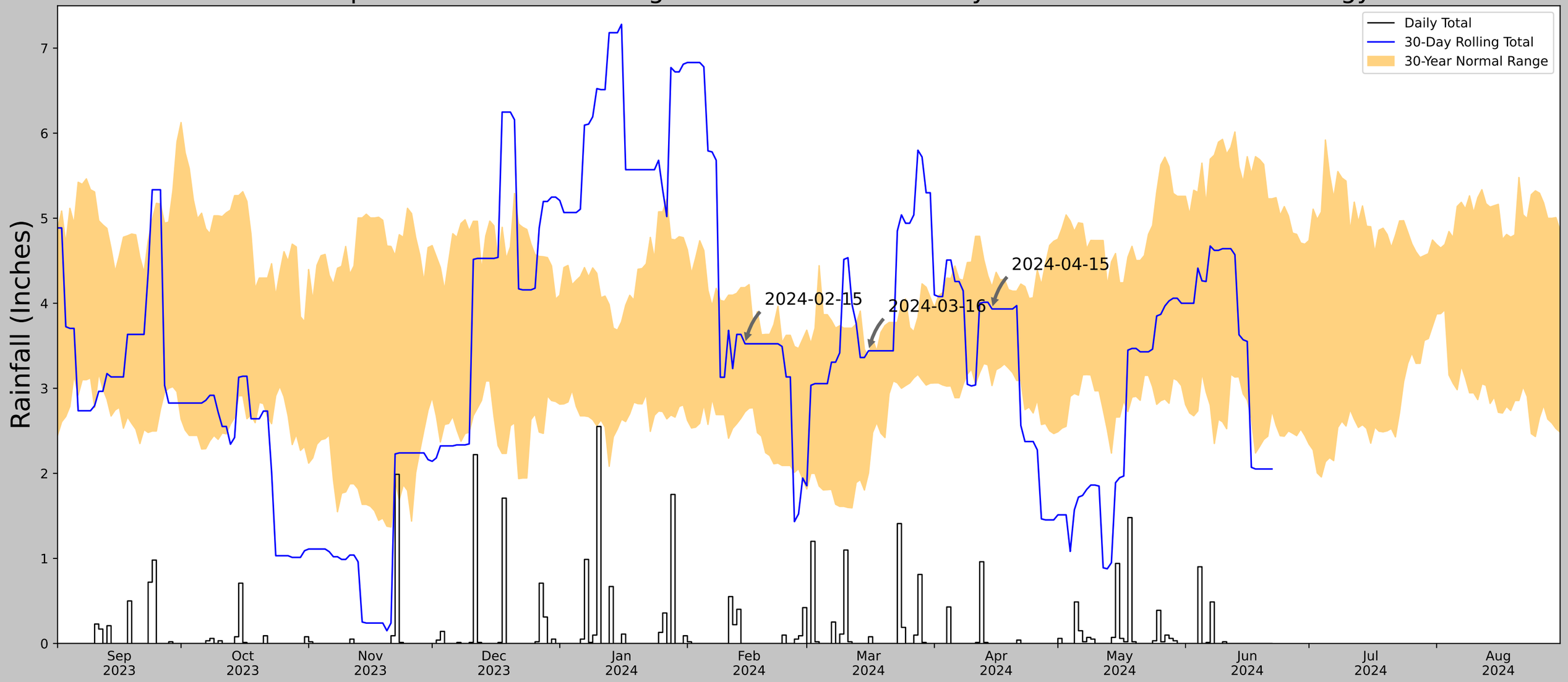
ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-04-15
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-15	3.03189	4.193701	3.933071	Normal	2	3	6
2024-03-16	2.00315	3.37874	3.440945	Wet	3	2	6
2024-02-15	2.723622	4.184252	3.523622	Normal	2	1	2
Result							Normal Conditions - 14

US Army Corps of Engineers

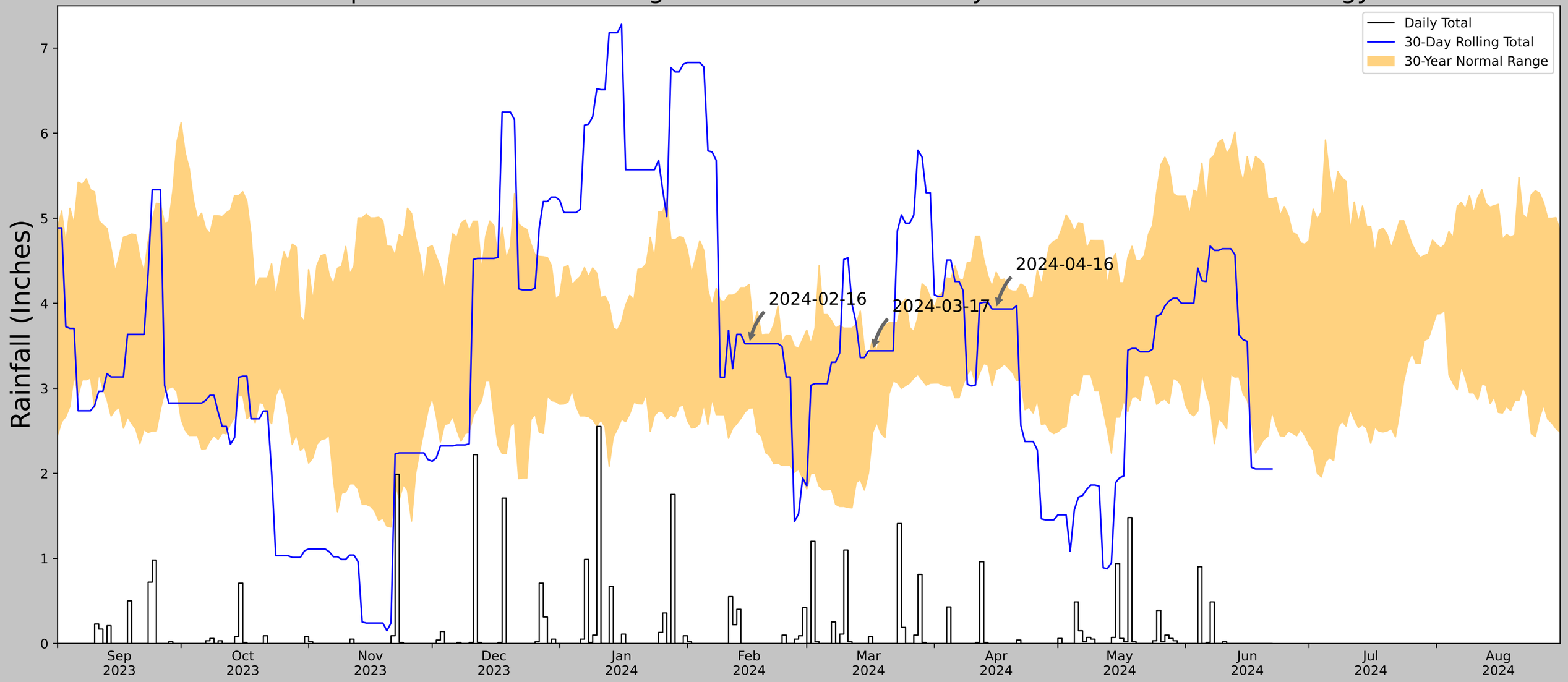
ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-04-16
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-16	3.218504	4.364567	3.933071	Normal	2	3	6
2024-03-17	2.479528	3.578347	3.440945	Normal	2	2	4
2024-02-16	2.766536	4.219685	3.523622	Normal	2	1	2
Result							Normal Conditions - 12

US Army Corps of Engineers

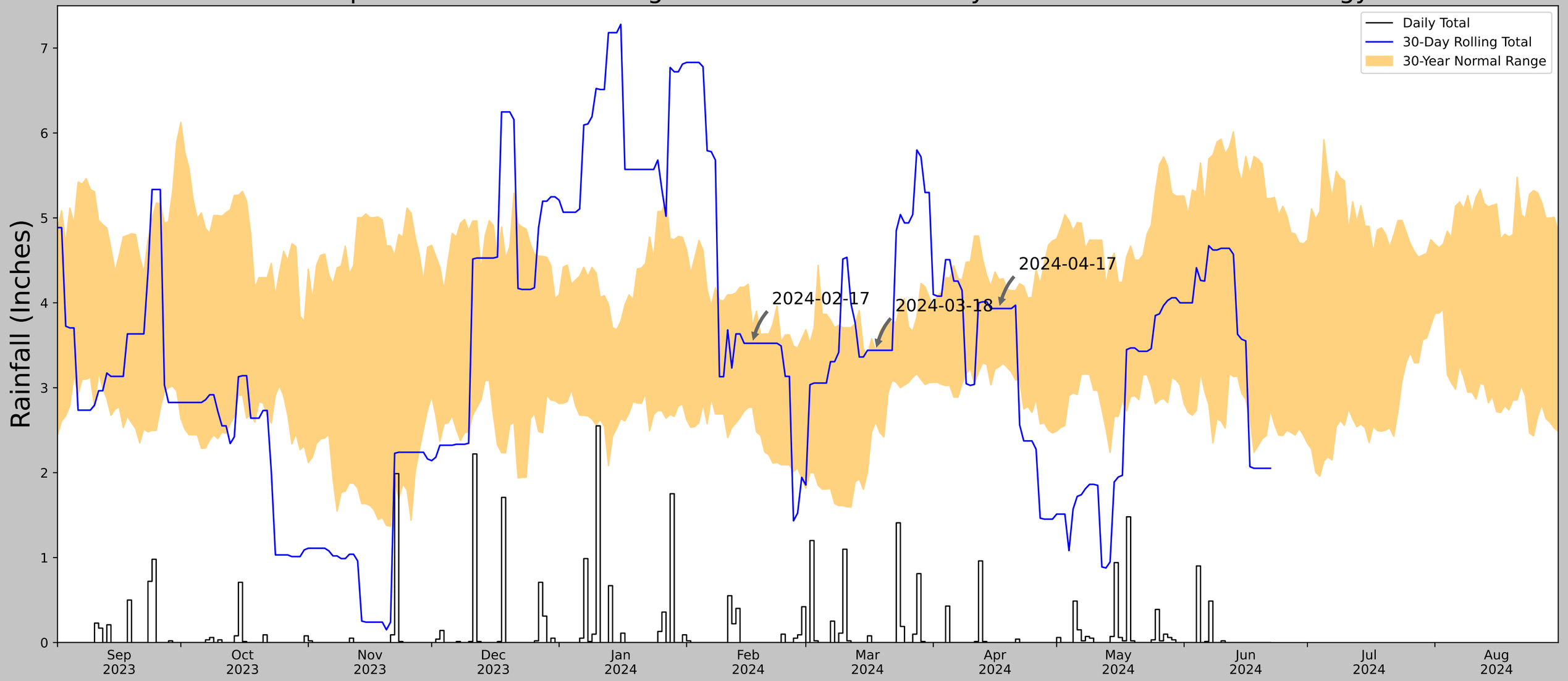
ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-04-17
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-17	3.246063	4.273622	3.933071	Normal	2	3	6
2024-03-18	2.598819	3.436614	3.440945	Wet	3	2	6
2024-02-17	2.771654	3.726772	3.523622	Normal	2	1	2
Result							Normal Conditions - 14

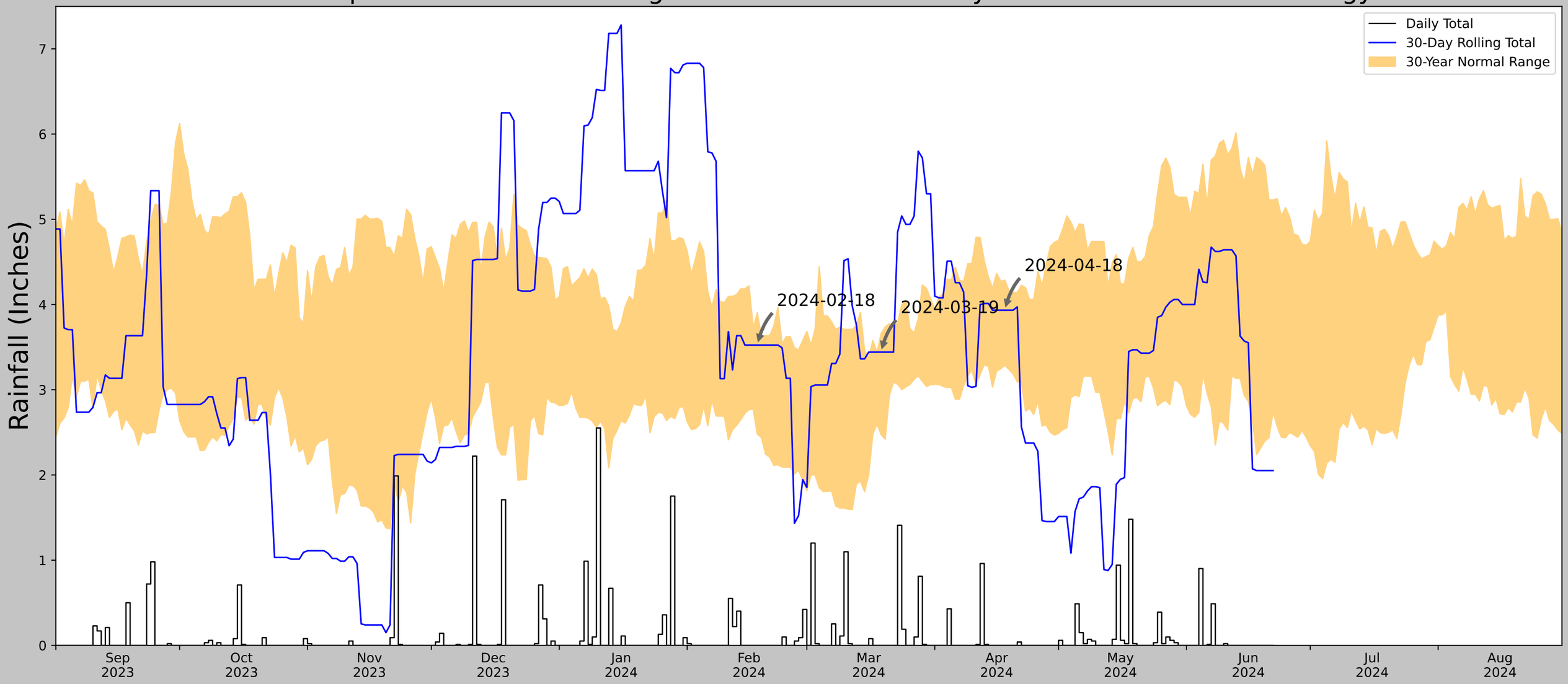
US Army Corps of Engineers

ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.711389, -79.465278
Observation Date	2024-04-18
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-18	3.286614	4.284252	3.933071	Normal	2	3	6
2024-03-19	2.472047	3.657874	3.440945	Normal	2	2	4
2024-02-18	2.47874	3.902362	3.523622	Normal	2	1	2
Result							Normal Conditions - 12

US Army Corps of Engineers

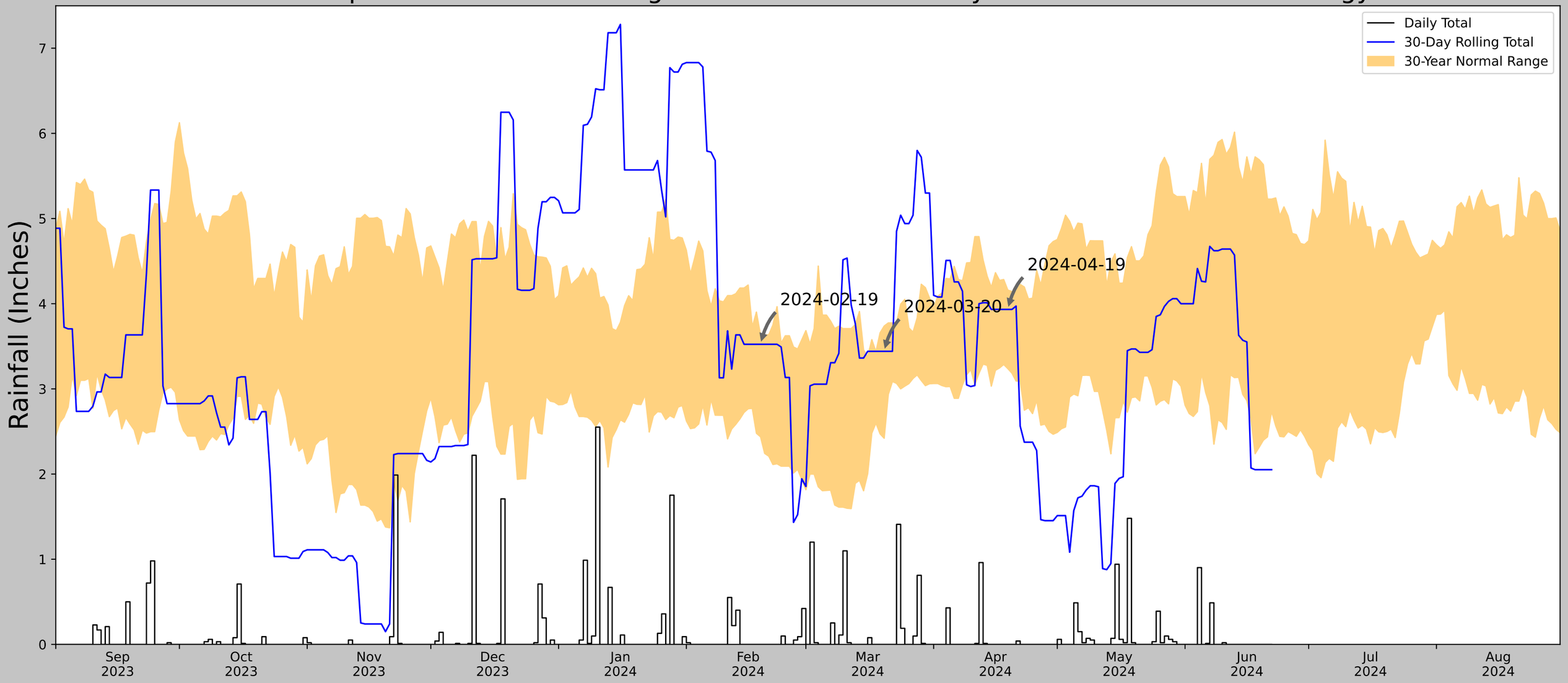
ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-04-19
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-19	3.237795	4.159843	3.933071	Normal	2	3	6
2024-03-20	2.420079	3.737795	3.440945	Normal	2	2	4
2024-02-19	2.437402	3.629134	3.523622	Normal	2	1	2
Result							Normal Conditions - 12

US Army Corps of Engineers

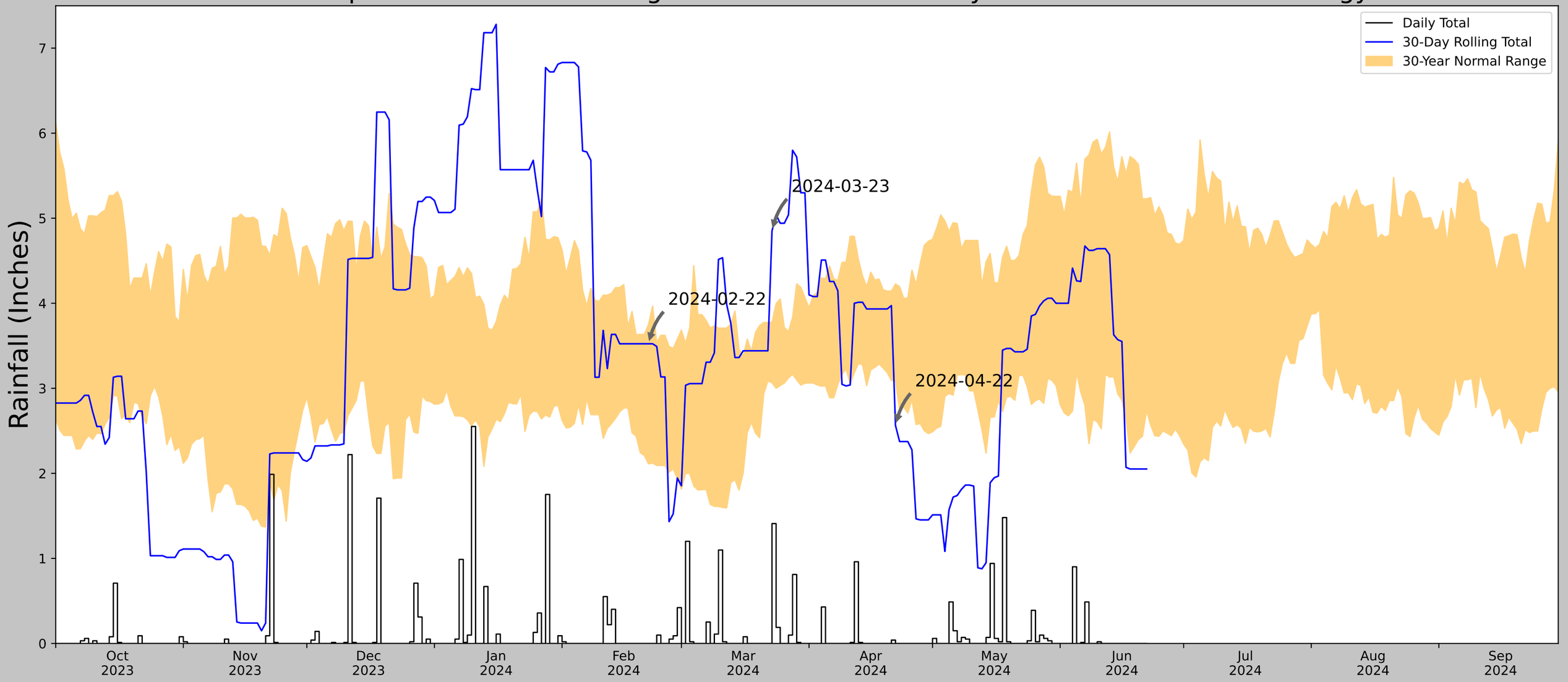
ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-04-22
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-22	3.092126	4.226378	2.562992	Dry	1	3	3
2024-03-23	3.064567	3.77441	4.850394	Wet	3	2	6
2024-02-22	2.112205	3.750394	3.523622	Normal	2	1	2
Result							Normal Conditions - 11

US Army Corps of Engineers

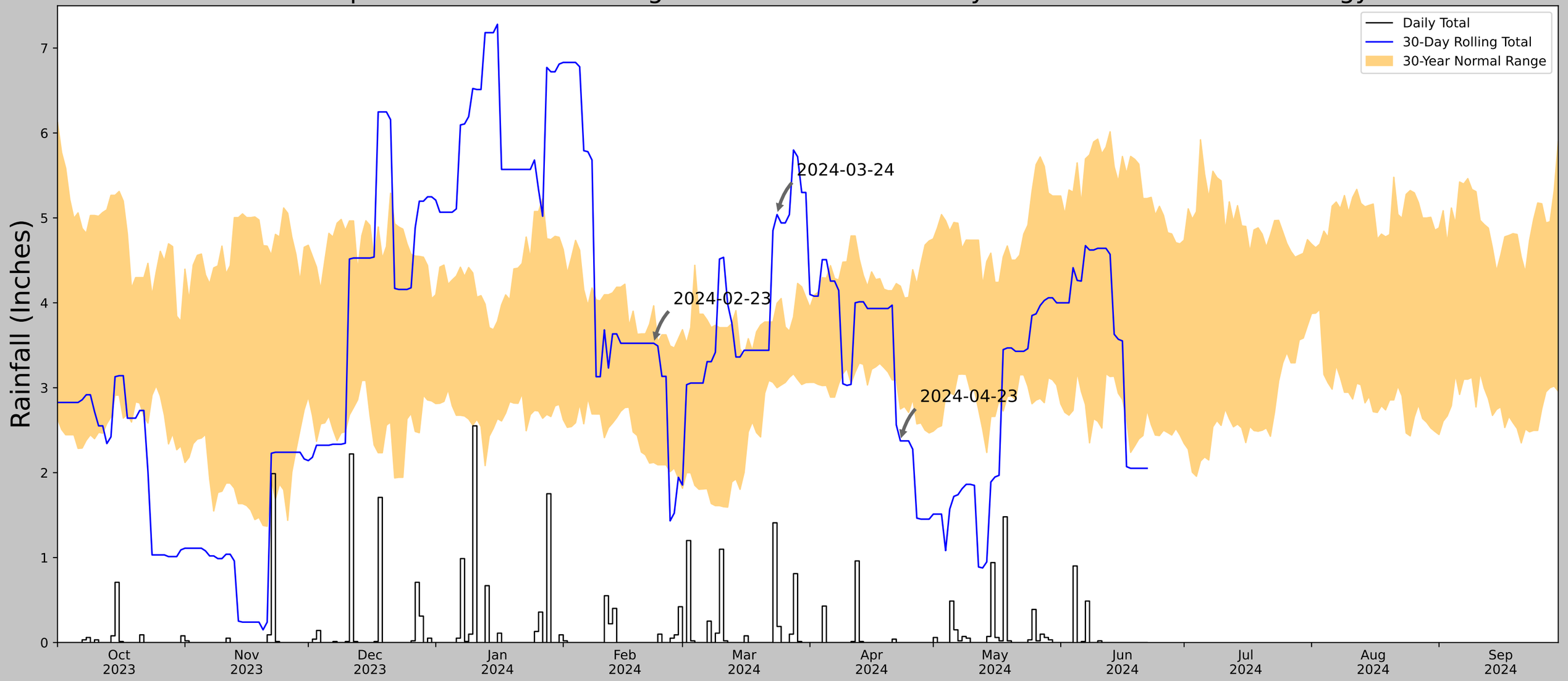
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-04-23
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-23	2.749213	4.196457	2.374016	Dry	1	3	3
2024-03-24	3.0	3.994882	5.03937	Wet	3	2	6
2024-02-23	2.120473	3.965354	3.523622	Normal	2	1	2
Result							Normal Conditions - 11

US Army Corps of Engineers

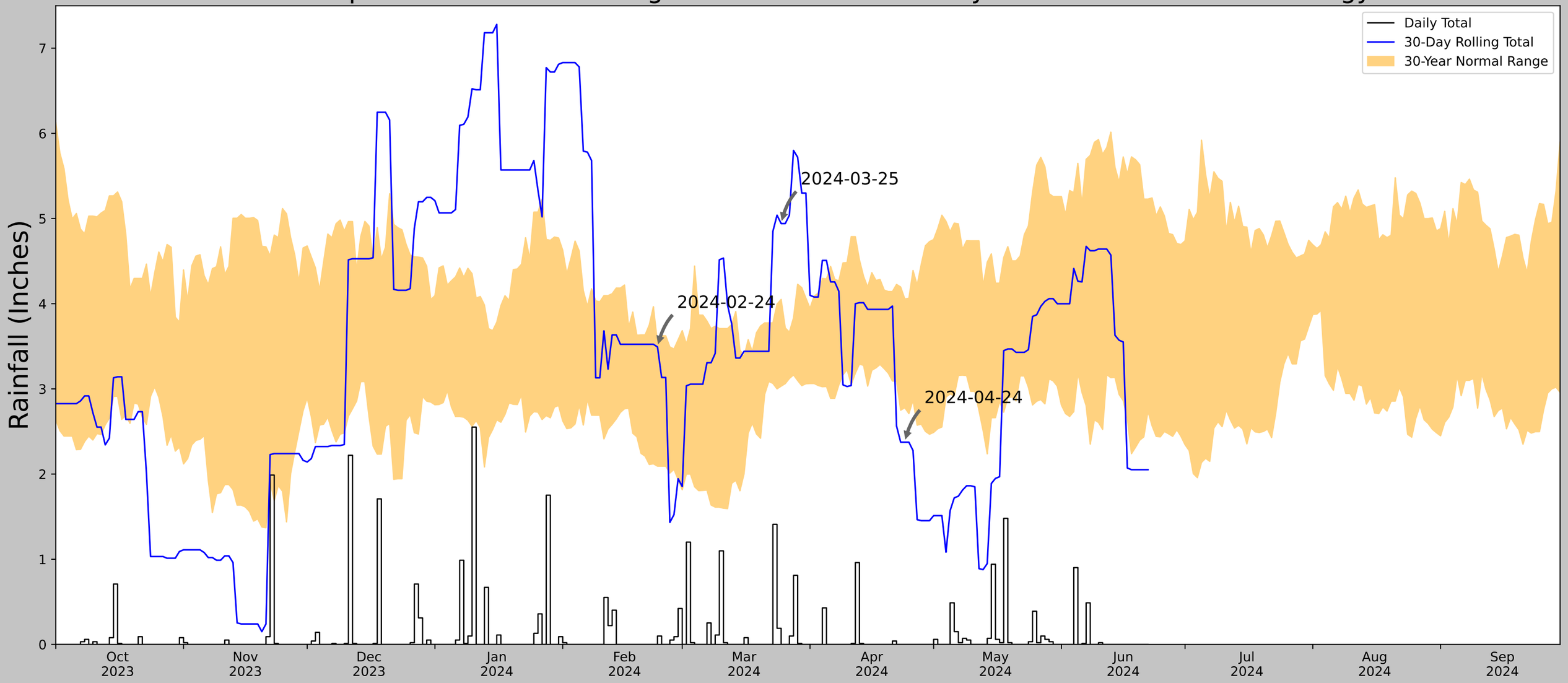
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-04-24
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-24	2.779134	4.056299	2.374016	Dry	1	3	3
2024-03-25	3.03189	4.050788	4.940945	Wet	3	2	6
2024-02-24	2.09252	3.537402	3.492126	Normal	2	1	2
Result							Normal Conditions - 11

US Army Corps of Engineers

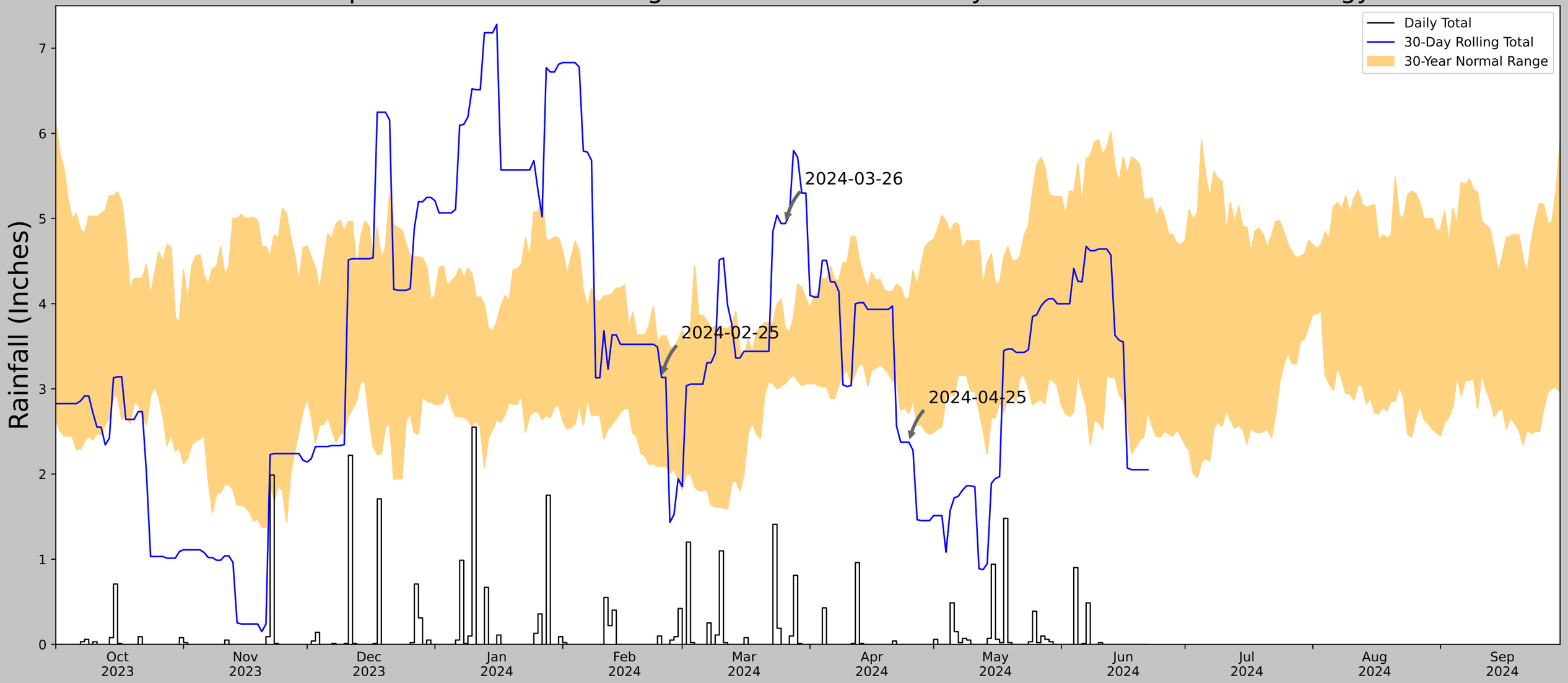
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-04-25
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-25	2.709449	4.064567	2.374016	Dry	1	3	3
2024-03-26	3.061811	3.715354	4.940945	Wet	3	2	6
2024-02-25	2.09252	3.623622	3.133858	Normal	2	1	2
Result							Normal Conditions - 11

US Army Corps of Engineers

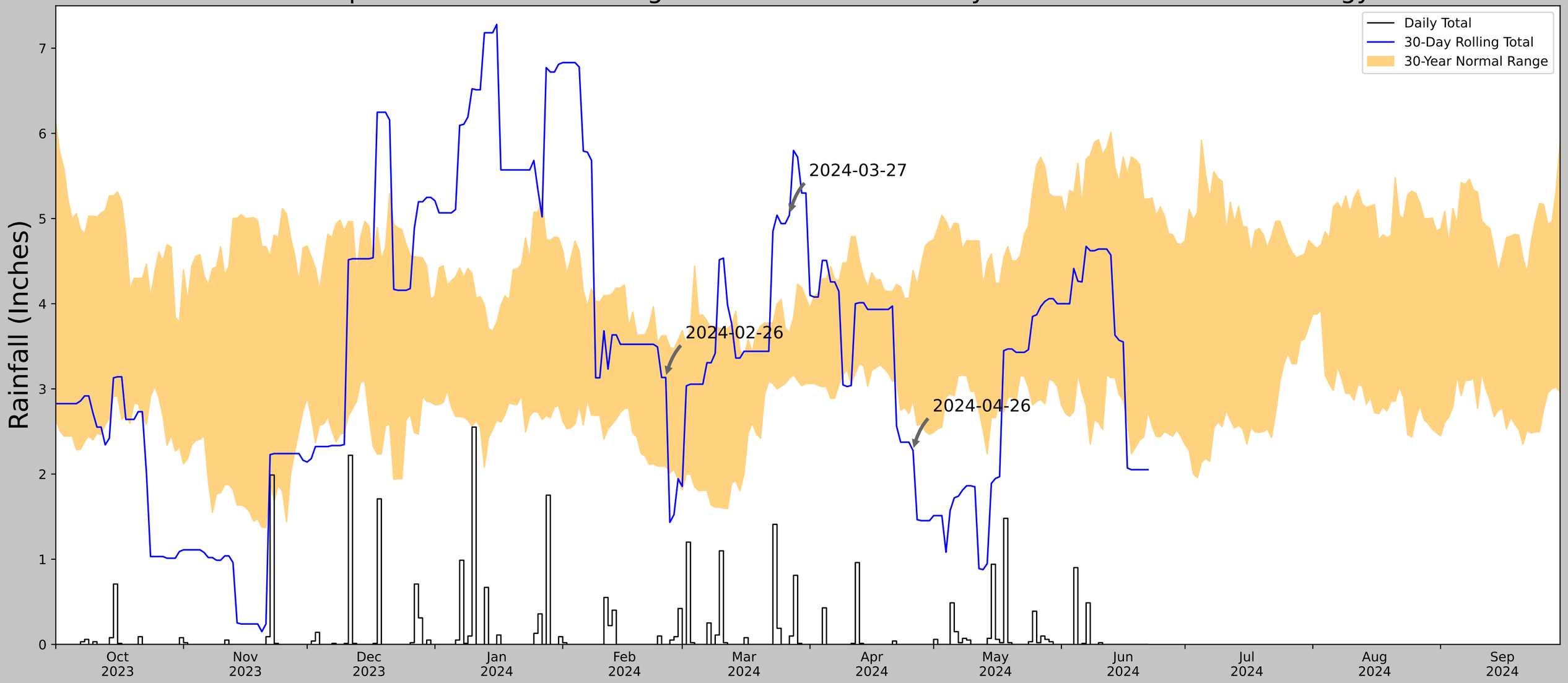
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-04-26
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-26	2.866142	4.390551	2.275591	Dry	1	3	3
2024-03-27	3.122047	3.666536	5.03937	Wet	3	2	6
2024-02-26	2.09252	3.623622	3.133858	Normal	2	1	2
Result							Normal Conditions - 11

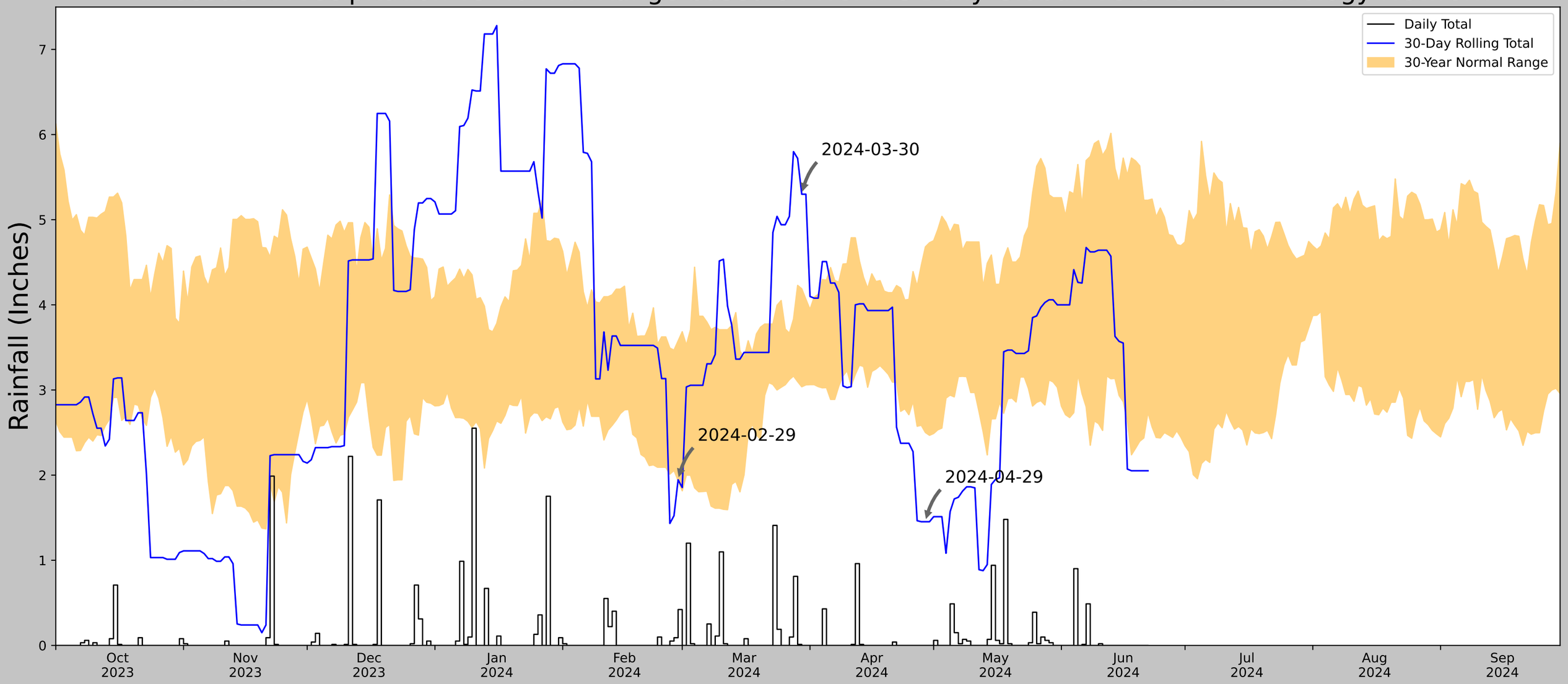
US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.711389, -79.465278
Observation Date	2024-04-29
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-29	2.500787	4.680709	1.452756	Dry	1	3	3
2024-03-30	3.037795	4.188583	5.299213	Wet	3	2	6
2024-02-29	1.935433	3.576378	1.944882	Normal	2	1	2
Result							Normal Conditions - 11

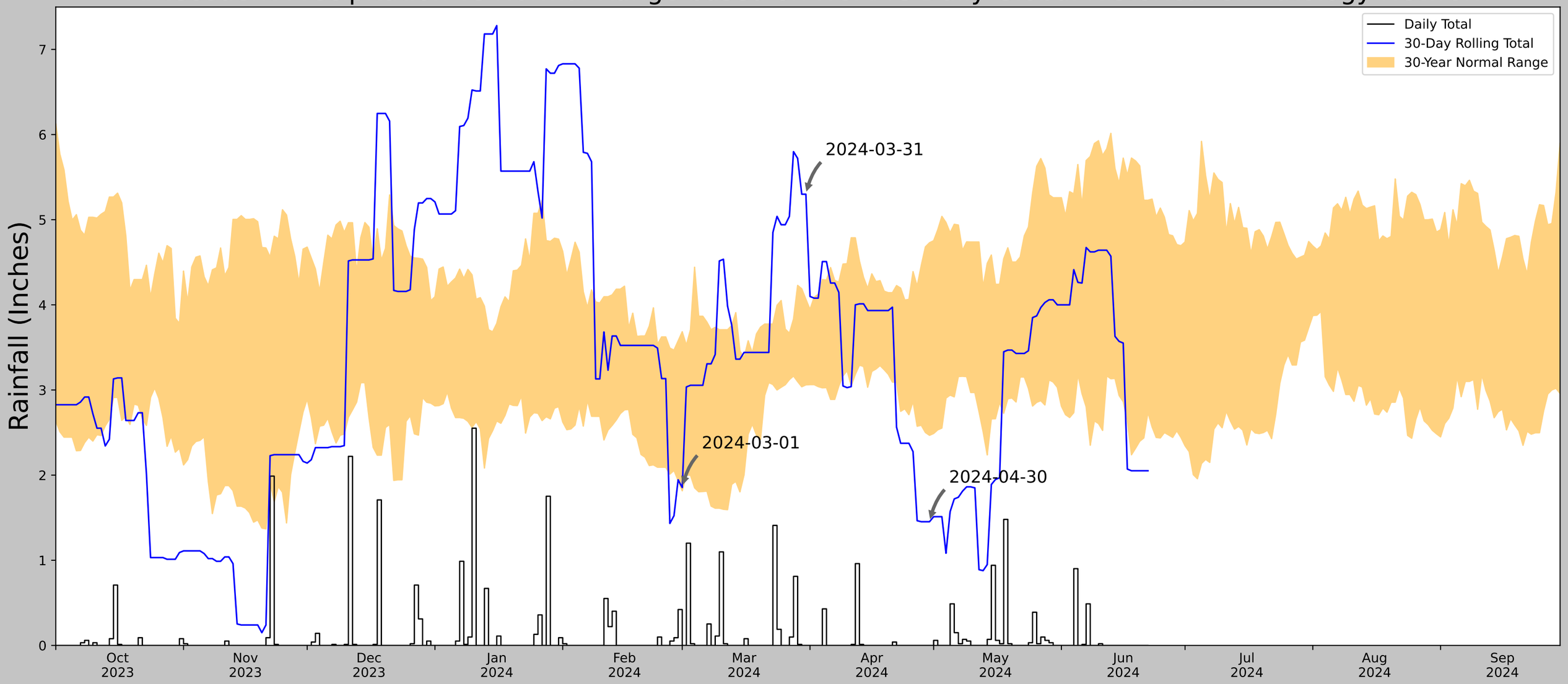
US Army Corps of Engineers

ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.711389, -79.465278
Observation Date	2024-04-30
Elevation (ft)	811.706
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-04-30	2.467323	4.729528	1.452756	Dry	1	3	3
2024-03-31	3.059843	4.066142	5.299213	Wet	3	2	6
2024-03-01	1.815354	3.684252	1.854331	Normal	2	1	2
Result							Normal Conditions - 11

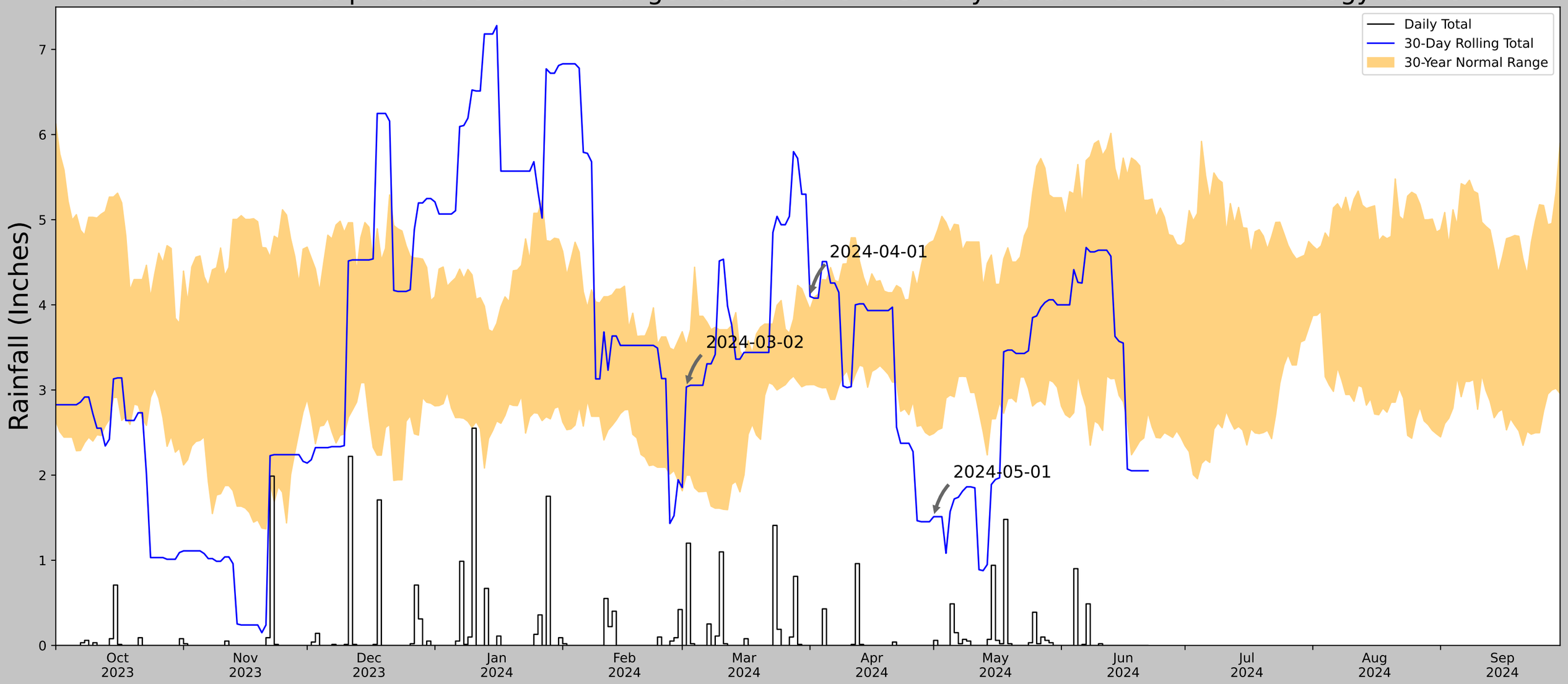
US Army Corps of Engineers

ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.711389, -79.465278
Observation Date	2024-05-01
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-01	2.488976	4.75315	1.511811	Dry	1	3	3
2024-04-01	3.062992	3.946063	4.098425	Wet	3	2	6
2024-03-02	1.999606	3.526772	3.035433	Normal	2	1	2
Result							Normal Conditions - 11

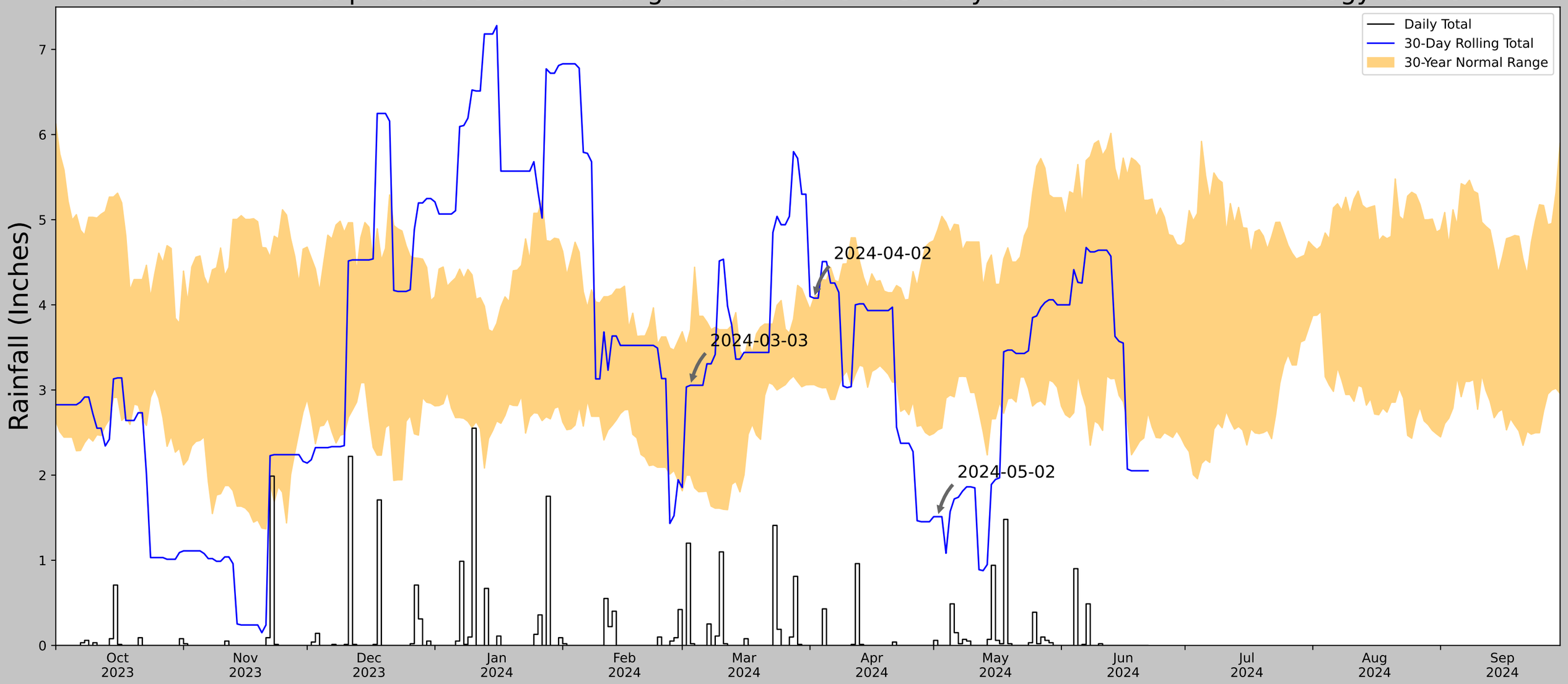
US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.711389, -79.465278
Observation Date	2024-05-02
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-02	2.53189	4.88189	1.511811	Dry	1	3	3
2024-04-02	3.062992	4.088583	4.07874	Normal	2	2	4
2024-03-03	1.999606	3.70748	3.055118	Normal	2	1	2
Result							Drier than Normal - 9

US Army Corps of Engineers

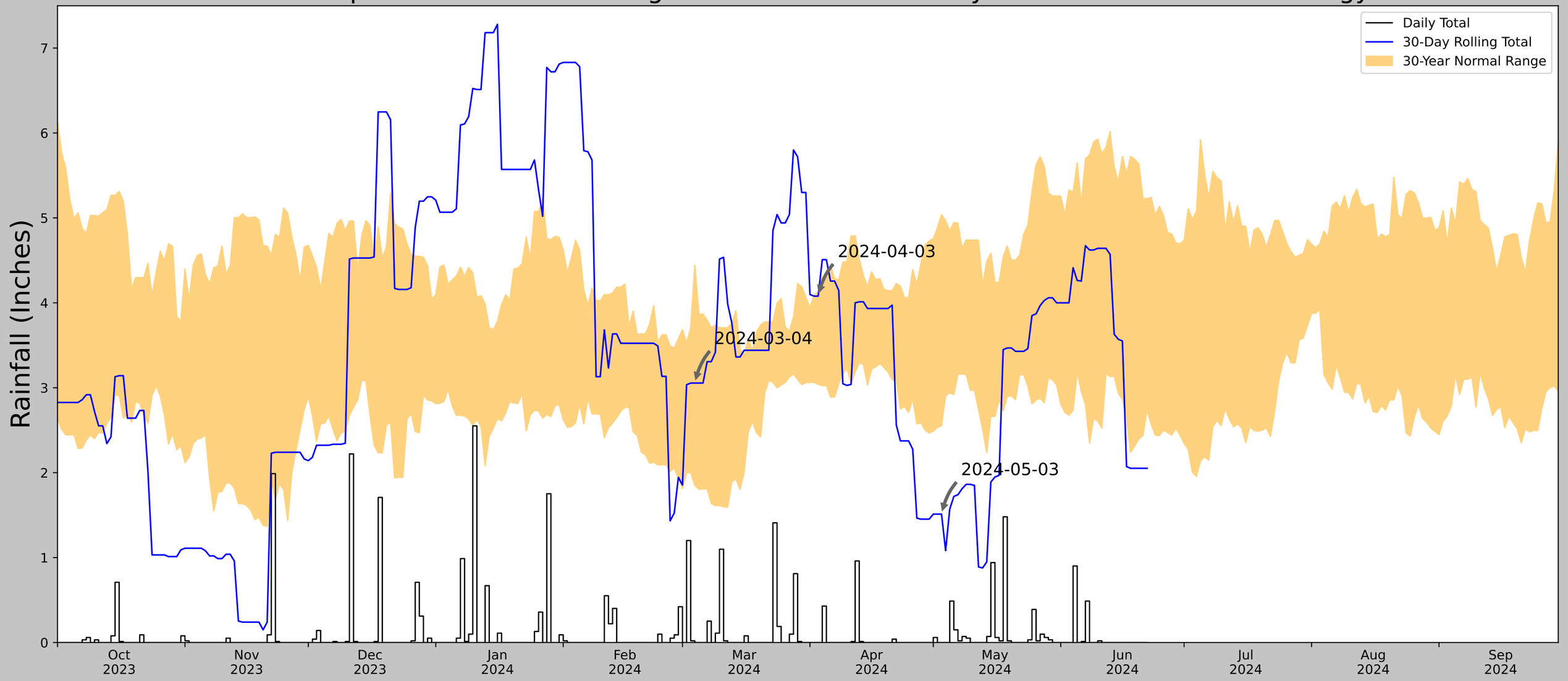
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-03
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-03	2.552362	5.03937	1.511811	Dry	1	3	3
2024-04-03	3.03937	4.124016	4.07874	Normal	2	2	4
2024-03-04	1.850787	4.44252	3.055118	Normal	2	1	2
Result							Drier than Normal - 9

US Army Corps of Engineers

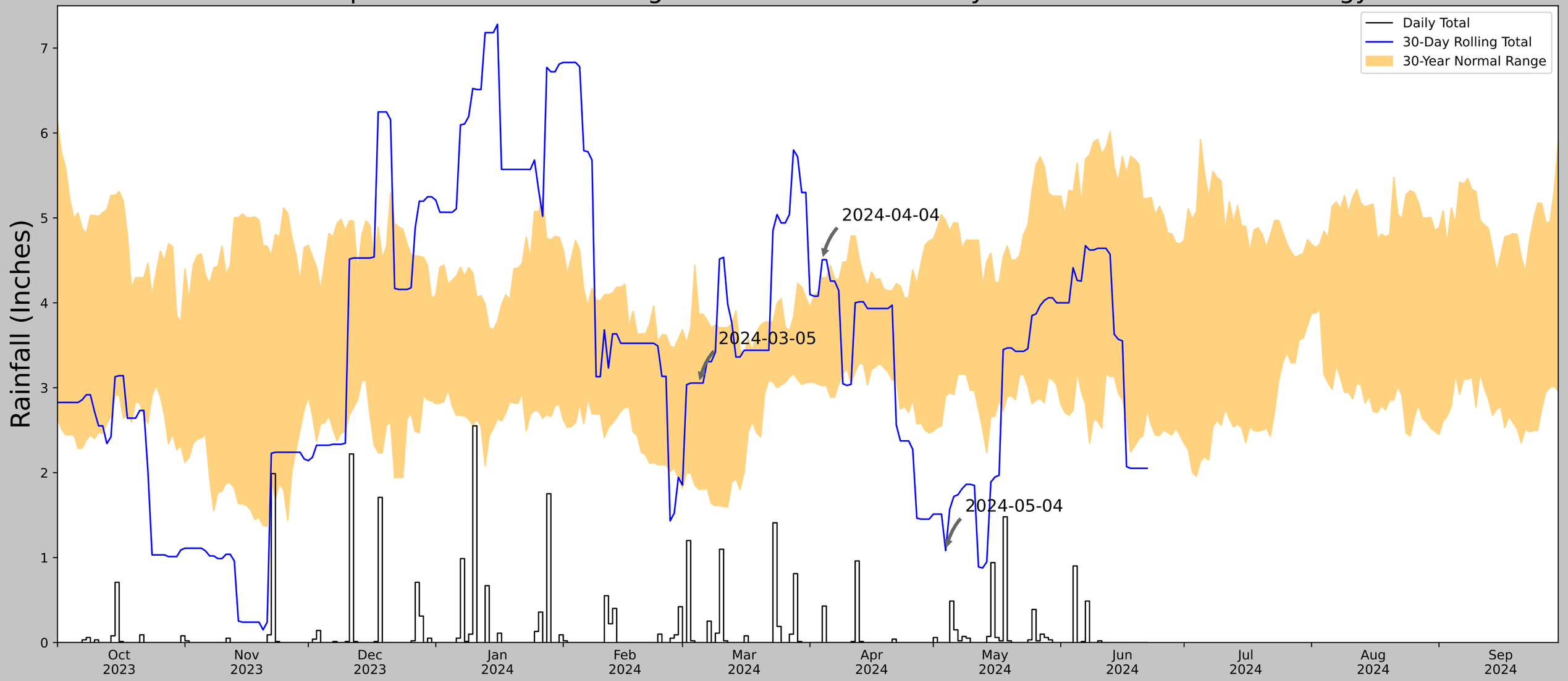
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-04
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-04	2.904725	4.967323	1.082677	Dry	1	3	3
2024-04-04	3.025197	4.296851	4.507874	Wet	3	2	6
2024-03-05	1.804724	3.866142	3.055118	Normal	2	1	2
Result							Normal Conditions - 11

US Army Corps of Engineers

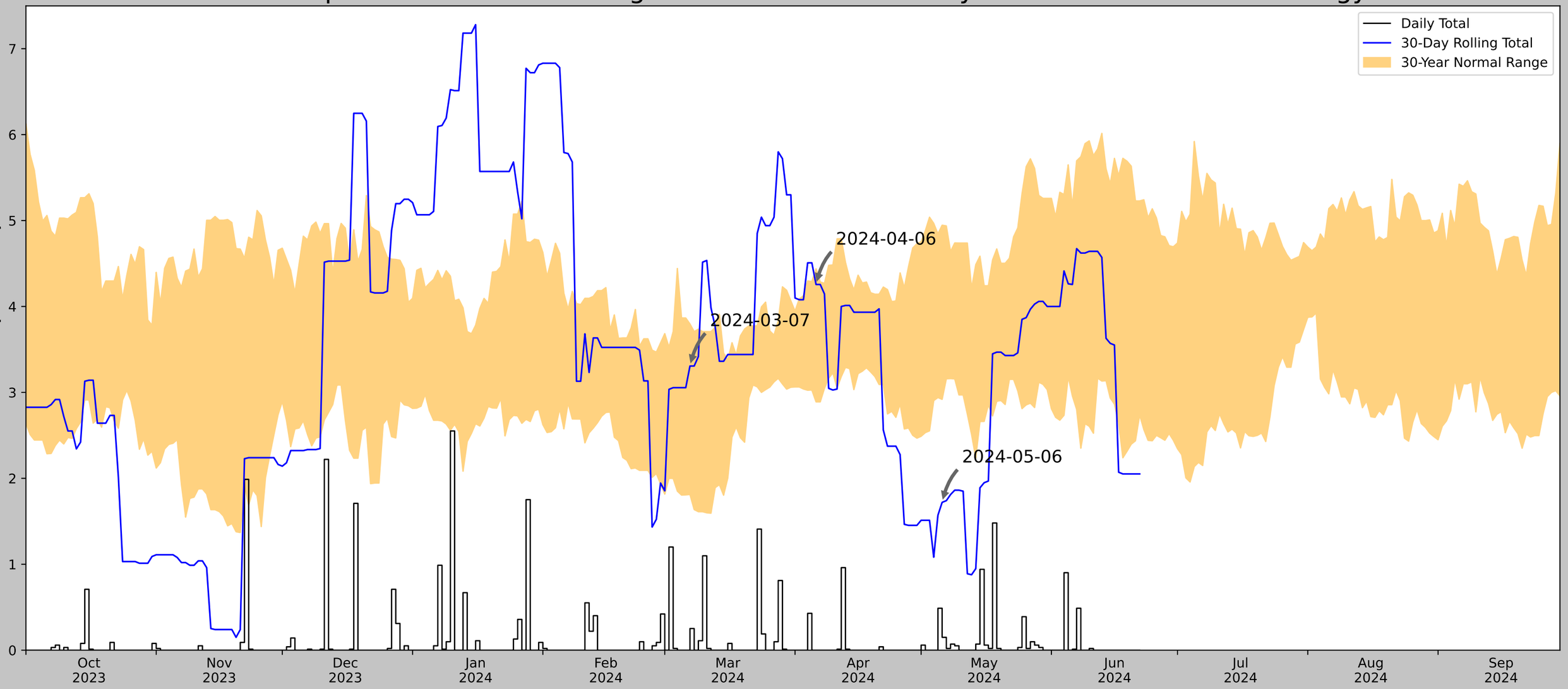
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-06
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-06	2.918898	4.946063	1.720472	Dry	1	3	3
2024-04-06	2.88937	4.438583	4.255906	Normal	2	2	4
2024-03-07	1.811811	3.796457	3.307087	Normal	2	1	2
Result							Drier than Normal - 9

US Army Corps of Engineers

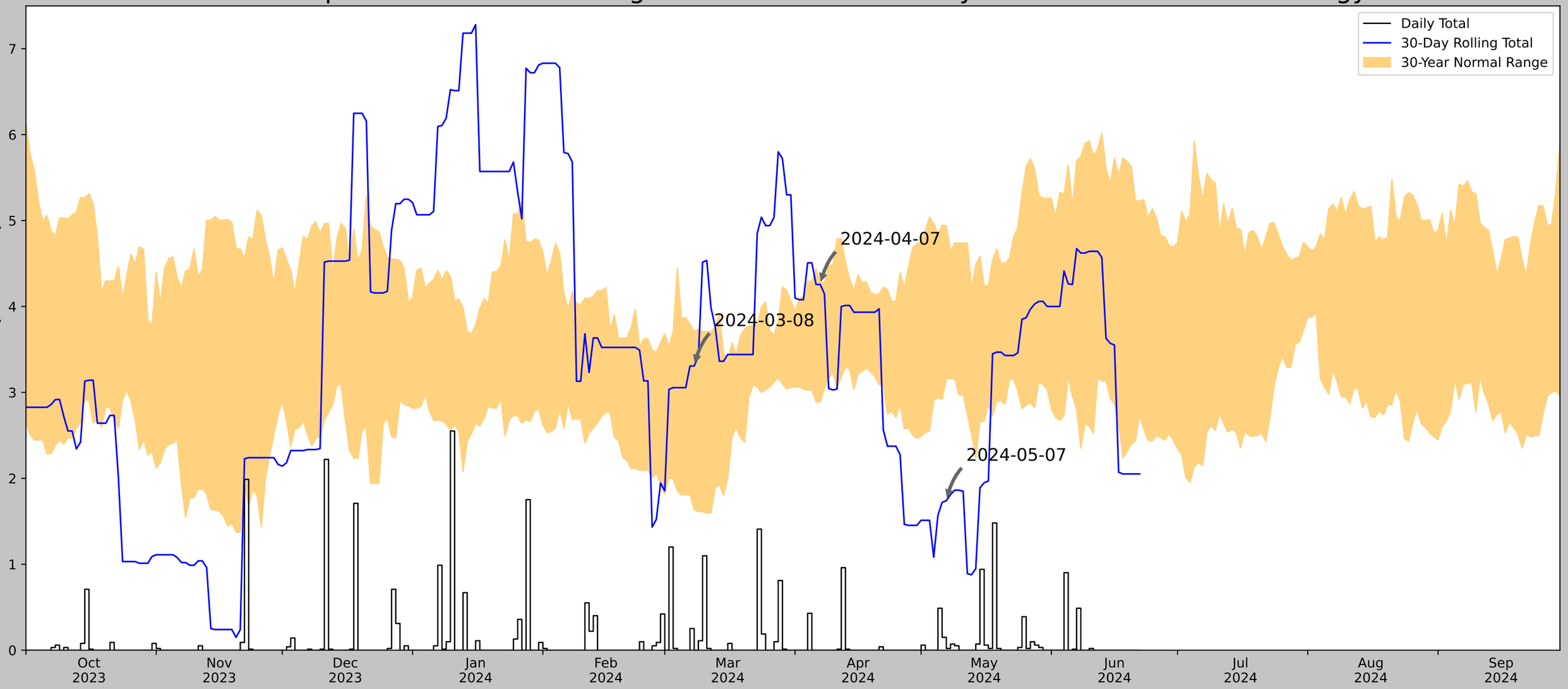
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-07
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-07	3.158268	4.937795	1.740158	Dry	1	3	3
2024-04-07	2.88937	4.285433	4.255906	Normal	2	2	4
2024-03-08	1.636221	3.707874	3.307087	Normal	2	1	2
Result							Drier than Normal - 9

US Army Corps of Engineers

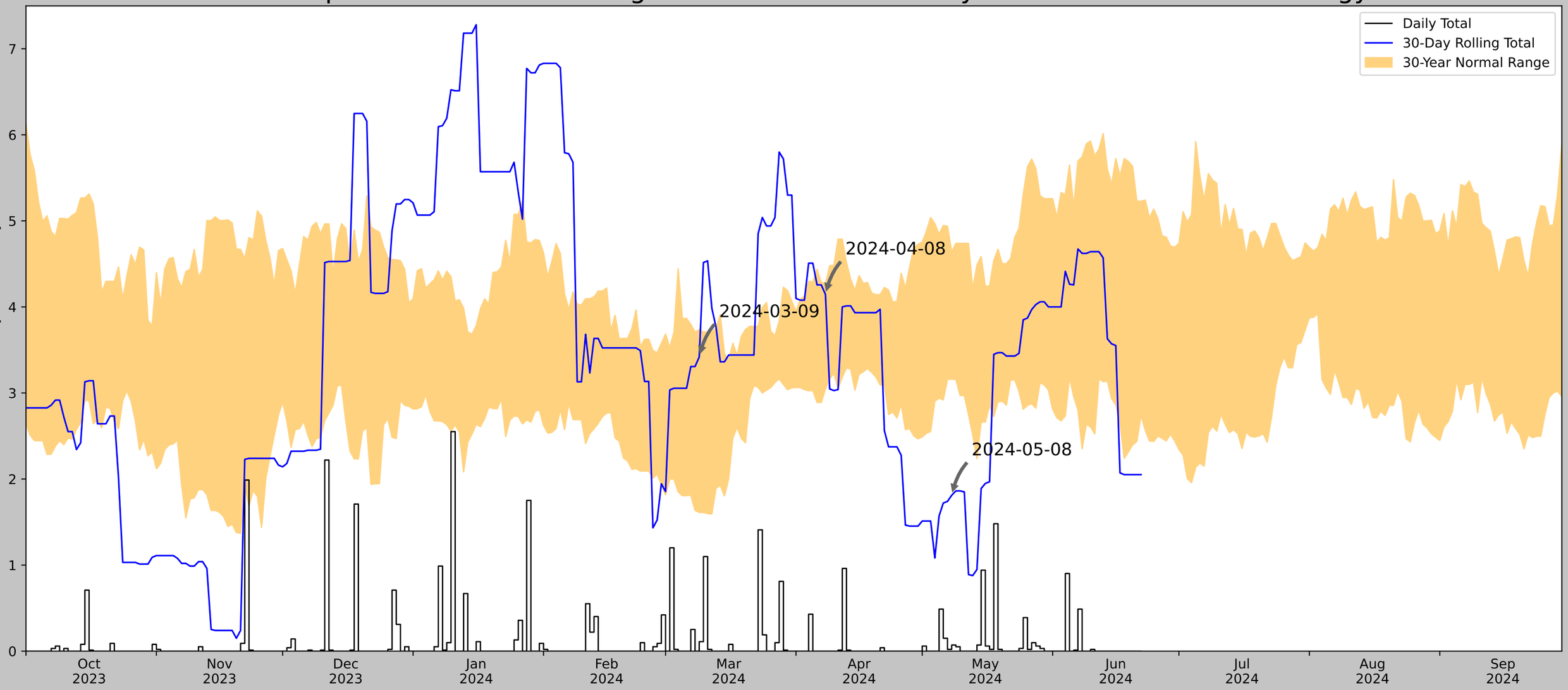
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-08
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-08	3.16063	4.63937	1.811024	Dry	1	3	3
2024-04-08	3.04685	4.268898	4.145669	Normal	2	2	4
2024-03-09	1.611417	3.736221	3.417323	Normal	2	1	2
Result							Drier than Normal - 9

US Army Corps of Engineers

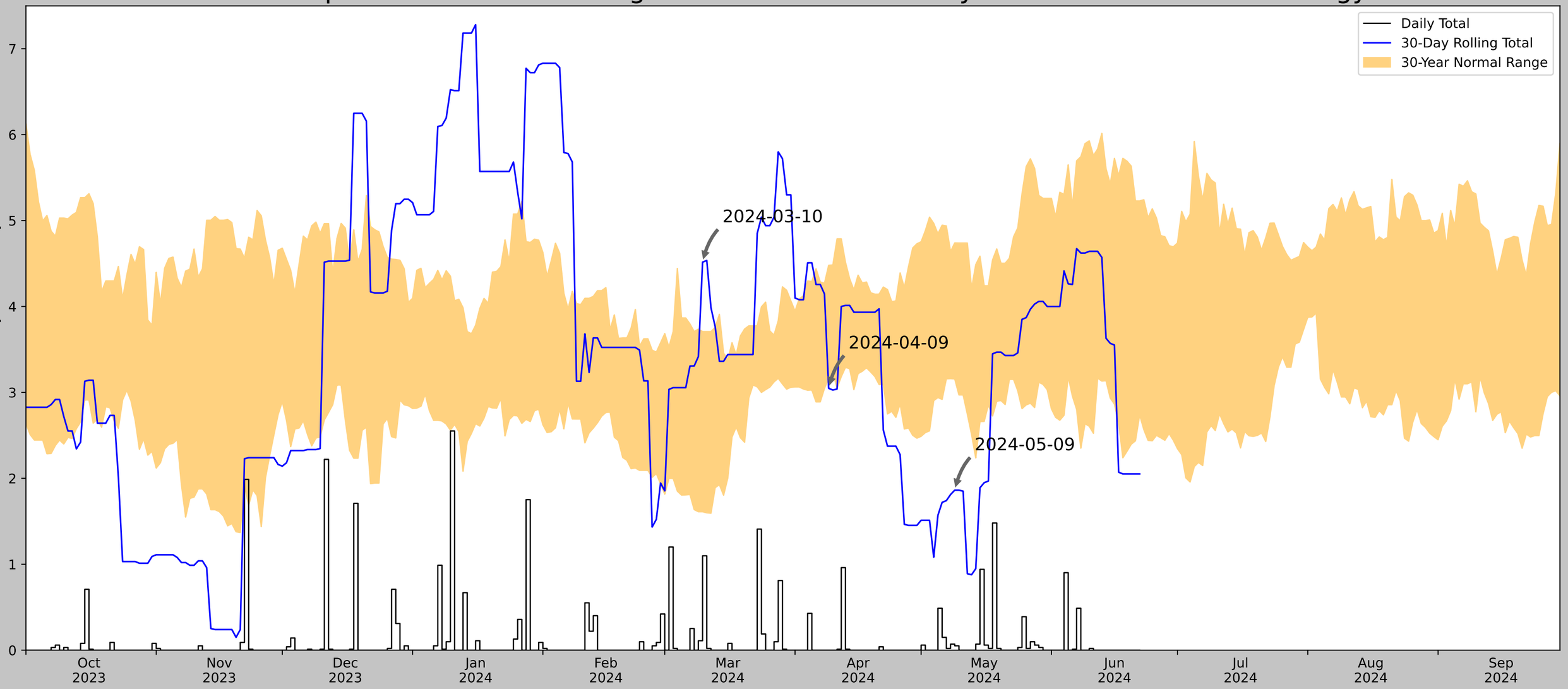
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-09
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-09	3.157087	4.73937	1.862205	Dry	1	3	3
2024-04-09	3.164961	4.479134	3.047244	Dry	1	2	2
2024-03-10	1.611417	3.707874	4.515748	Wet	3	1	3
Result							Drier than Normal - 8

US Army Corps of Engineers

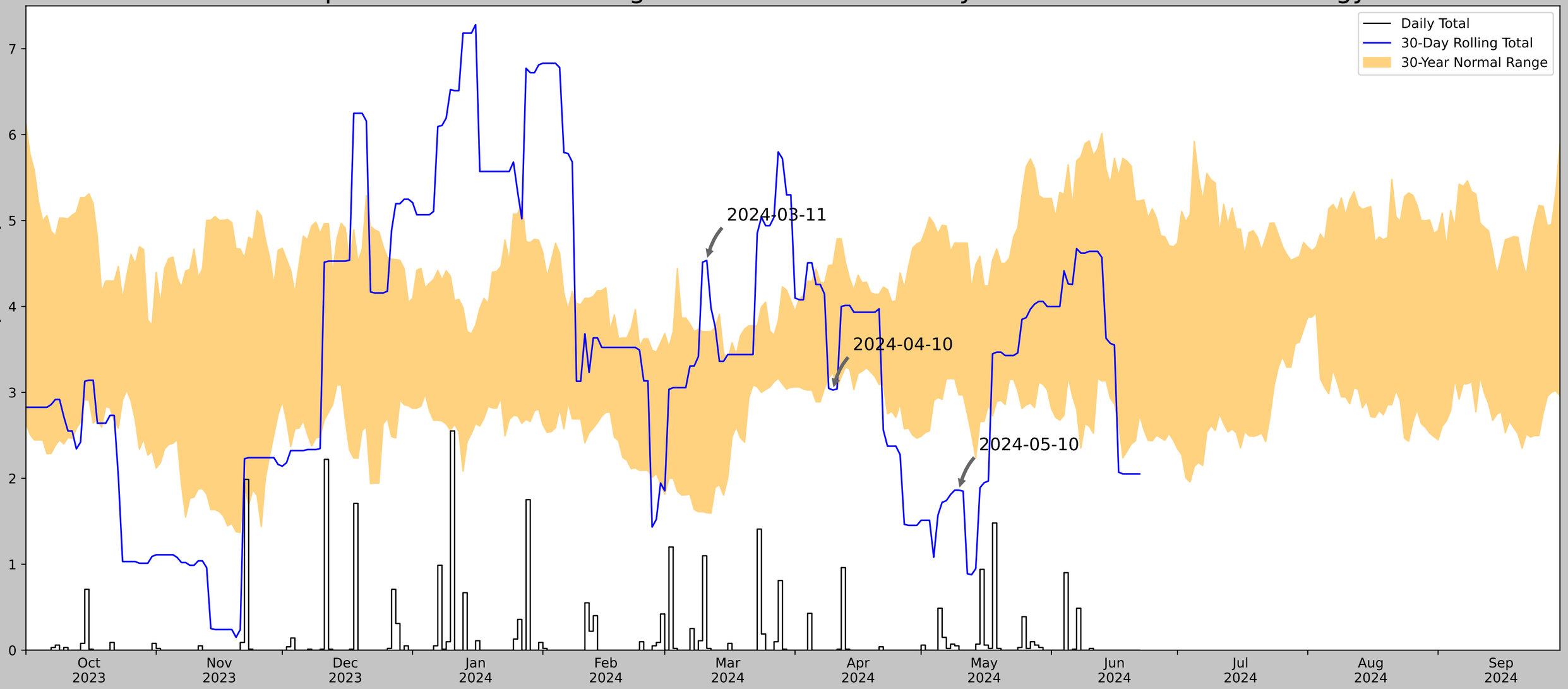
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-10
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-10	2.970473	4.738189	1.862205	Dry	1	3	3
2024-04-10	3.227165	4.482677	3.027559	Dry	1	2	2
2024-03-11	1.598425	3.707874	4.535433	Wet	3	1	3
Result							Drier than Normal - 8

US Army Corps of Engineers

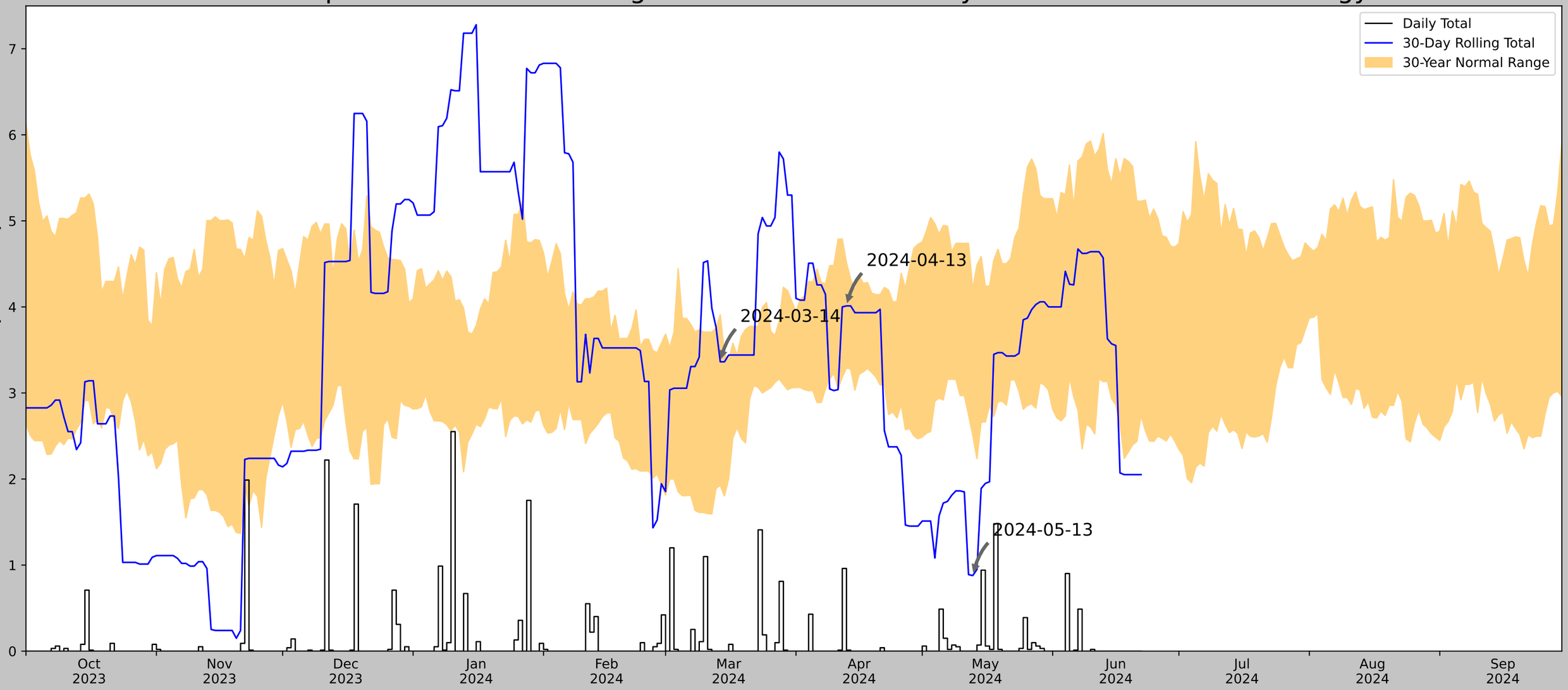
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-13
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-13	2.511024	4.208662	0.877953	Dry	1	3	3
2024-04-13	3.291339	4.514567	4.011811	Normal	2	2	4
2024-03-14	1.925984	3.908662	3.362205	Normal	2	1	2
Result							Drier than Normal - 9

US Army Corps of Engineers

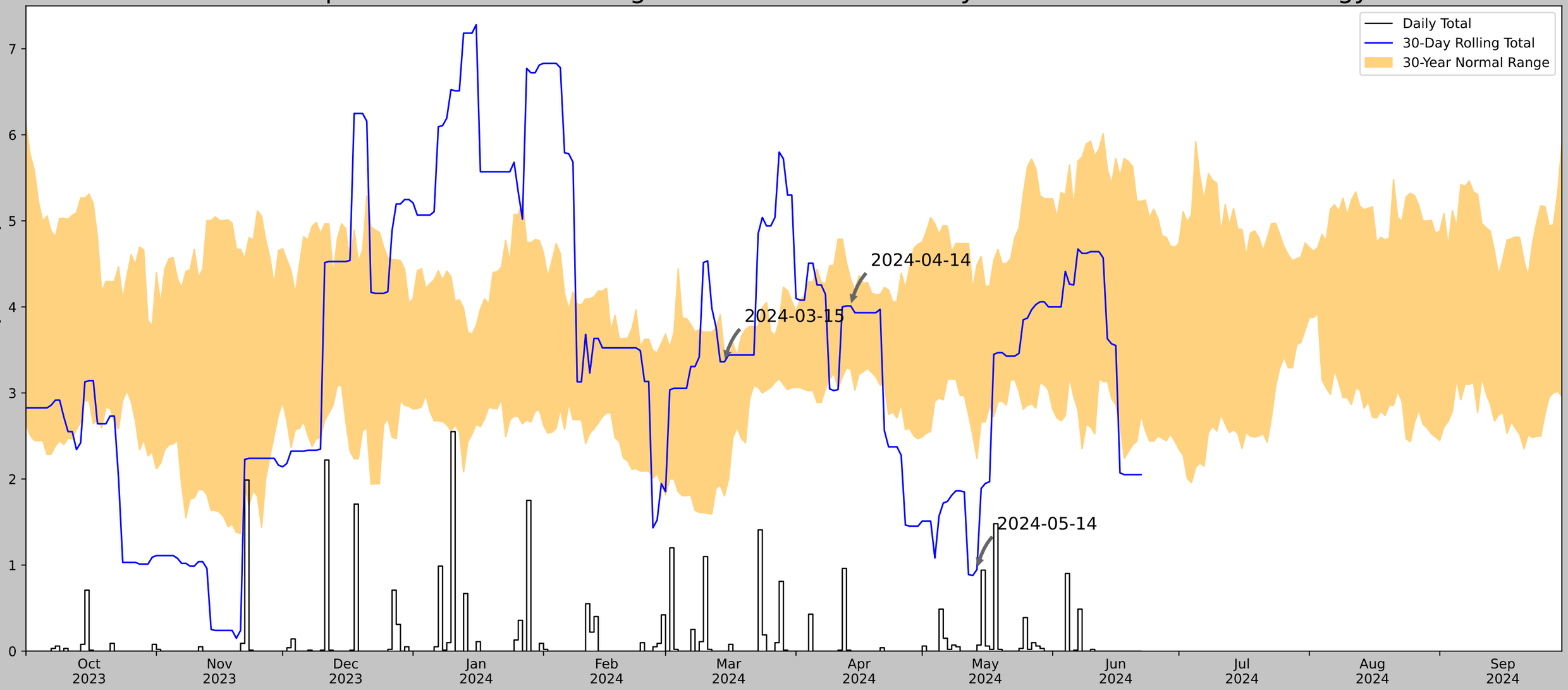
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-14
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-14	2.237008	4.487008	0.948819	Dry	1	3	3
2024-04-14	3.275984	4.322047	4.011811	Normal	2	2	4
2024-03-15	1.80315	3.457874	3.362205	Normal	2	1	2
Result							Drier than Normal - 9

US Army Corps of Engineers

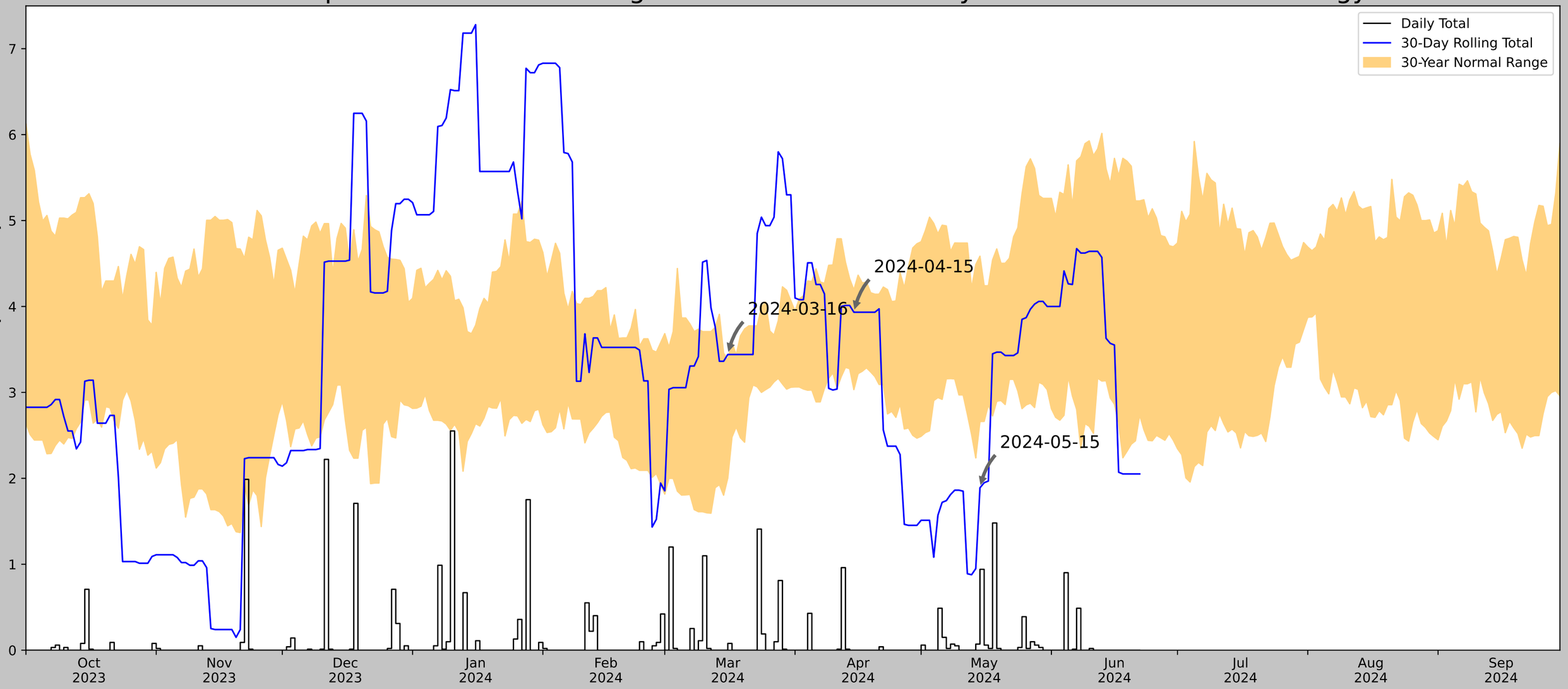
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-15
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-15	2.661024	4.585433	1.889764	Dry	1	3	3
2024-04-15	3.03189	4.193701	3.933071	Normal	2	2	4
2024-03-16	2.00315	3.37874	3.440945	Wet	3	1	3
Result							Normal Conditions - 10

US Army Corps of Engineers

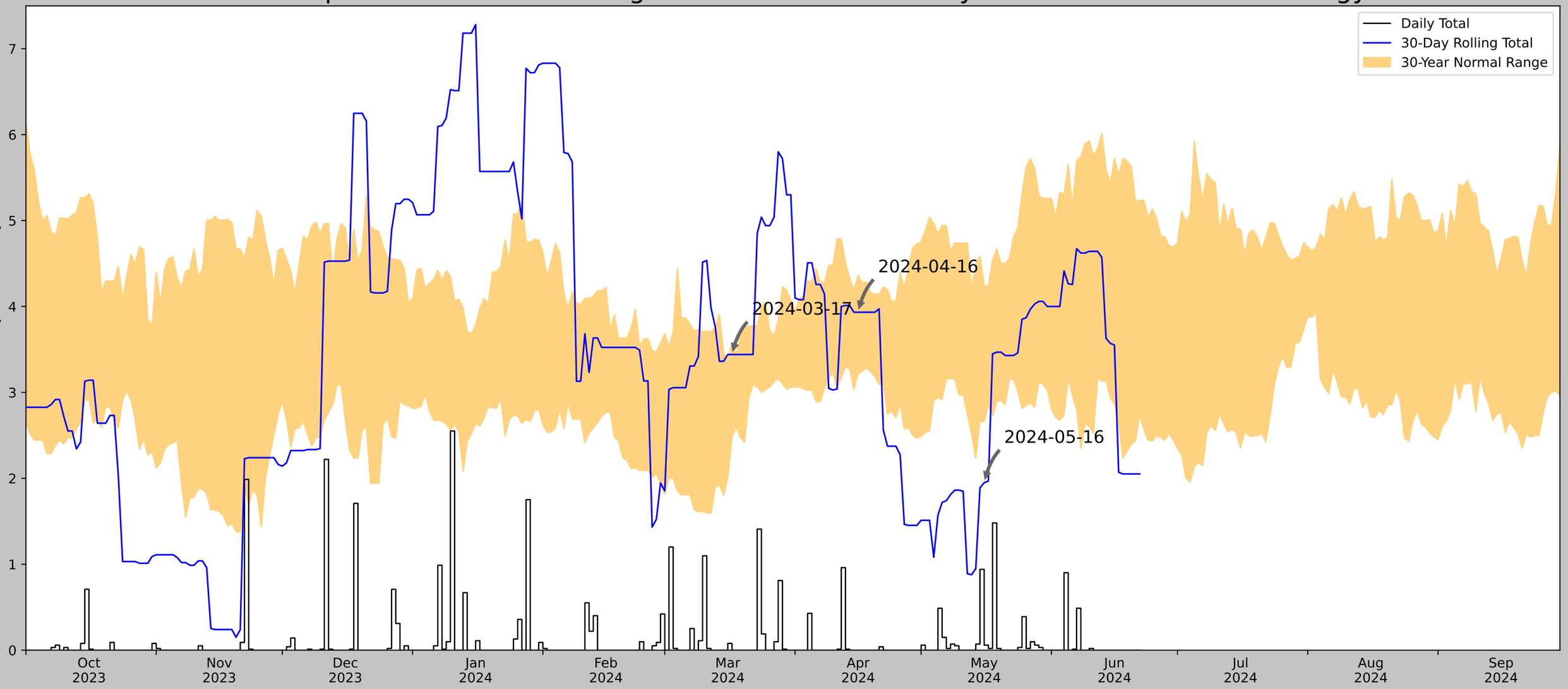
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-16
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-16	2.662205	4.241339	1.948819	Dry	1	3	3
2024-04-16	3.218504	4.364567	3.933071	Normal	2	2	4
2024-03-17	2.479528	3.578347	3.440945	Normal	2	1	2
Result							Drier than Normal - 9

US Army Corps of Engineers

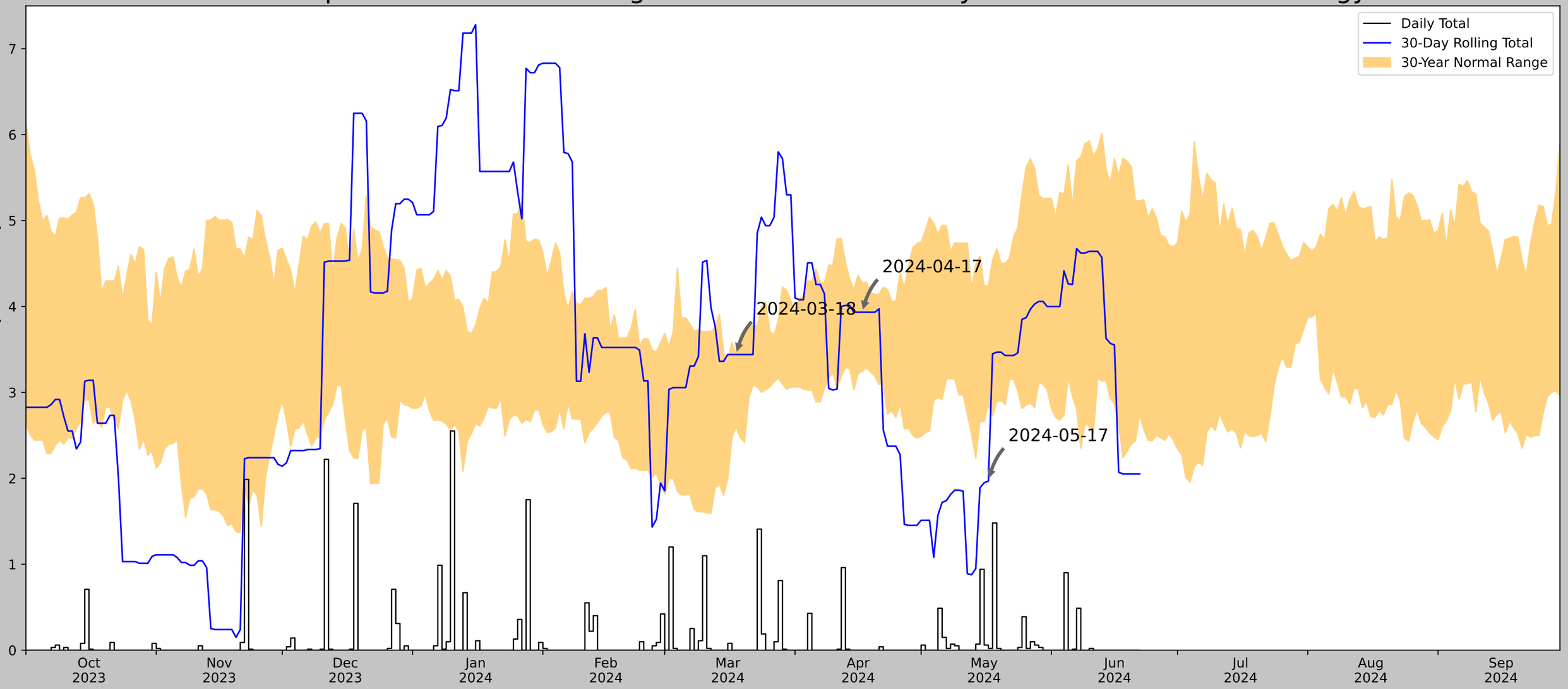
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-17
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-17	2.855118	4.241339	1.968504	Dry	1	3	3
2024-04-17	3.246063	4.273622	3.933071	Normal	2	2	4
2024-03-18	2.598819	3.436614	3.440945	Wet	3	1	3
Result							Normal Conditions - 10

US Army Corps of Engineers

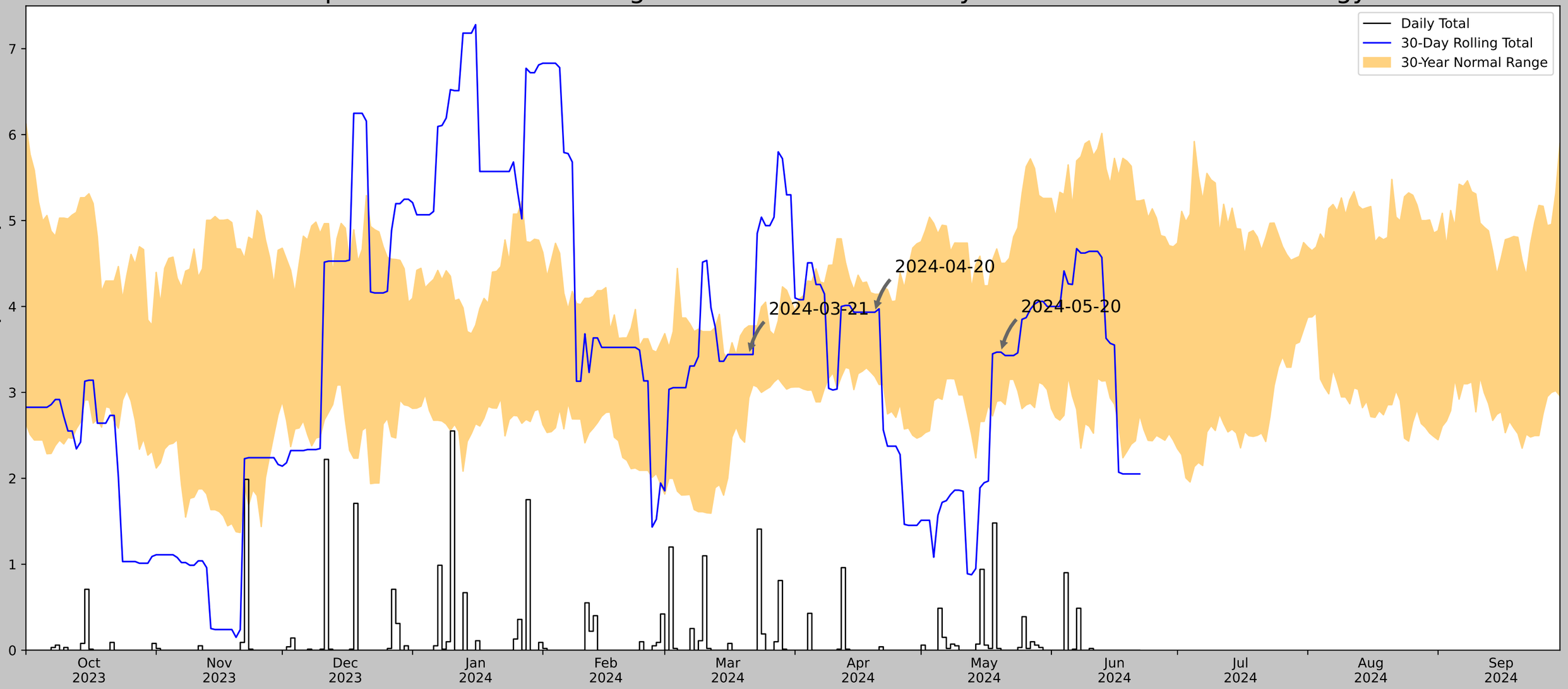
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-20
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-20	2.905906	4.502756	3.468504	Normal	2	3	6
2024-04-20	3.184252	4.142914	3.933071	Normal	2	2	4
2024-03-21	2.935039	3.77441	3.440945	Normal	2	1	2
Result							Normal Conditions - 12

US Army Corps of Engineers

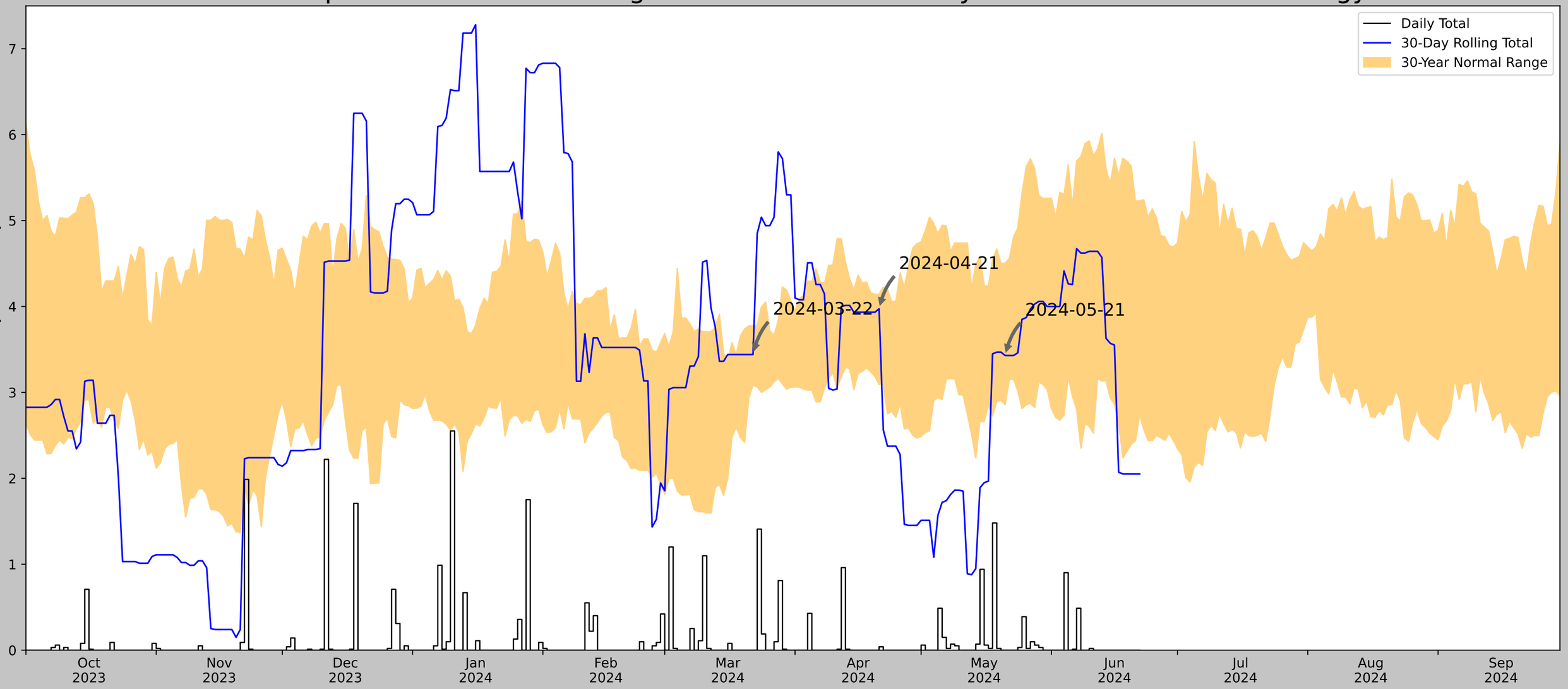
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-21
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-21	2.858662	4.502756	3.429134	Normal	2	3	6
2024-04-21	3.092126	4.142914	3.972441	Normal	2	2	4
2024-03-22	3.086614	3.77441	3.440945	Normal	2	1	2
Result							Normal Conditions - 12

US Army Corps of Engineers

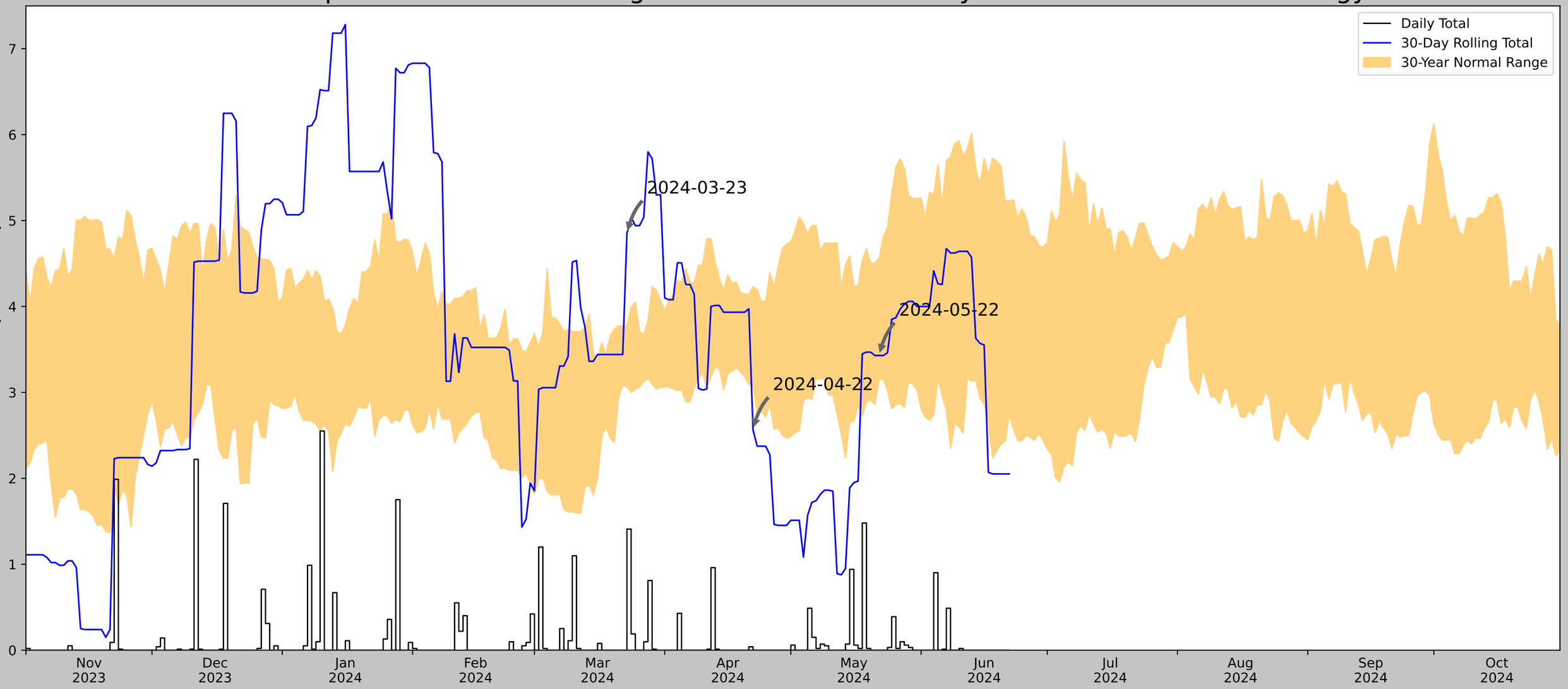
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-22
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-22	3.151969	4.561417	3.429134	Normal	2	3	6
2024-04-22	3.092126	4.226378	2.562992	Dry	1	2	2
2024-03-23	3.064567	3.77441	4.850394	Wet	3	1	3
Result							Normal Conditions - 11

US Army Corps of Engineers

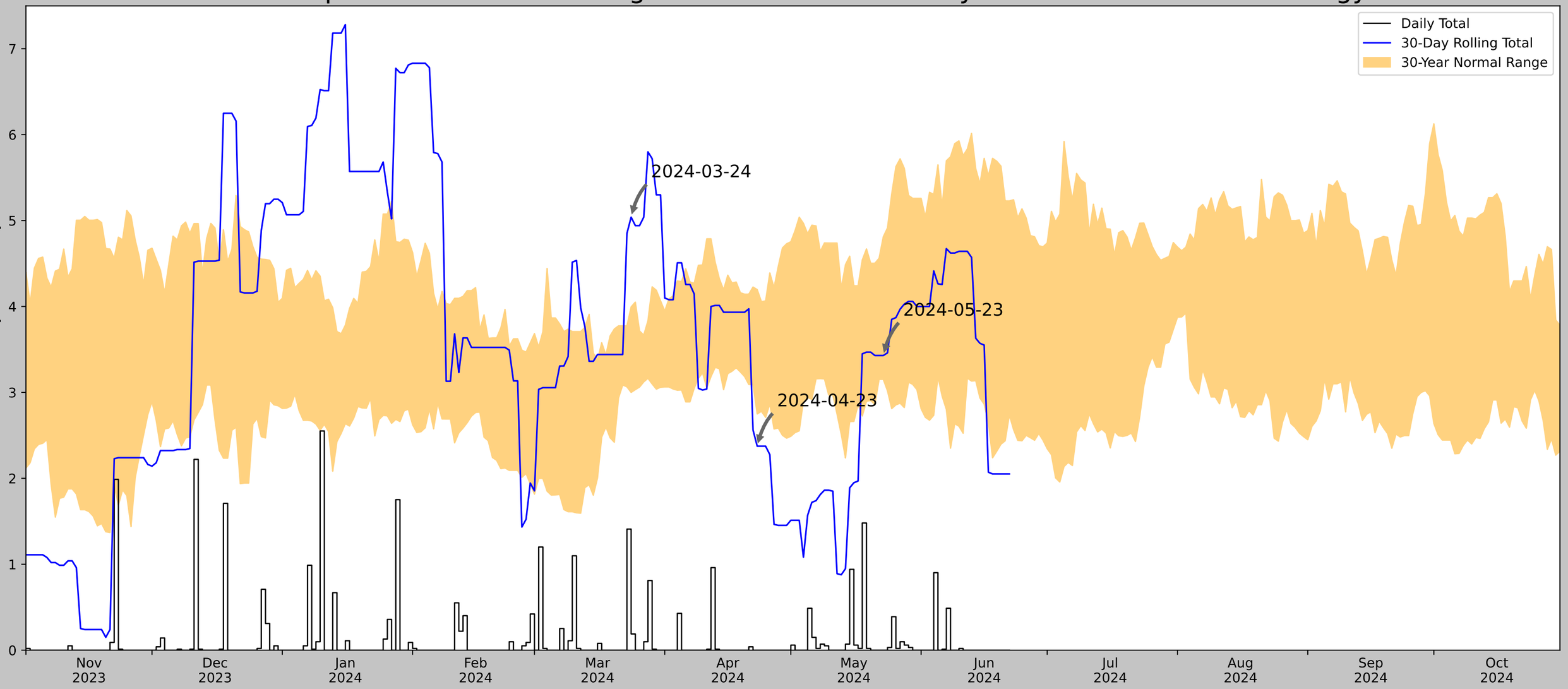
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-23
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-23	3.151969	4.811024	3.429134	Normal	2	3	6
2024-04-23	2.749213	4.196457	2.374016	Dry	1	2	2
2024-03-24	3.0	3.994882	5.03937	Wet	3	1	3
Result							Normal Conditions - 11

US Army Corps of Engineers

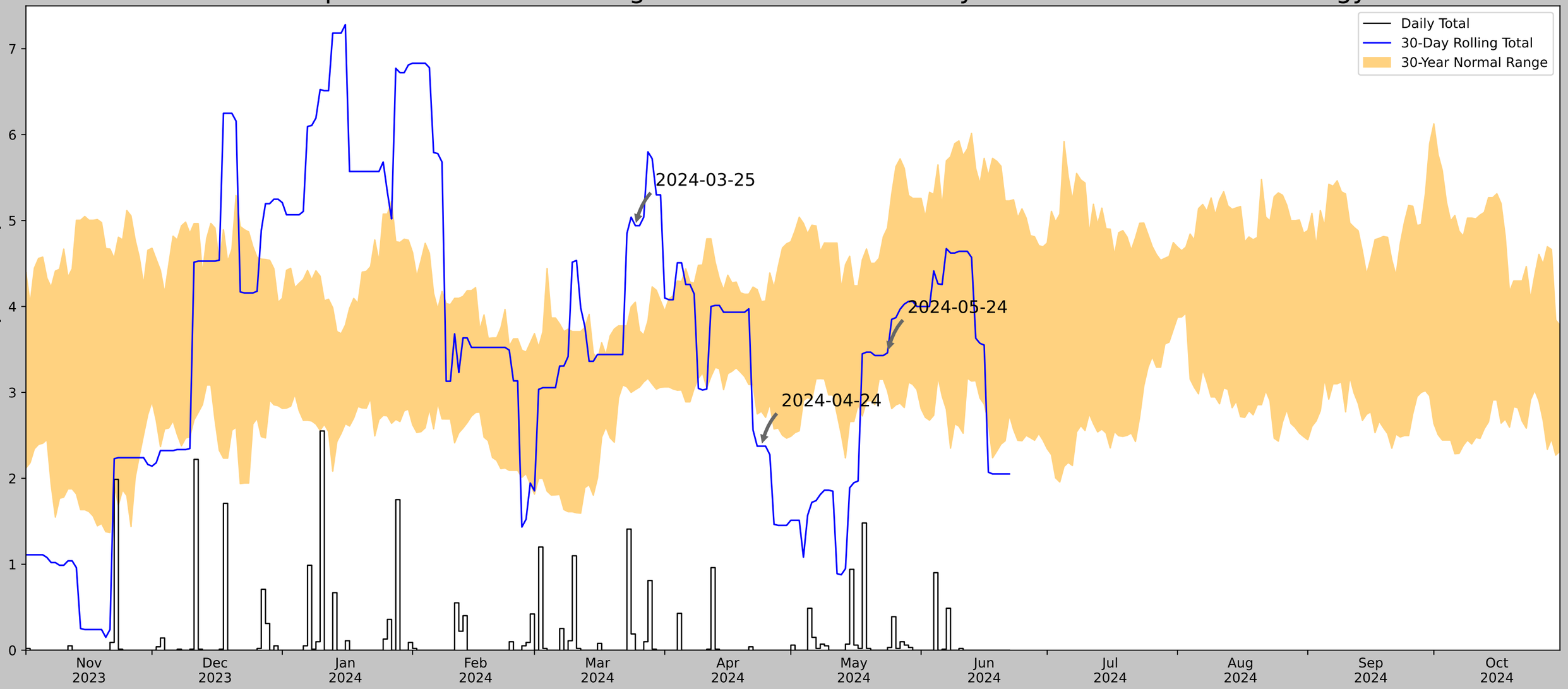
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-24
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-24	3.017323	4.914961	3.46063	Normal	2	3	6
2024-04-24	2.779134	4.056299	2.374016	Dry	1	2	2
2024-03-25	3.03189	4.050788	4.940945	Wet	3	1	3
Result							Normal Conditions - 11

US Army Corps of Engineers

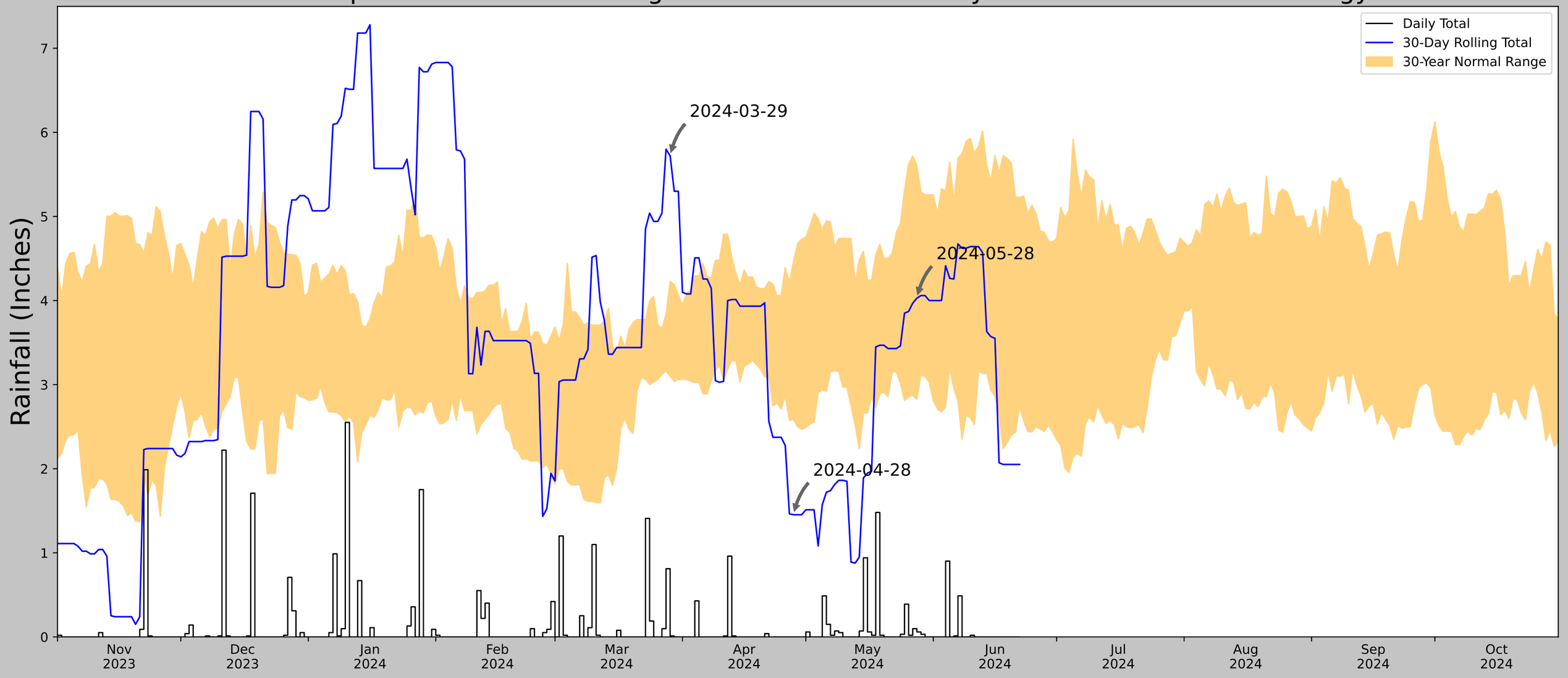
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-28
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-28	2.823622	5.60748	4.027559	Normal	2	3	6
2024-04-28	2.585827	4.46378	1.452756	Dry	1	2	2
2024-03-29	3.098425	4.22874	5.720473	Wet	3	1	3
Result							Normal Conditions - 11

US Army Corps of Engineers

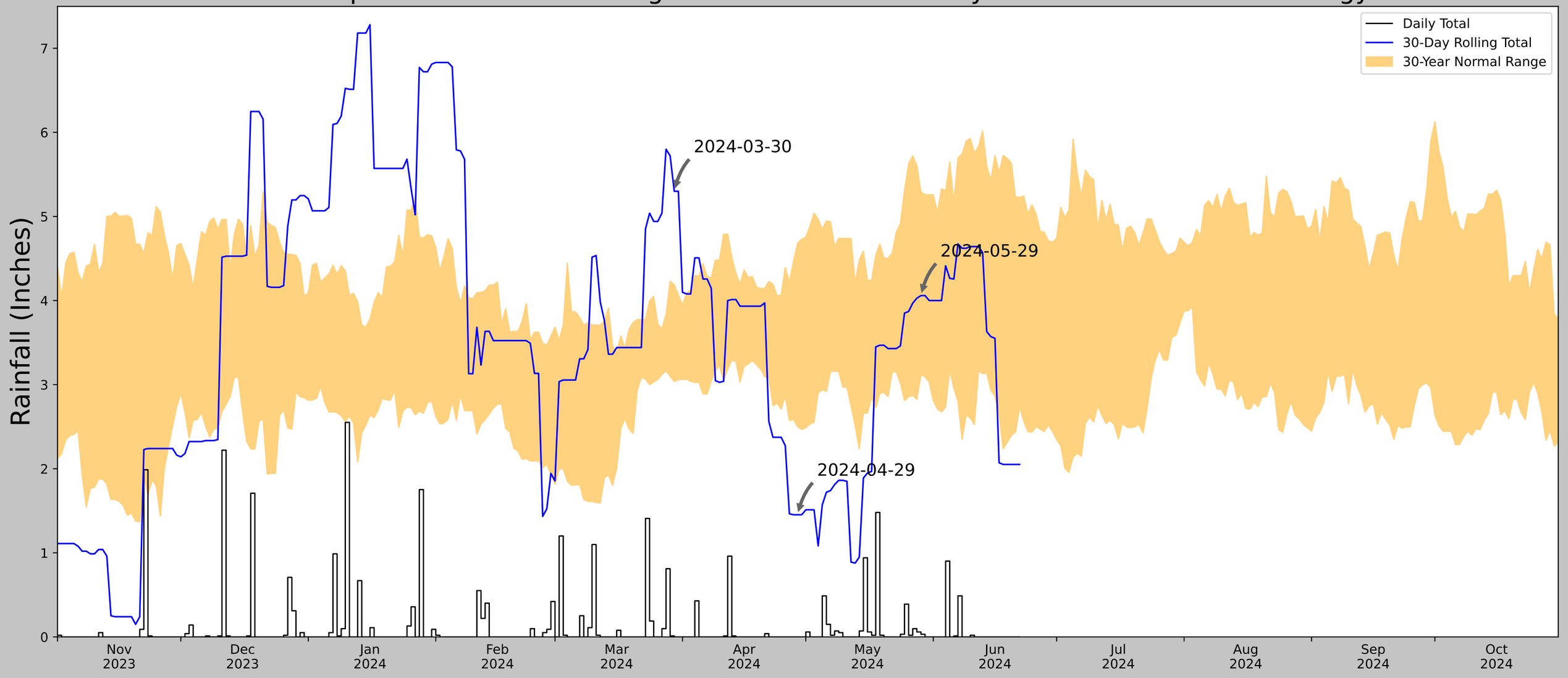
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-29
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-29	3.118504	5.29252	4.059055	Normal	2	3	6
2024-04-29	2.500787	4.680709	1.452756	Dry	1	2	2
2024-03-30	3.037795	4.188583	5.299213	Wet	3	1	3
Result							Normal Conditions - 11

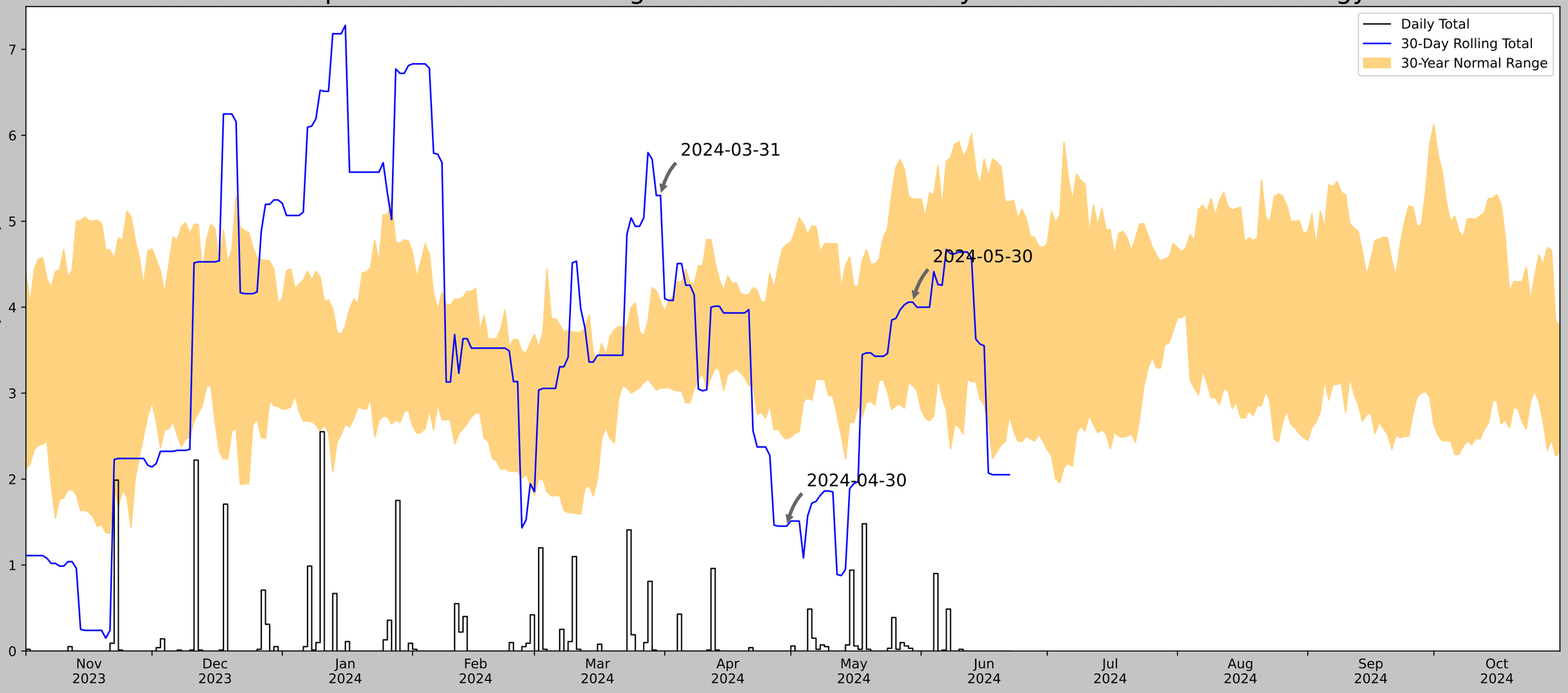
US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	88
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	2
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.711389, -79.465278
Observation Date	2024-05-30
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-30	3.093701	5.258268	4.059055	Normal	2	3	6
2024-04-30	2.467323	4.729528	1.452756	Dry	1	2	2
2024-03-31	3.059843	4.066142	5.299213	Wet	3	1	3
Result							Normal Conditions - 11

US Army Corps of Engineers

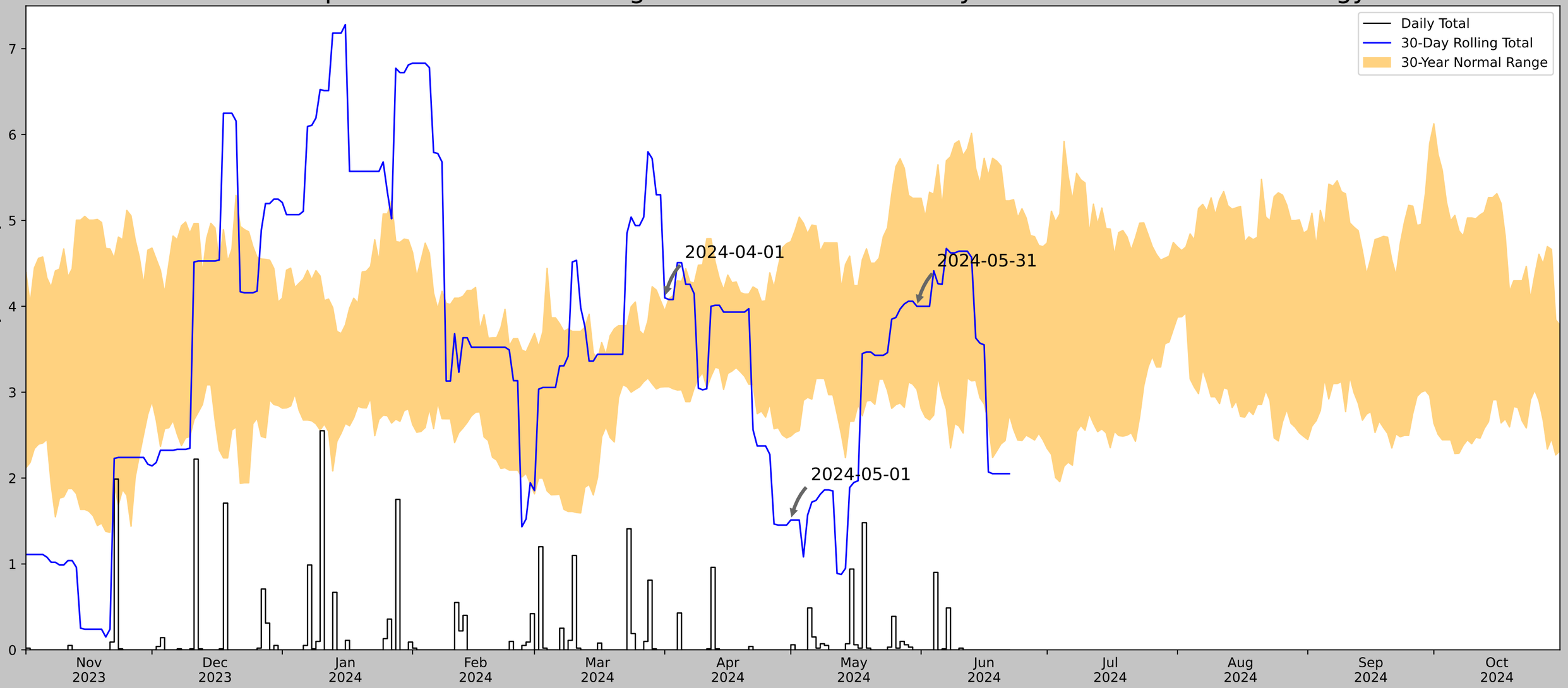
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	88
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	2
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711389, -79.465278
Observation Date	2024-05-31
Elevation (ft)	811.706
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-05-31	3.03189	5.258268	4.0	Normal	2	3	6
2024-05-01	2.488976	4.75315	1.511811	Dry	1	2	2
2024-04-01	3.062992	3.946063	4.098425	Wet	3	1	3
Result							Normal Conditions - 11

US Army Corps of Engineers

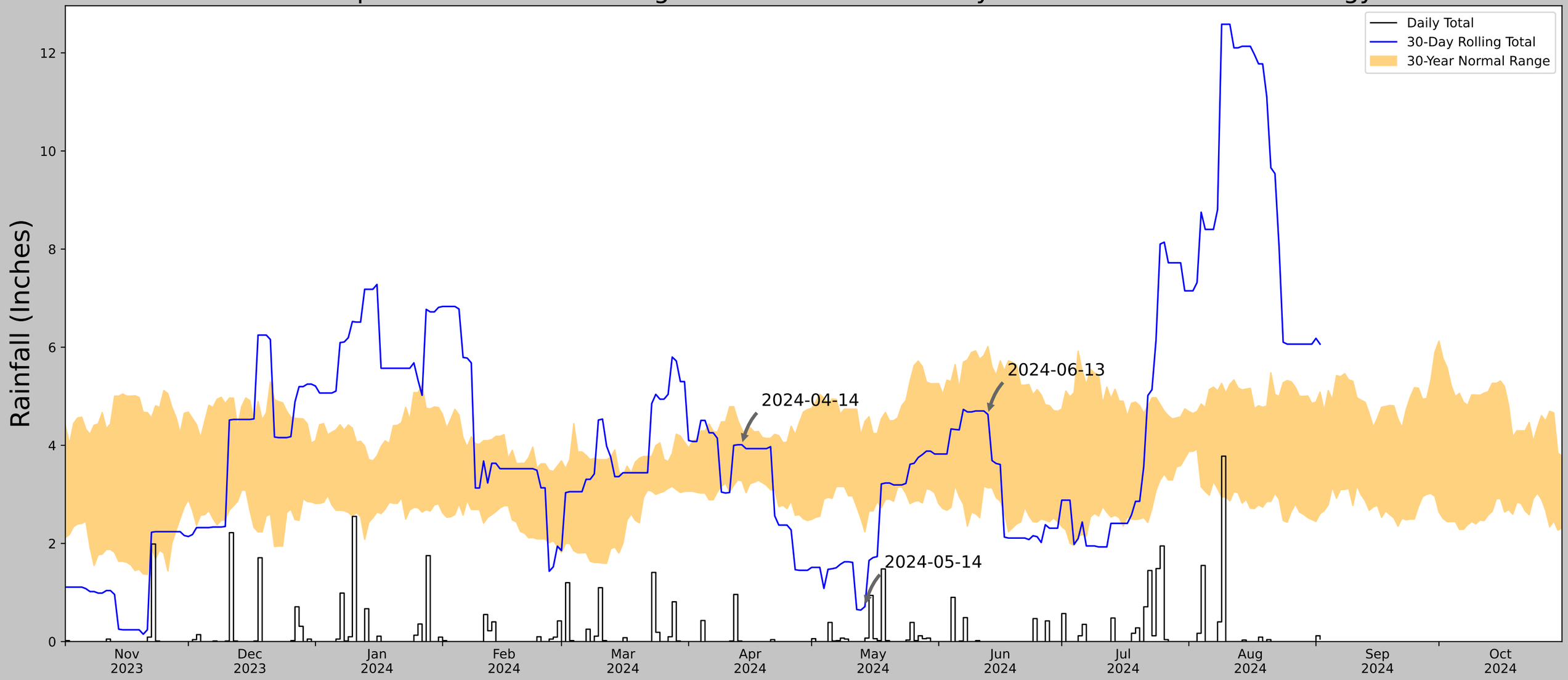
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.22	164.724	5.053	11342	88
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	2
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1122, -79.275	528.871	21.403	118.111	12.159	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.781389, -79.383889
Observation Date	2024-06-13
Elevation (ft)	652.107
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-06-13	3.13189	6.014567	4.629921	Normal	2	3	6
2024-05-14	2.237008	4.487008	0.712598	Dry	1	2	2
2024-04-14	3.275984	4.322047	4.011811	Normal	2	1	2
Result							Normal Conditions - 10

US Army Corps of Engineers

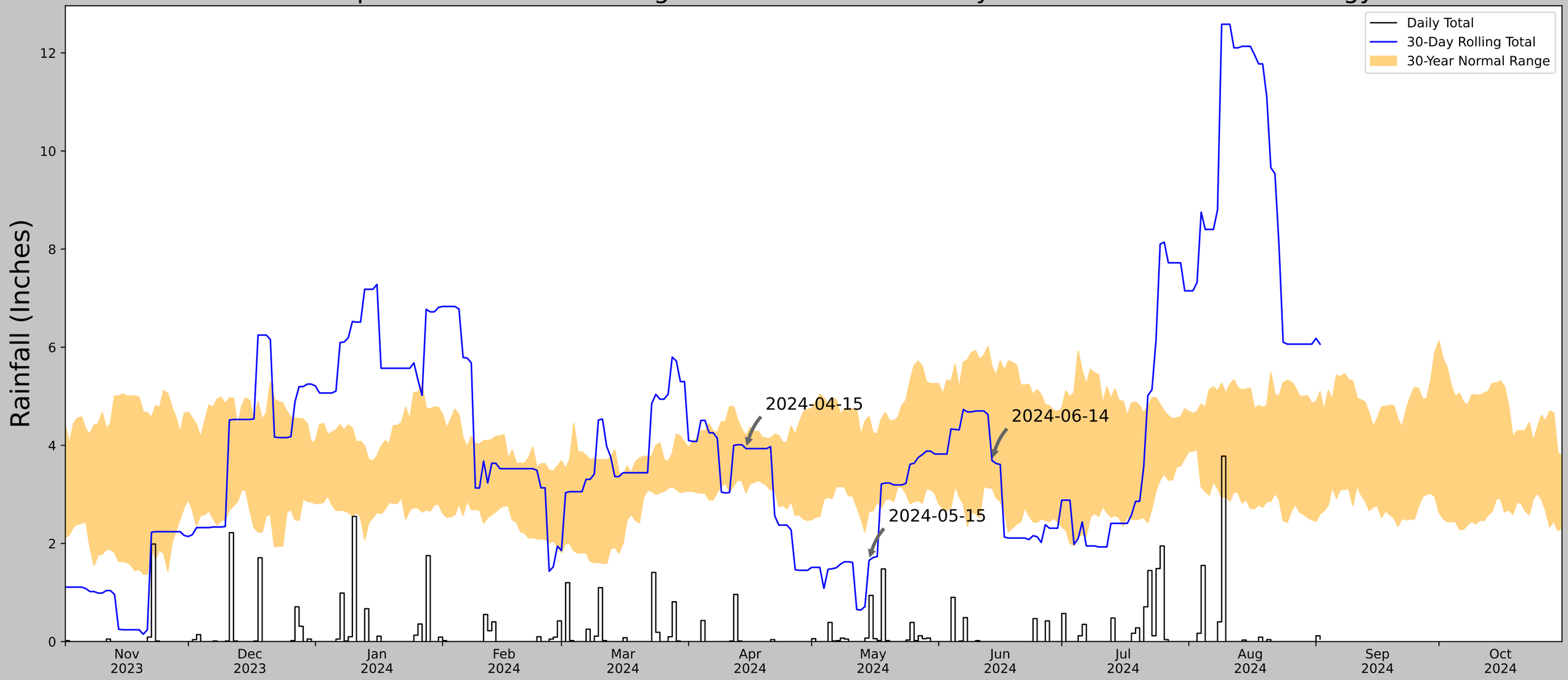
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	3.157	5.125	1.437	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.781389, -79.383889
Observation Date	2024-06-14
Elevation (ft)	652.107
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-06-14	3.135827	5.602362	3.688976	Normal	2	3	6
2024-05-15	2.661024	4.585433	1.653543	Dry	1	2	2
2024-04-15	3.03189	4.193701	3.933071	Normal	2	1	2
Result							Normal Conditions - 10

US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	3.157	5.125	1.437	11342	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.781389, -79.383889
Observation Date	2024-07-07
Elevation (ft)	652.107
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-07-07	2.149213	5.240551	1.948819	Dry	1	3	3
2024-06-07	2.802362	5.695276	4.732284	Normal	2	2	4
2024-05-08	3.16063	4.63937	1.574803	Dry	1	1	1
Result							Drier than Normal - 8

US Army Corps of Engineers

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Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	3.157	5.125	1.437	11342	86
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	2
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
GRETNA 0.5 WNW	36.9545, -79.3724	910.105	9.398	263.123	6.702	0	2
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.781389, -79.383889
Observation Date	2024-07-08
Elevation (ft)	652.107
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-07-08	2.539764	5.549213	1.948819	Dry	1	3	3
2024-06-08	2.350787	5.742126	4.681103	Normal	2	2	4
2024-05-09	3.157087	4.73937	1.625984	Dry	1	1	1
Result							Drier than Normal - 8

US Army Corps of Engineers

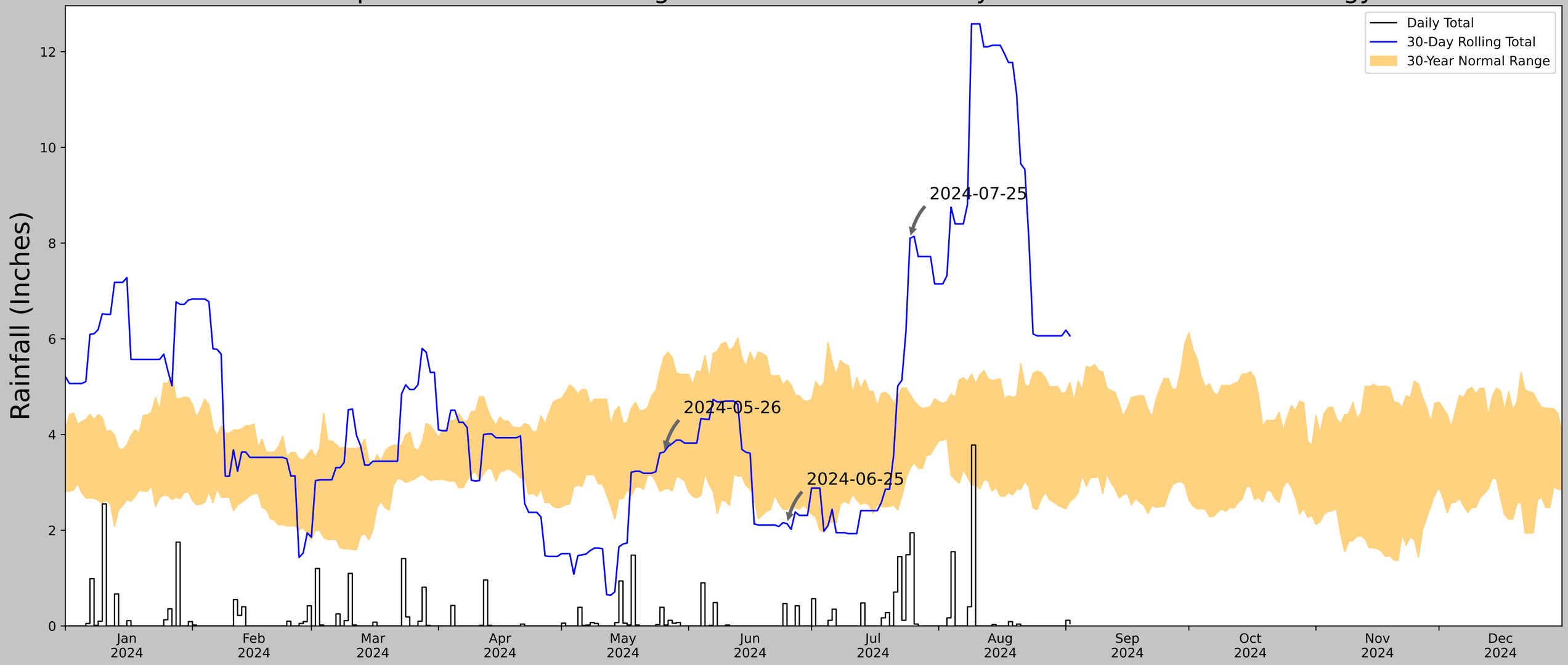
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	3.157	5.125	1.437	11342	86
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	2
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
GRETNA 0.5 WNW	36.9545, -79.3724	910.105	9.398	263.123	6.702	0	2
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.781389, -79.383889
Observation Date	2024-07-25
Elevation (ft)	652.107
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-07-25	3.293307	4.836221	8.102362	Wet	3	3	9
2024-06-25	2.436614	5.137008	2.137795	Dry	1	2	2
2024-05-26	2.854725	5.627166	3.633858	Normal	2	1	2
Result							Normal Conditions - 13

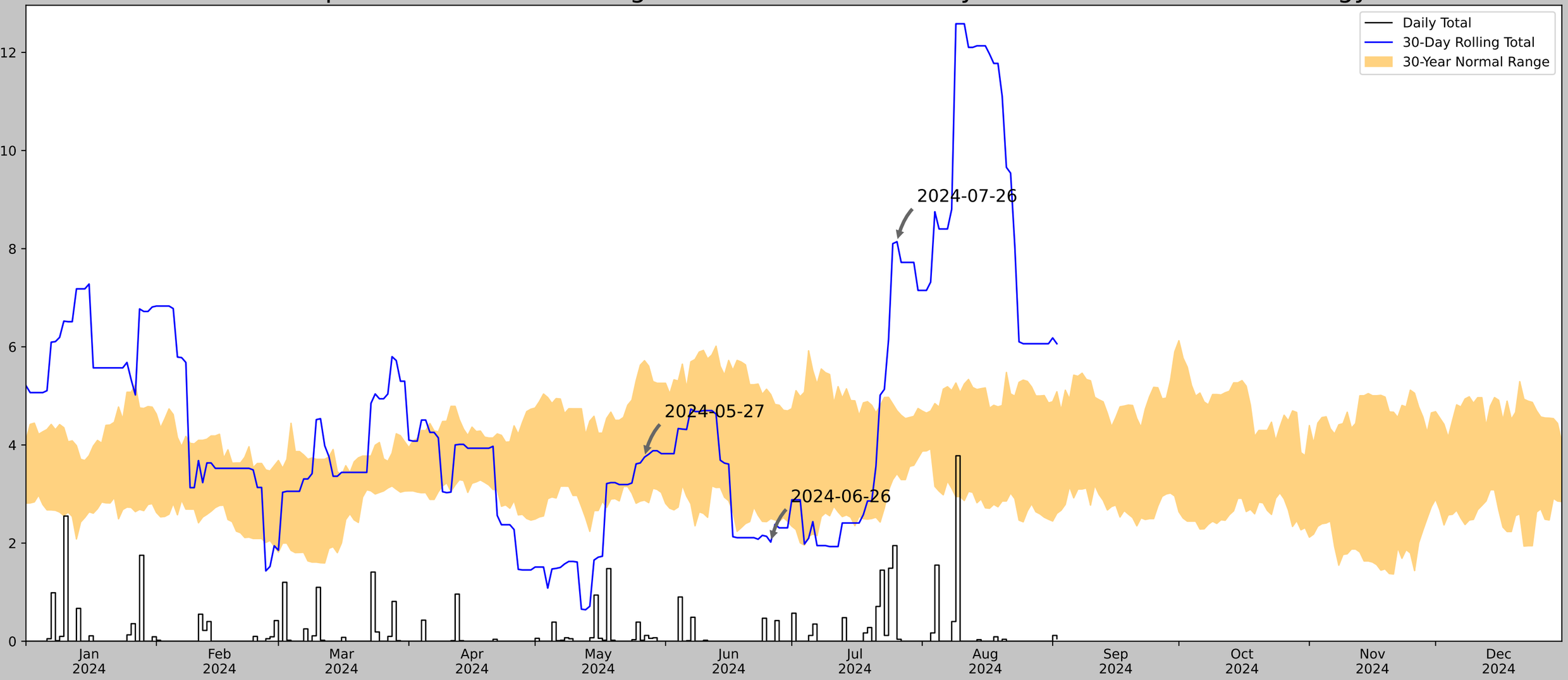
US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	3.157	5.125	1.437	11342	86
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	2
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
GRETNA 0.5 WNW	36.9545, -79.3724	910.105	9.398	263.123	6.702	0	2
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.781389, -79.383889
Observation Date	2024-07-26
Elevation (ft)	652.107
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-07-26	3.416536	4.698032	8.141733	Wet	3	3	9
2024-06-26	2.499606	5.029528	2.019685	Dry	1	2	2
2024-05-27	2.87441	5.718504	3.751969	Normal	2	1	2
Result							Normal Conditions - 13

US Army Corps of Engineers

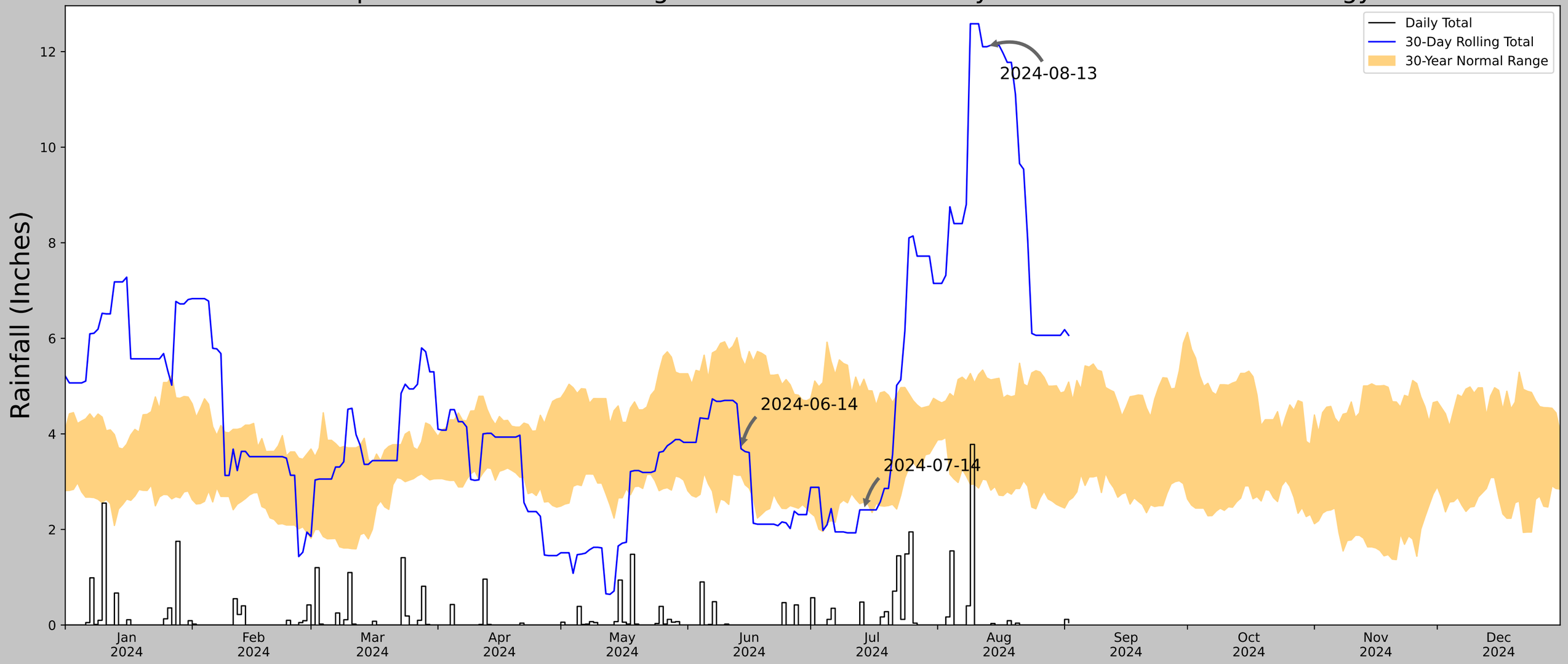
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	3.157	5.125	1.437	11342	86
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	2
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
GRETNA 0.5 WNW	36.9545, -79.3724	910.105	9.398	263.123	6.702	0	2
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.781389, -79.383889
Observation Date	2024-08-13
Elevation (ft)	652.107
Drought Index (PDSI)	Mild drought (2024-07)
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-08-13	3.035433	5.170866	12.102363	Wet	3	3	9
2024-07-14	2.572835	5.144882	2.409449	Dry	1	2	2
2024-06-14	3.135827	5.602362	3.688976	Normal	2	1	2
Result							Normal Conditions - 13

US Army Corps of Engineers

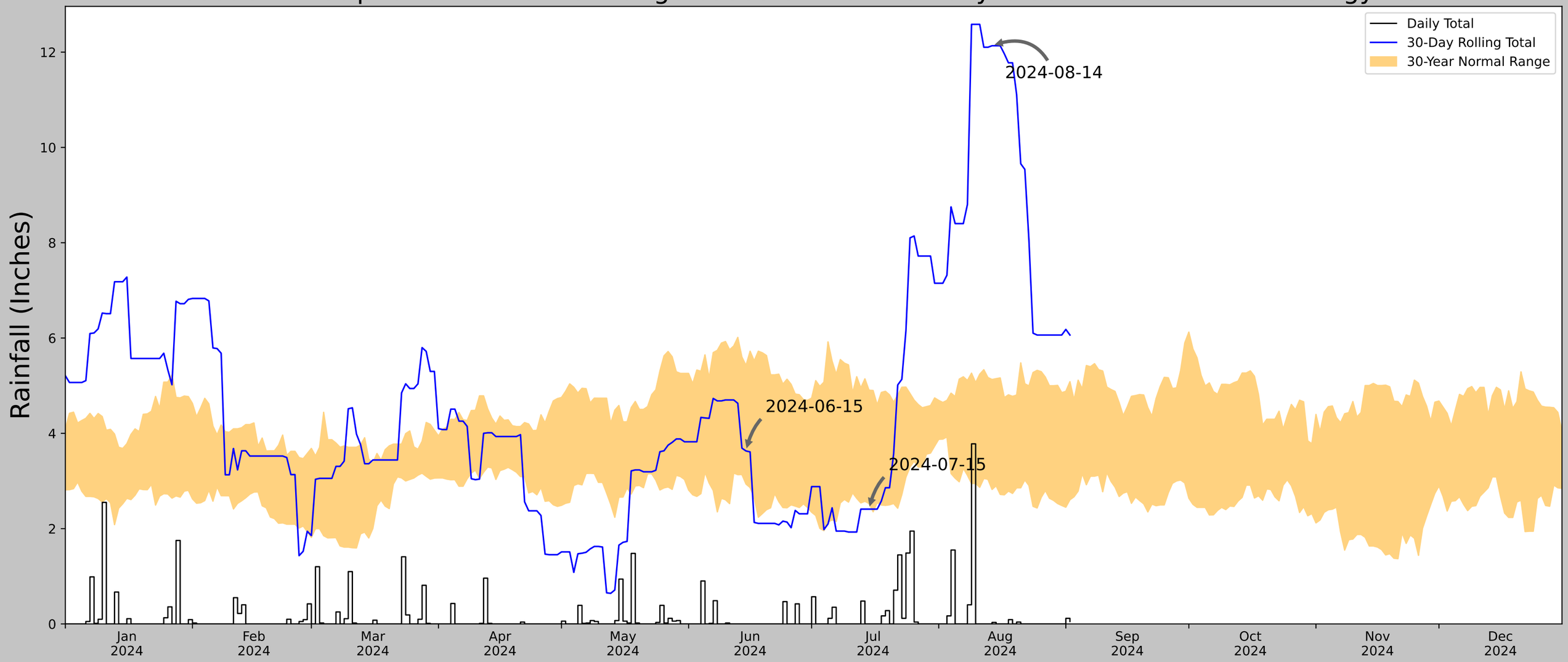
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	3.157	5.125	1.437	11342	86
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	2
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
GRETNA 0.5 WNW	36.9545, -79.3724	910.105	9.398	263.123	6.702	0	2
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.781389, -79.383889
Observation Date	2024-08-14
Elevation (ft)	652.107
Drought Index (PDSI)	Mild drought (2024-07)
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-08-14	2.821654	5.130315	12.133859	Wet	3	3	9
2024-07-15	2.527953	4.905512	2.409449	Dry	1	2	2
2024-06-15	2.934646	5.426378	3.629921	Normal	2	1	2
Result							Normal Conditions - 13

US Army Corps of Engineers

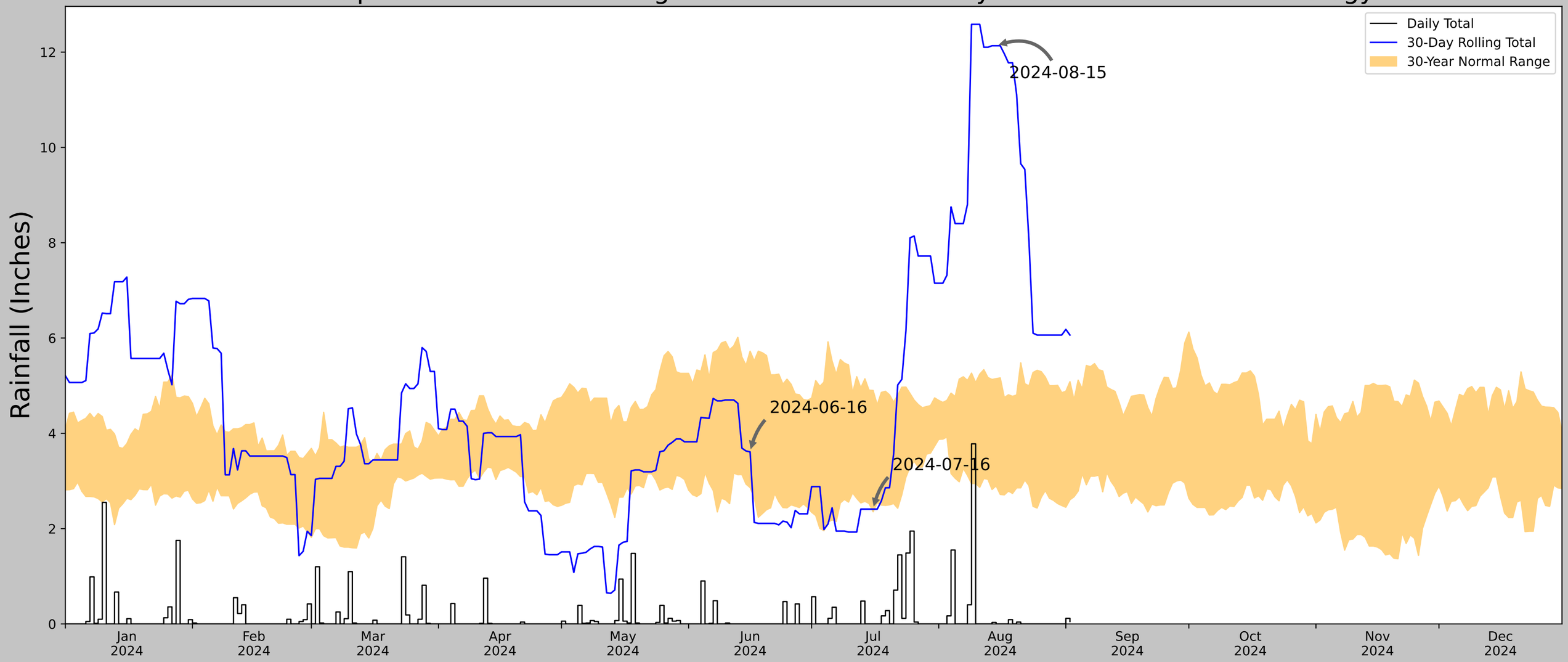
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	3.157	5.125	1.437	11342	85
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	2
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
DANVILLE 5.5 N	36.6627, -79.4199	670.932	11.013	23.95	5.22	0	1
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
GRETNA 0.5 WNW	36.9545, -79.3724	910.105	9.398	263.123	6.702	0	2
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.781389, -79.383889
Observation Date	2024-08-15
Elevation (ft)	652.107
Drought Index (PDSI)	Mild drought (2024-07)
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-08-15	2.898819	5.148032	12.133859	Wet	3	3	9
2024-07-16	2.353543	4.9	2.409449	Normal	2	2	4
2024-06-16	2.862599	5.724016	3.610236	Normal	2	1	2
Result							Wetter than Normal - 15

US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	3.157	5.125	1.437	11342	85
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	2
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
DANVILLE 5.5 N	36.6627, -79.4199	670.932	11.013	23.95	5.22	0	1
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
GRETNA 0.5 WNW	36.9545, -79.3724	910.105	9.398	263.123	6.702	0	2
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.781389, -79.383889
Observation Date	2024-08-16
Elevation (ft)	652.107
Drought Index (PDSI)	Mild drought (2024-07)
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-08-16	2.717323	5.163386	12.133859	Wet	3	3	9
2024-07-17	2.545669	4.598032	2.409449	Dry	1	2	2
2024-06-17	2.647638	5.52126	2.129921	Dry	1	1	1
Result							Normal Conditions - 12

US Army Corps of Engineers

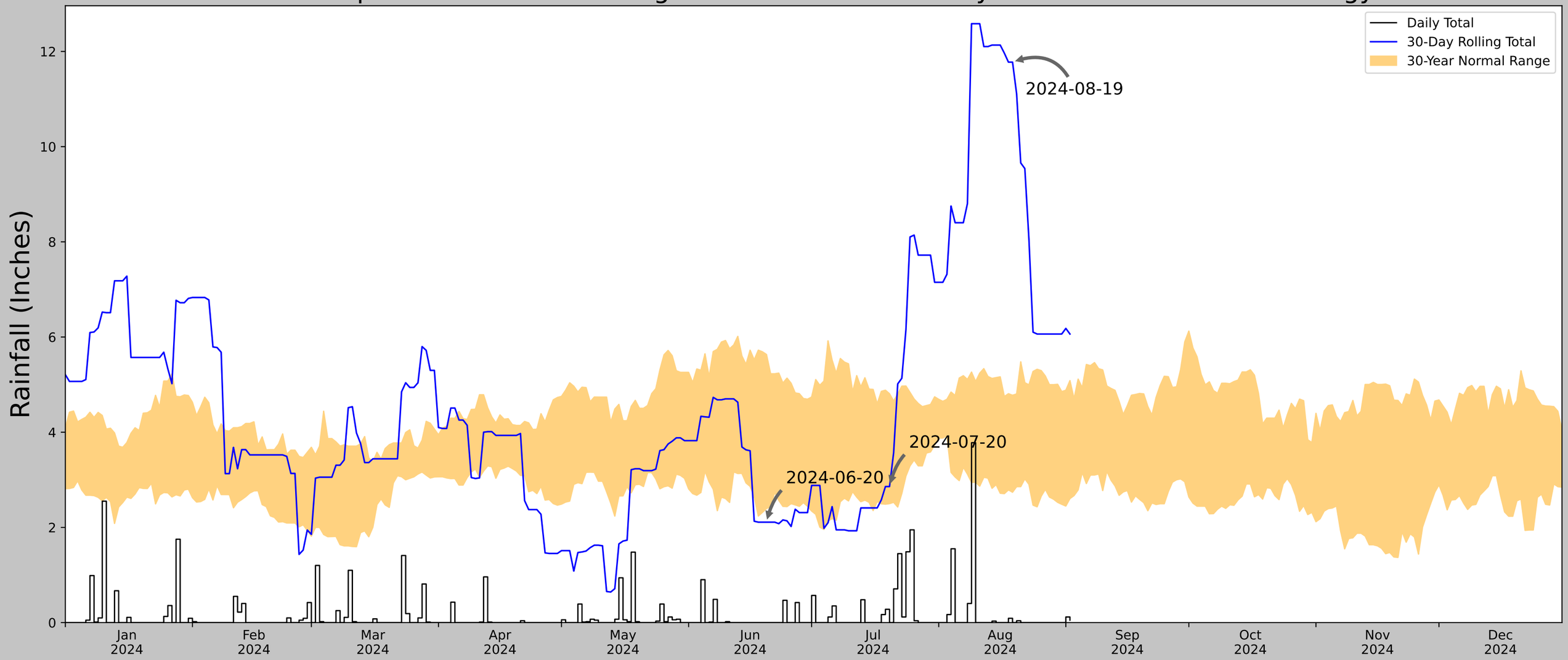
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	3.157	5.125	1.437	11342	85
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	2
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
DANVILLE 5.5 N	36.6627, -79.4199	670.932	11.013	23.95	5.22	0	1
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
GRETNA 0.5 WNW	36.9545, -79.3724	910.105	9.398	263.123	6.702	0	2
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.781389, -79.383889
Observation Date	2024-08-19
Elevation (ft)	652.107
Drought Index (PDSI)	Mild drought (2024-07)
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-08-19	2.738976	4.776772	11.775591	Wet	3	3	9
2024-07-20	2.499606	4.808662	2.858268	Normal	2	2	4
2024-06-20	2.397244	5.633071	2.110236	Dry	1	1	1
Result							Normal Conditions - 14

US Army Corps of Engineers

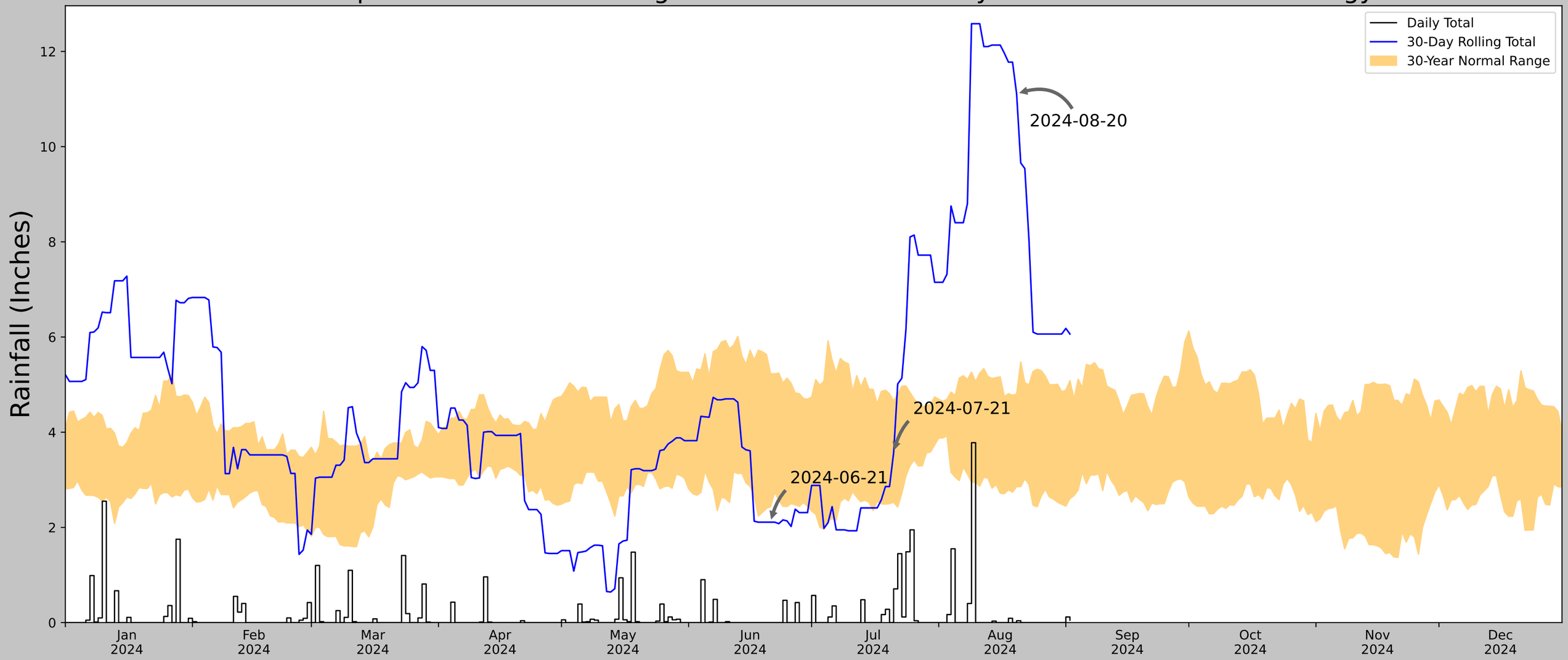
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	3.157	5.125	1.437	11342	85
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	2
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
DANVILLE 5.5 N	36.6627, -79.4199	670.932	11.013	23.95	5.22	0	1
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
GRETNA 0.5 WNW	36.9545, -79.3724	910.105	9.398	263.123	6.702	0	2
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.781389, -79.383889
Observation Date	2024-08-20
Elevation (ft)	652.107
Drought Index (PDSI)	Mild drought (2024-07)
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-08-20	2.856299	4.803543	11.1063	Wet	3	3	9
2024-07-21	2.527165	4.655906	3.566929	Normal	2	2	4
2024-06-21	2.436614	5.228347	2.110236	Dry	1	1	1
Result							Normal Conditions - 14

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	3.157	5.125	1.437	11342	85
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	2
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
DANVILLE 5.5 N	36.6627, -79.4199	670.932	11.013	23.95	5.22	0	1
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
GRETNA 0.5 WNW	36.9545, -79.3724	910.105	9.398	263.123	6.702	0	2
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

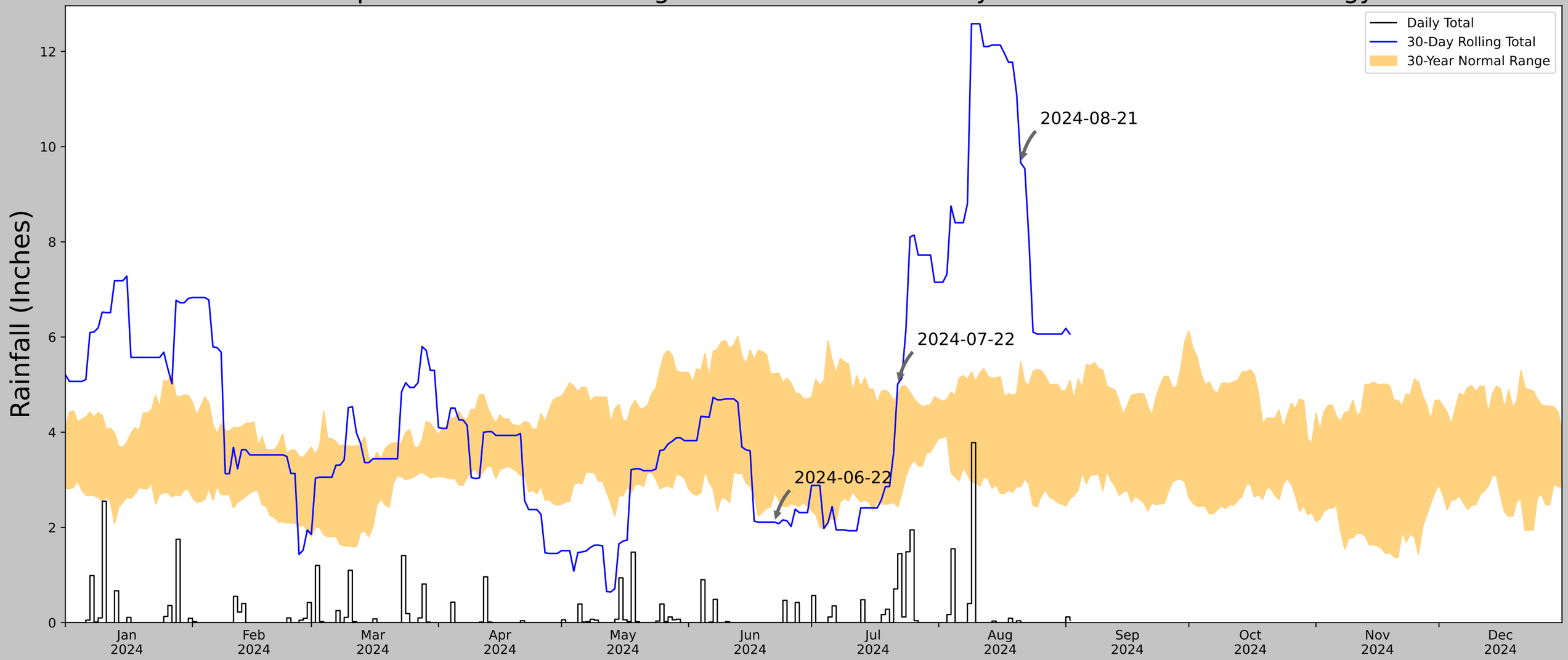
US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.781389, -79.383889
Observation Date	2024-08-21
Elevation (ft)	652.107
Drought Index (PDSI)	Mild drought (2024-07)
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-08-21	2.856299	5.479134	9.657481	Wet	3	3	9
2024-07-22	2.427953	4.800394	5.015748	Wet	3	2	6
2024-06-22	2.737402	5.228347	2.110236	Dry	1	1	1
Result							Wetter than Normal - 16

US Army Corps of Engineers

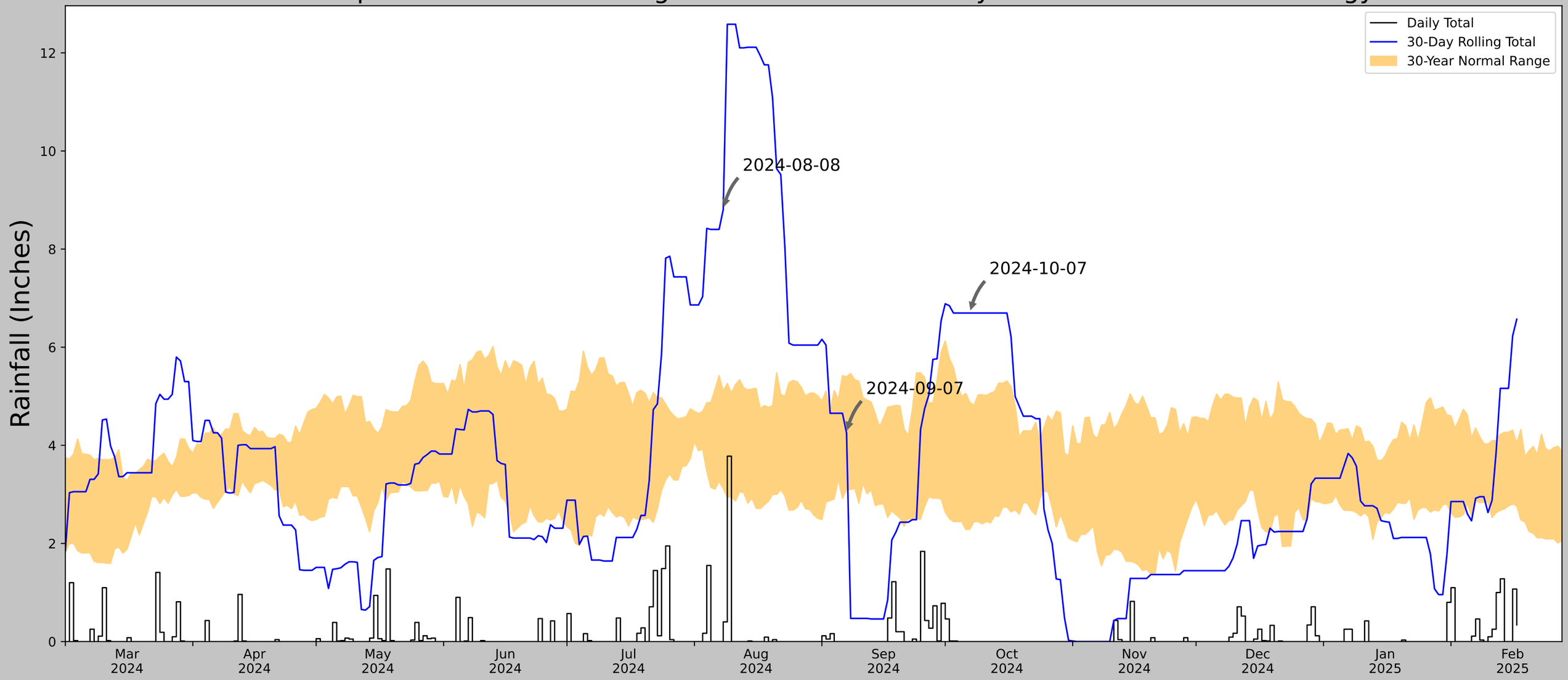
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	3.157	5.125	1.437	11342	84
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	2
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
DANVILLE 5.5 N	36.6627, -79.4199	670.932	11.013	23.95	5.22	0	1
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
GRETNA 0.5 WNW	36.9545, -79.3724	910.105	9.398	263.123	6.702	0	3
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.715278, -79.461389
Observation Date	2024-10-07
Elevation (ft)	791.267
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-10-07	2.28937	4.876378	6.696851	Wet	3	3	9
2024-09-07	3.100394	5.398425	4.251969	Normal	2	2	4
2024-08-08	3.119685	5.109449	8.80315	Wet	3	1	3
Result							Wetter than Normal - 16

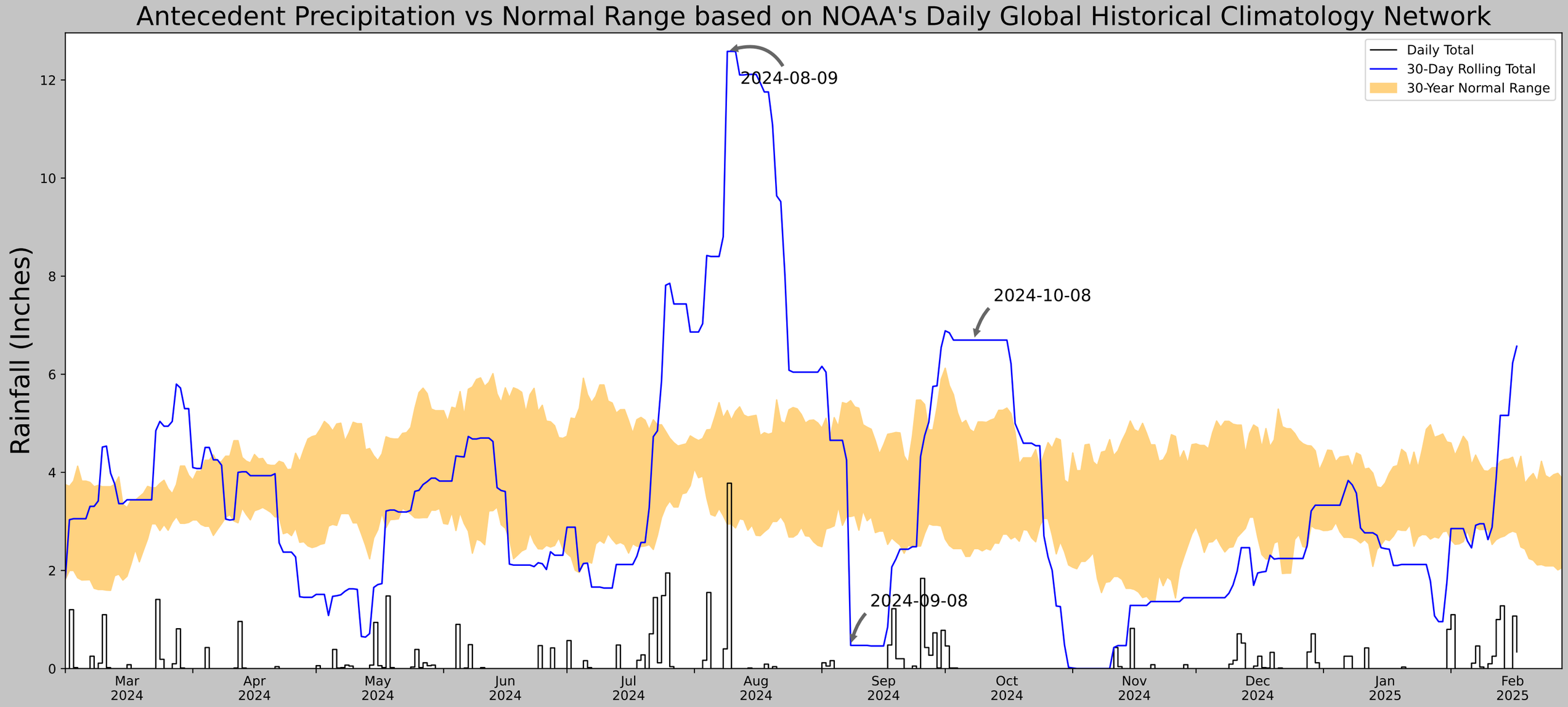
US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	7.891	144.285	4.689	11343	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.715278, -79.461389
Observation Date	2024-10-08
Elevation (ft)	791.267
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-10-08	2.445669	4.818504	6.696851	Wet	3	3	9
2024-09-08	3.100394	5.462992	0.472441	Dry	1	2	2
2024-08-09	2.94685	5.26378	12.582678	Wet	3	1	3
Result							Normal Conditions - 14

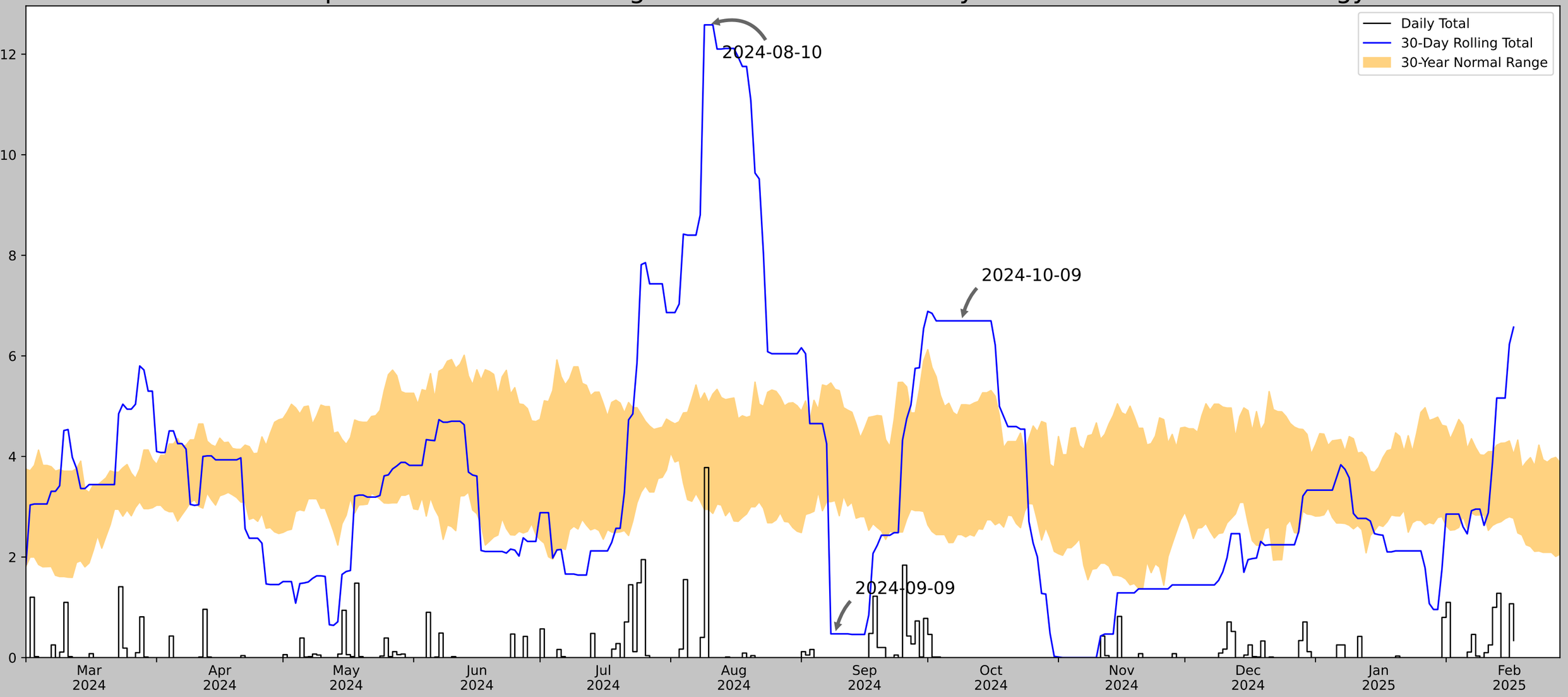
US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	7.891	144.285	4.689	11343	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.715278, -79.461389
Observation Date	2024-10-09
Elevation (ft)	791.267
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-10-09	2.445669	5.02874	6.696851	Wet	3	3	9
2024-09-09	3.122441	5.33504	0.472441	Dry	1	2	2
2024-08-10	2.94685	5.065354	12.582678	Wet	3	1	3
Result							Normal Conditions - 14

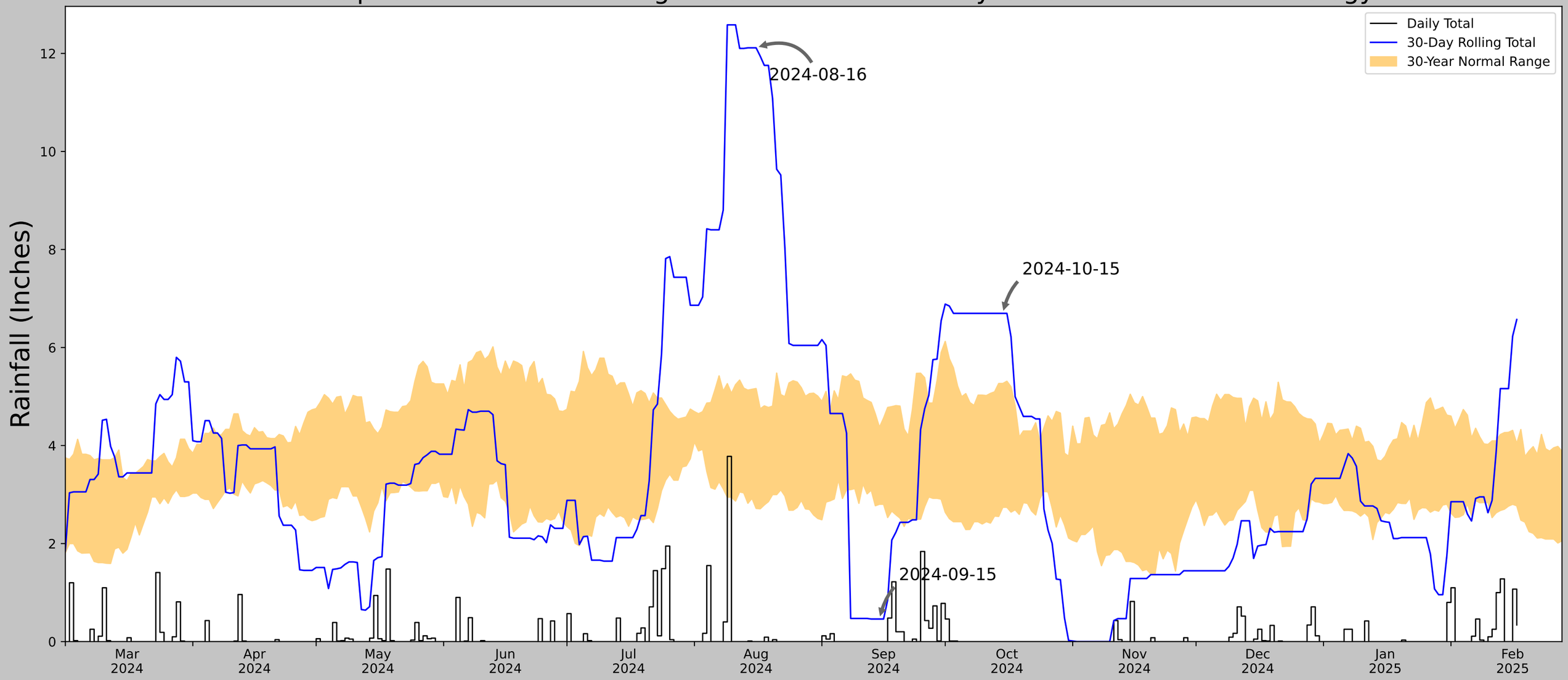
US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	7.891	144.285	4.689	11343	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.715278, -79.461389
Observation Date	2024-10-15
Elevation (ft)	791.267
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-10-15	2.740158	5.266142	6.696851	Wet	3	3	9
2024-09-15	2.802362	4.372441	0.46063	Dry	1	2	2
2024-08-16	2.717323	5.163386	12.114174	Wet	3	1	3
Result							Normal Conditions - 14

US Army Corps of Engineers

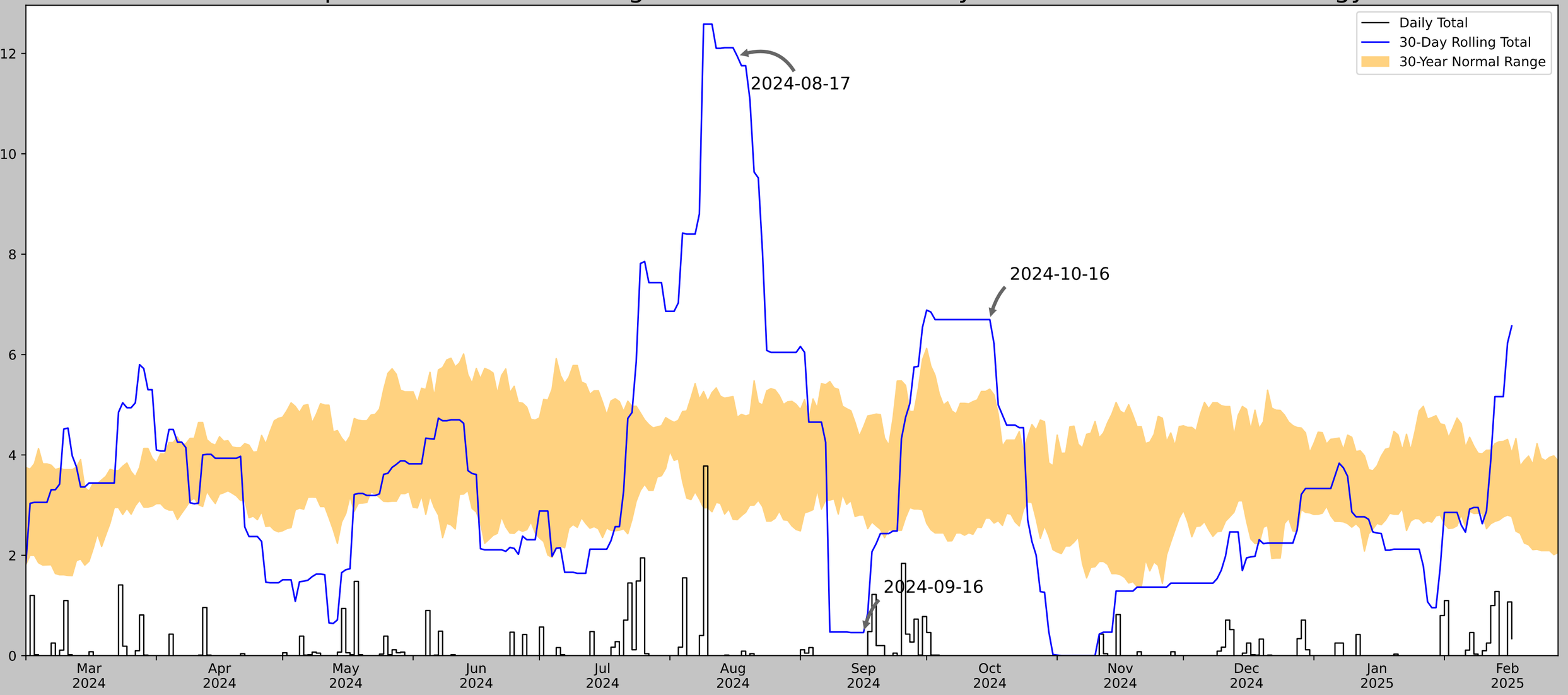
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	7.891	144.285	4.689	11343	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.715278, -79.461389
Observation Date	2024-10-16
Elevation (ft)	791.267
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-10-16	2.740158	5.312205	6.696851	Wet	3	3	9
2024-09-16	2.802362	4.559843	0.46063	Dry	1	2	2
2024-08-17	2.709055	4.749606	11.944882	Wet	3	1	3
Result							Normal Conditions - 14

US Army Corps of Engineers

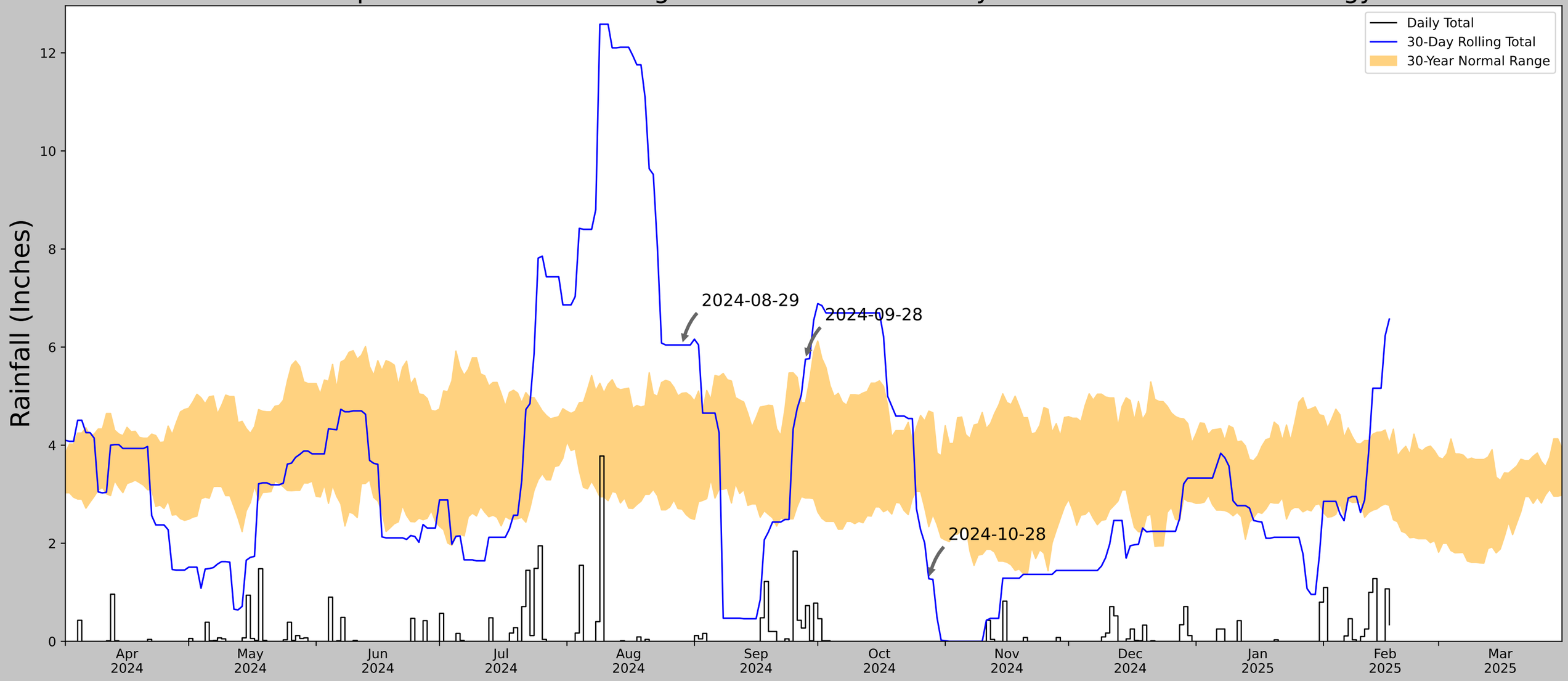
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	7.891	144.285	4.689	11343	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.715278, -79.461389
Observation Date	2024-10-28
Elevation (ft)	791.267
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-10-28	2.337795	4.695669	1.275591	Dry	1	3	3
2024-09-28	2.923228	4.866536	5.751969	Wet	3	2	6
2024-08-29	2.695669	5.059843	6.043307	Wet	3	1	3
Result							Normal Conditions - 12

US Army Corps of Engineers

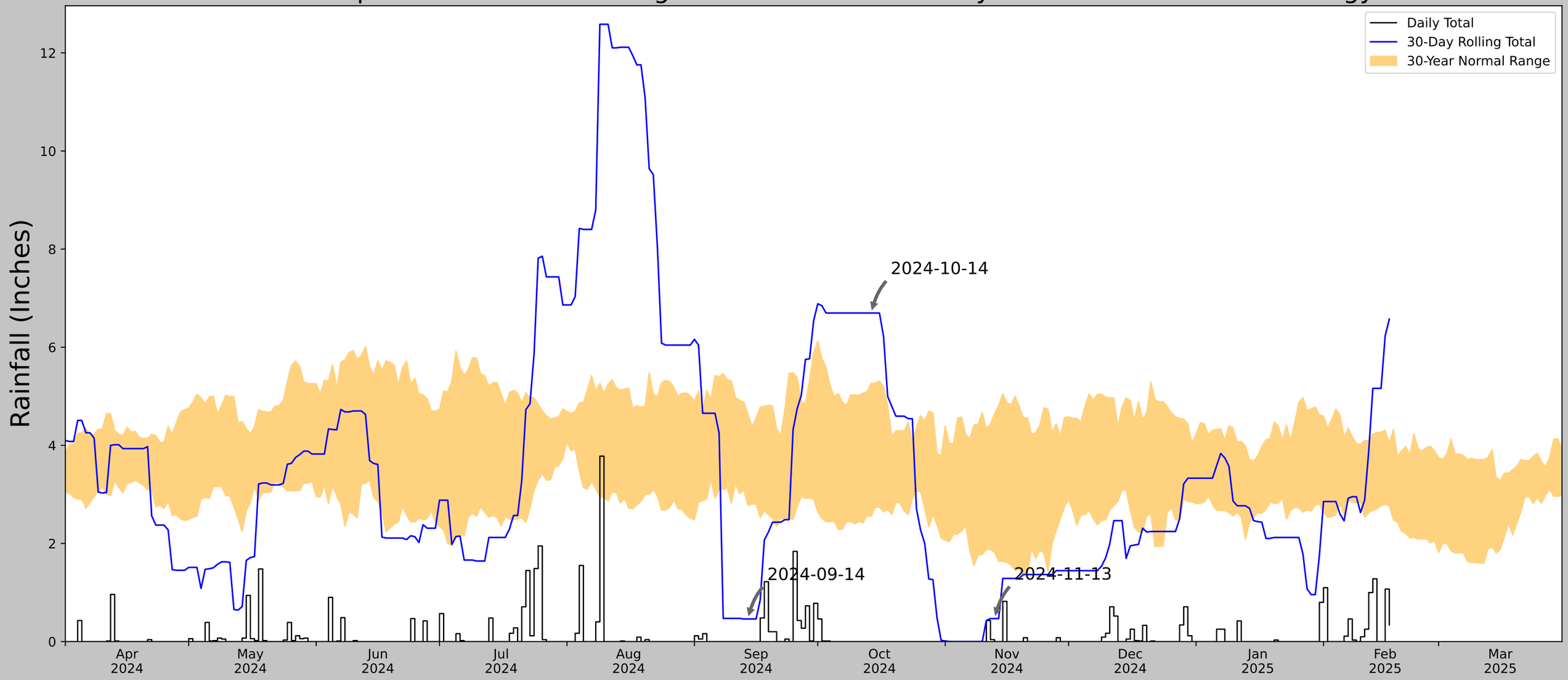
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	7.891	144.285	4.689	11343	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.715278, -79.461389
Observation Date	2024-11-13
Elevation (ft)	791.267
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-11-13	1.817717	4.648032	0.468504	Dry	1	3	3
2024-10-14	2.553937	5.266142	6.696851	Wet	3	2	6
2024-09-14	2.771654	4.646063	0.46063	Dry	1	1	1
Result							Normal Conditions - 10

US Army Corps of Engineers

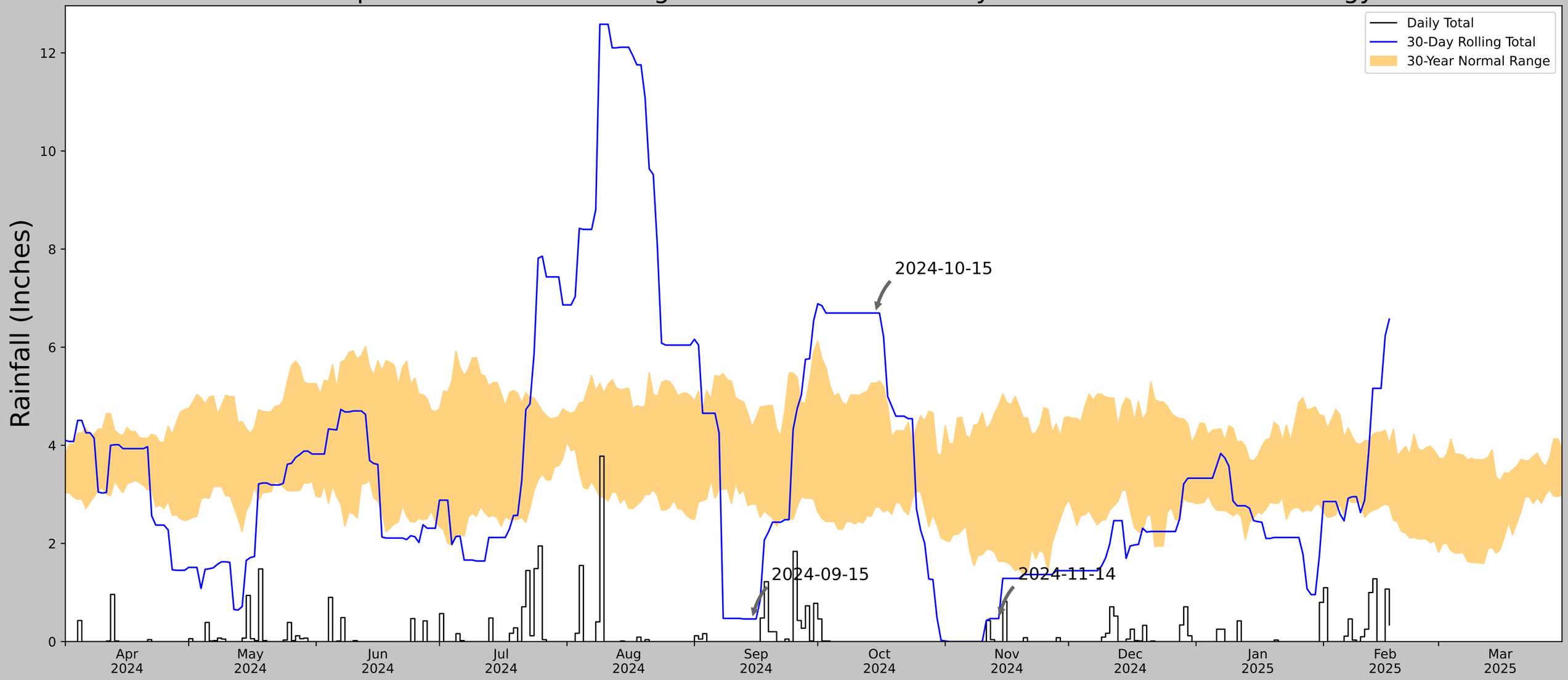
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	7.891	144.285	4.689	11343	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.715278, -79.461389
Observation Date	2024-11-14
Elevation (ft)	791.267
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-11-14	1.635039	4.816142	0.468504	Dry	1	3	3
2024-10-15	2.740158	5.266142	6.696851	Wet	3	2	6
2024-09-15	2.802362	4.372441	0.46063	Dry	1	1	1
Result							Normal Conditions - 10

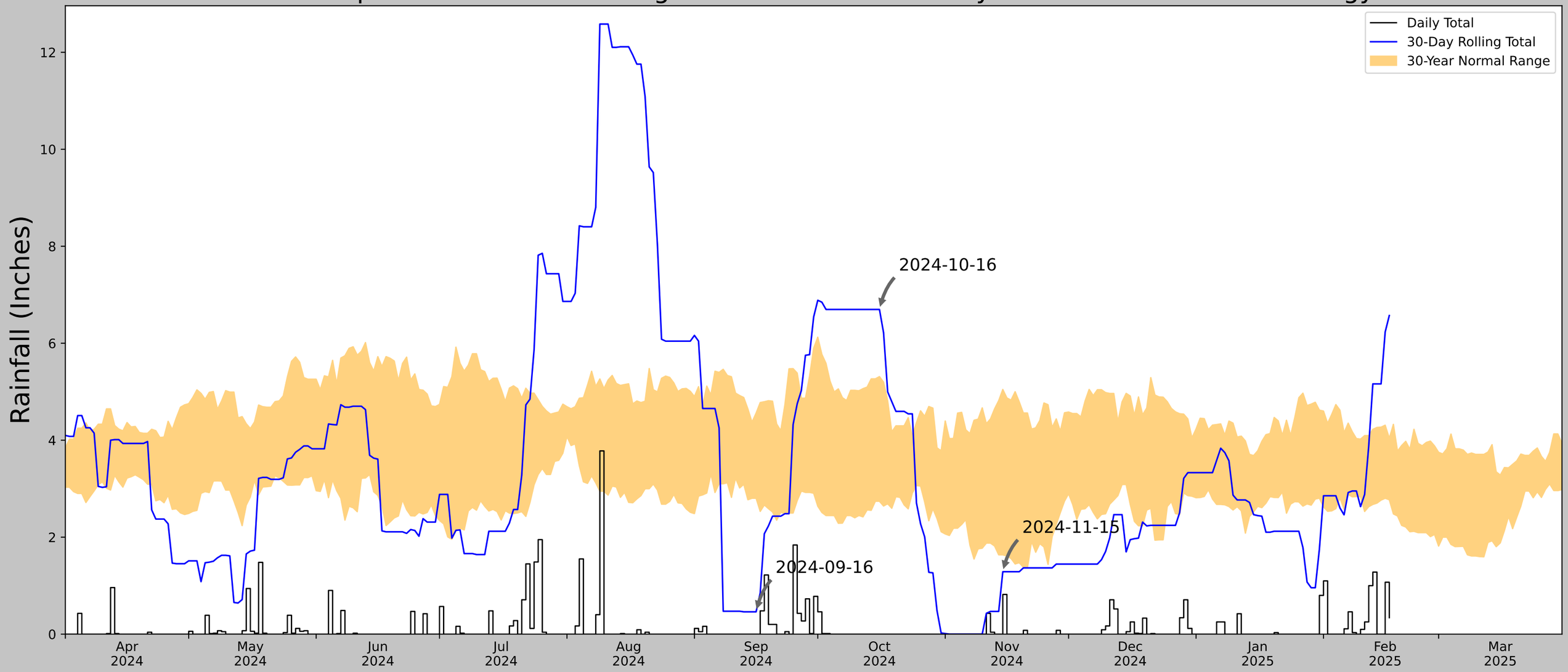
US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	7.891	144.285	4.689	11343	90
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.715278, -79.461389
Observation Date	2024-11-15
Elevation (ft)	791.267
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-11-15	1.635039	5.047638	1.287402	Dry	1	3	3
2024-10-16	2.740158	5.312205	6.696851	Wet	3	2	6
2024-09-16	2.802362	4.559843	0.46063	Dry	1	1	1
Result							Normal Conditions - 10

US Army Corps of Engineers

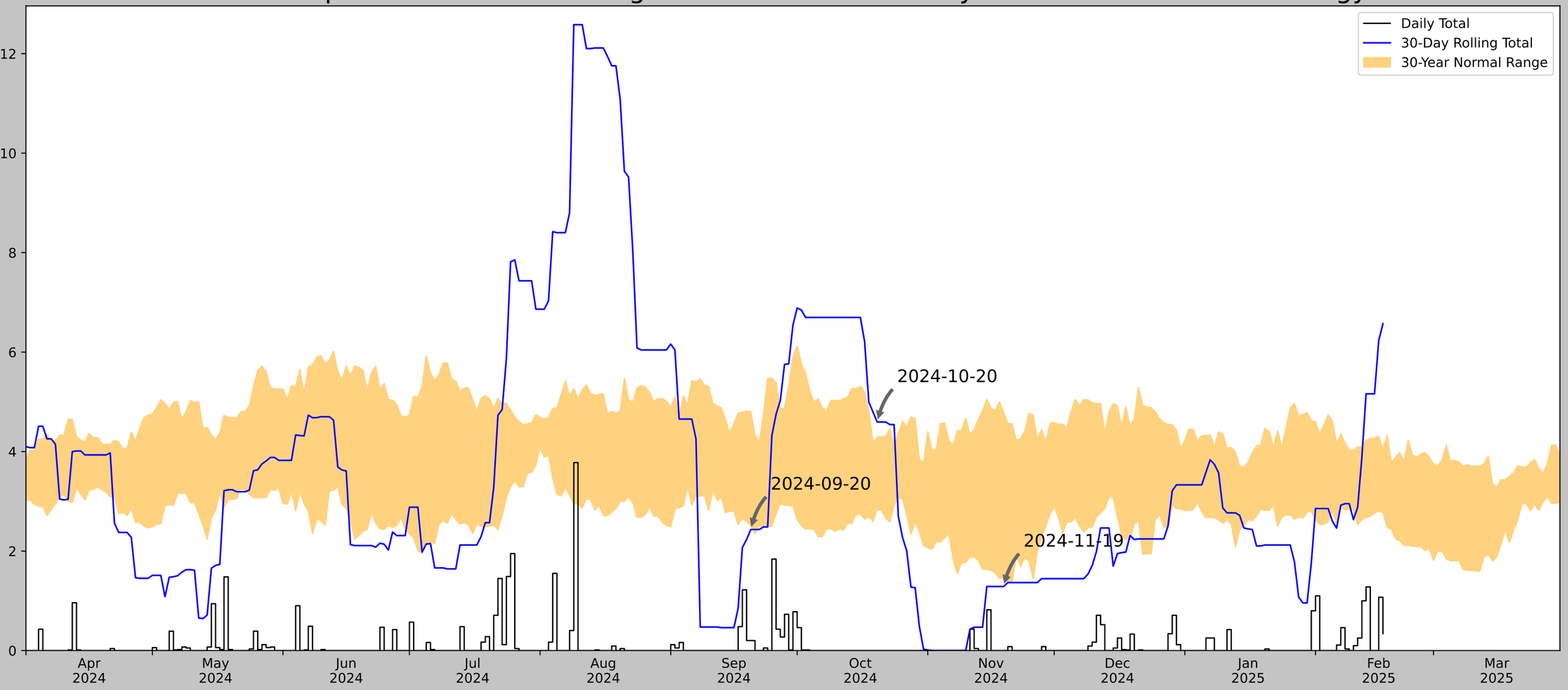
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	7.891	144.285	4.689	11343	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.715278, -79.461389
Observation Date	2024-11-19
Elevation (ft)	791.267
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-11-19	1.473622	4.791732	1.287402	Dry	1	3	3
2024-10-20	2.833858	4.296851	4.594488	Wet	3	2	6
2024-09-20	2.519685	4.805118	2.433071	Dry	1	1	1
Result							Normal Conditions - 10

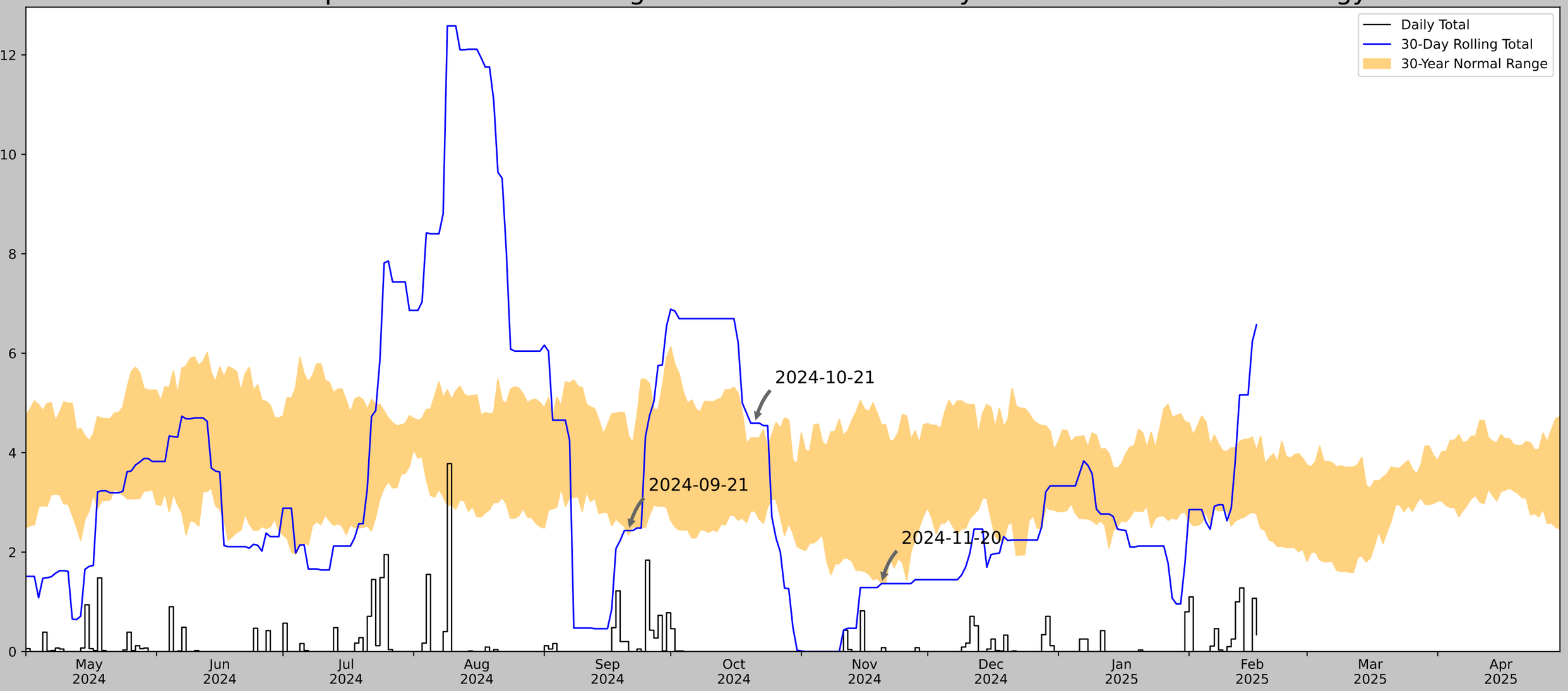
US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	7.891	144.285	4.689	11343	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.715278, -79.461389
Observation Date	2024-11-20
Elevation (ft)	791.267
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-11-20	1.378347	4.561417	1.366142	Dry	1	3	3
2024-10-21	2.820866	4.296851	4.594488	Wet	3	2	6
2024-09-21	2.35	4.334646	2.433071	Normal	2	1	2
Result							Normal Conditions - 11

US Army Corps of Engineers

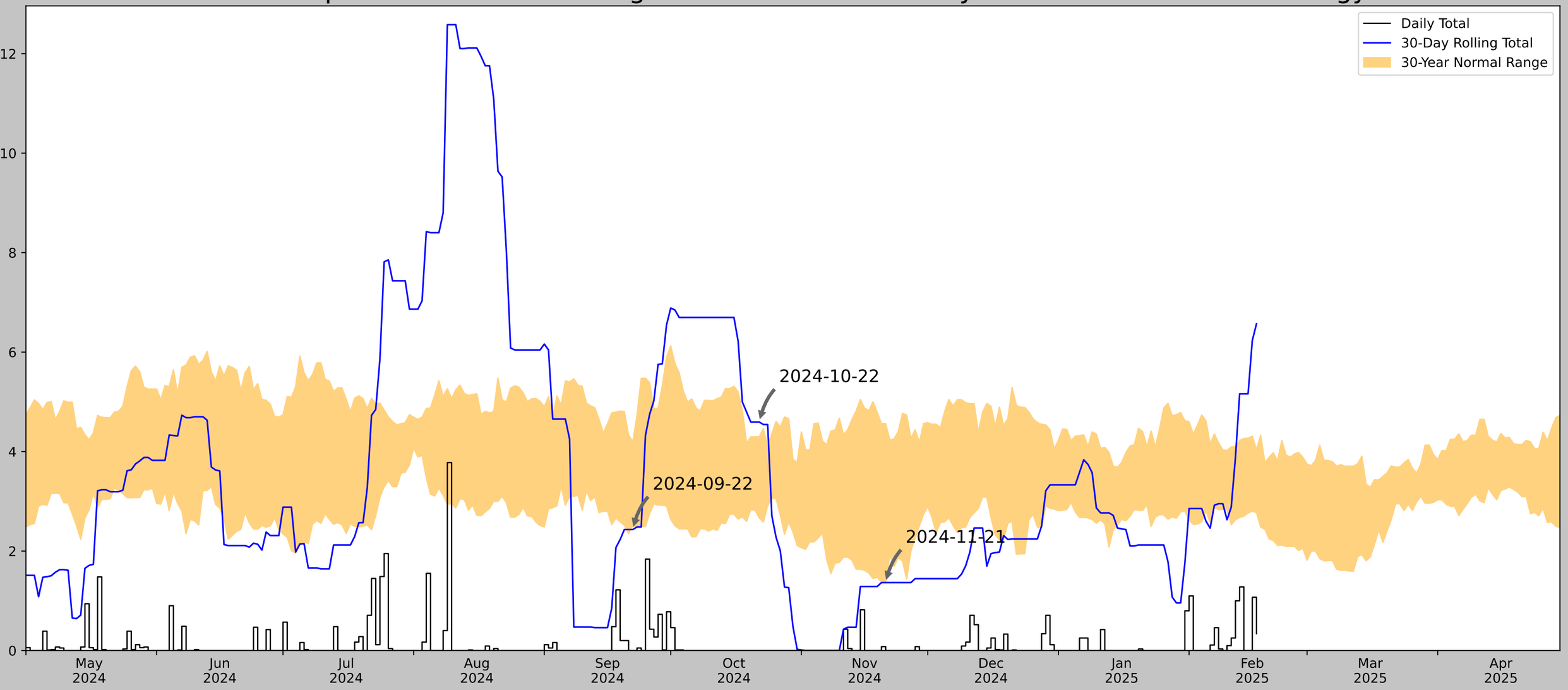
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	7.891	144.285	4.689	11343	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.715278, -79.461389
Observation Date	2024-11-21
Elevation (ft)	791.267
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-11-21	1.368898	4.561417	1.366142	Dry	1	3	3
2024-10-22	2.666142	4.296851	4.594488	Wet	3	2	6
2024-09-22	2.514961	4.197244	2.433071	Dry	1	1	1
Result							Normal Conditions - 10

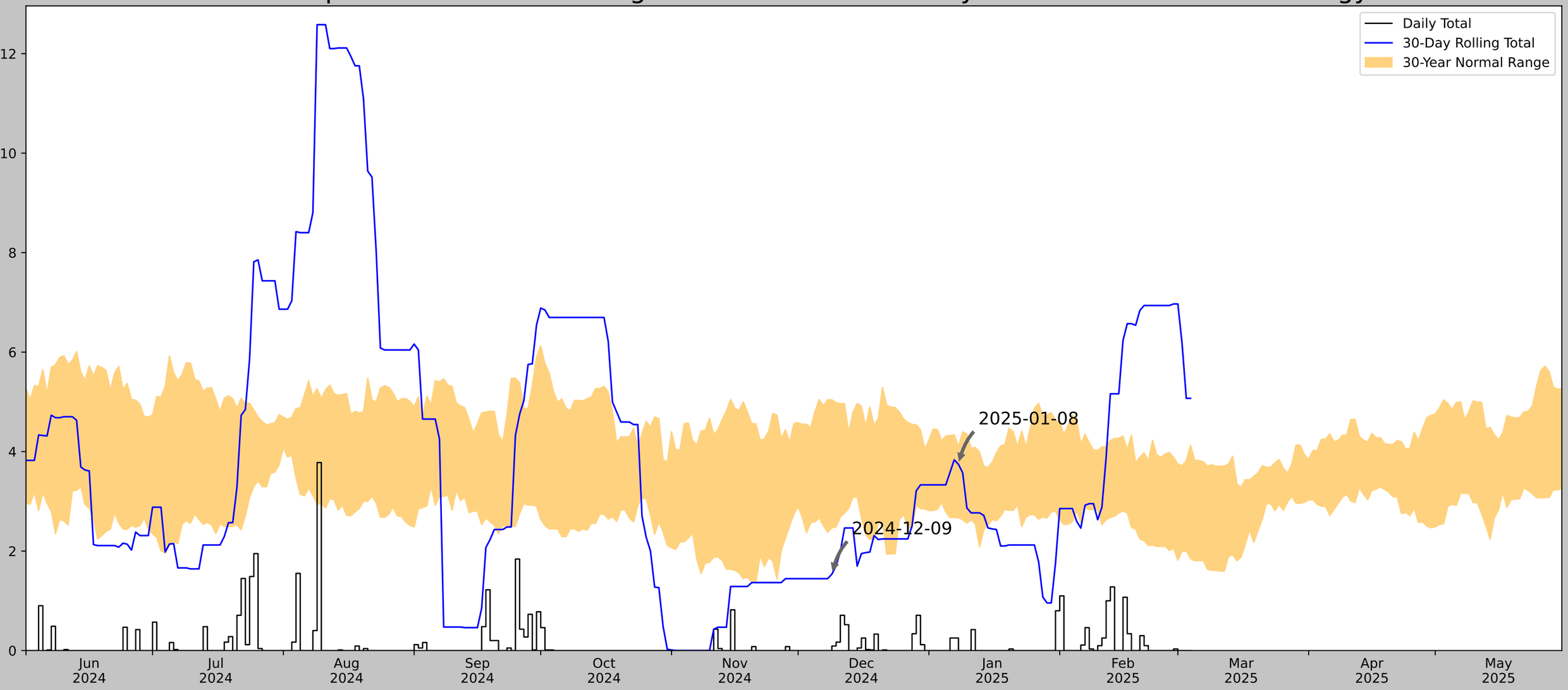
US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	7.891	144.285	4.689	11343	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.711111, -79.465
Observation Date	2025-01-08
Elevation (ft)	811.822
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-01-08	2.667323	4.105118	3.744095	Normal	2	3	6
2024-12-09	2.468504	5.041339	1.535433	Dry	1	2	2
2024-11-09	1.758661	4.434252	0.0	Dry	1	1	1
Result							Drier than Normal - 9

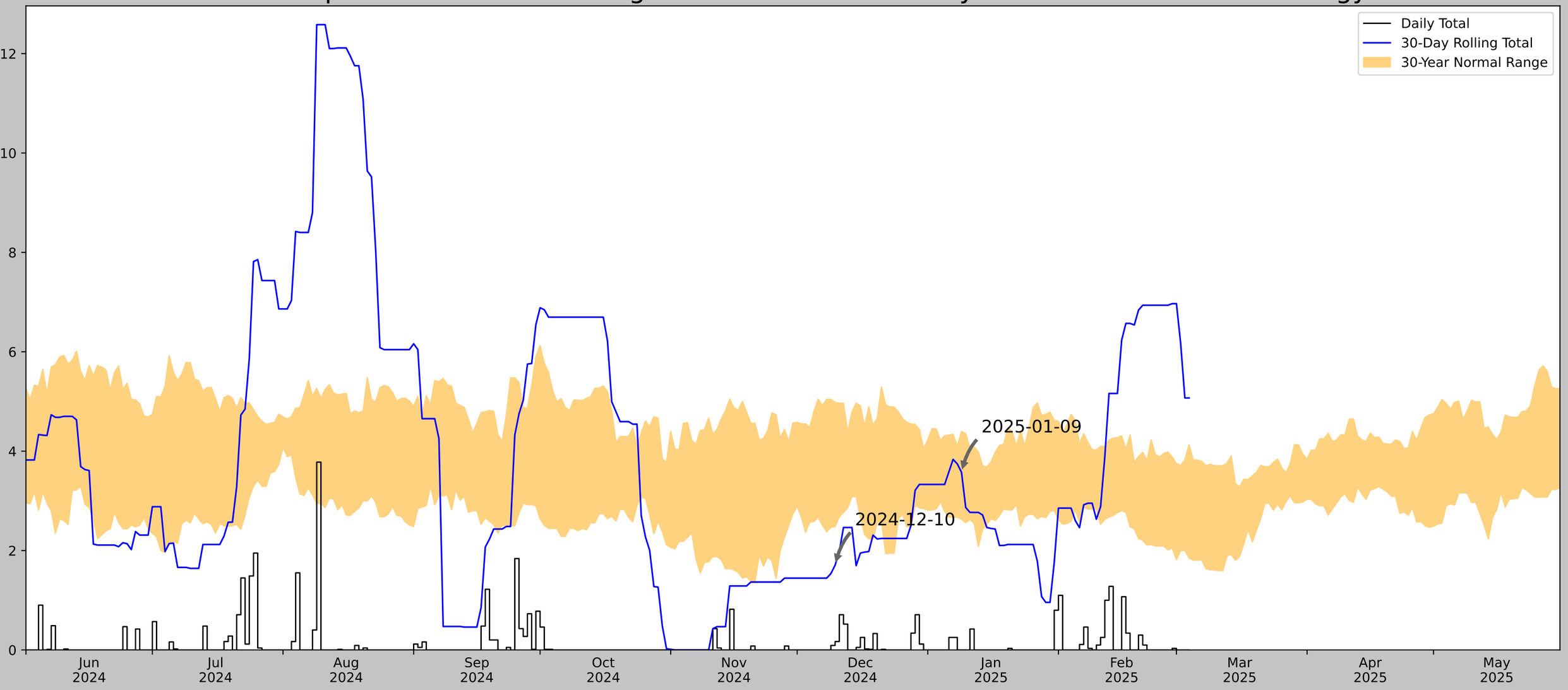
US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.232	164.84	5.061	11343	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.711111, -79.465
Observation Date	2025-01-09
Elevation (ft)	811.822
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-01-09	2.631496	4.396063	3.574803	Normal	2	3	6
2024-12-10	2.482284	4.982284	1.704724	Dry	1	2	2
2024-11-10	1.772835	4.668504	0.0	Dry	1	1	1
Result							Drier than Normal - 9

US Army Corps of Engineers

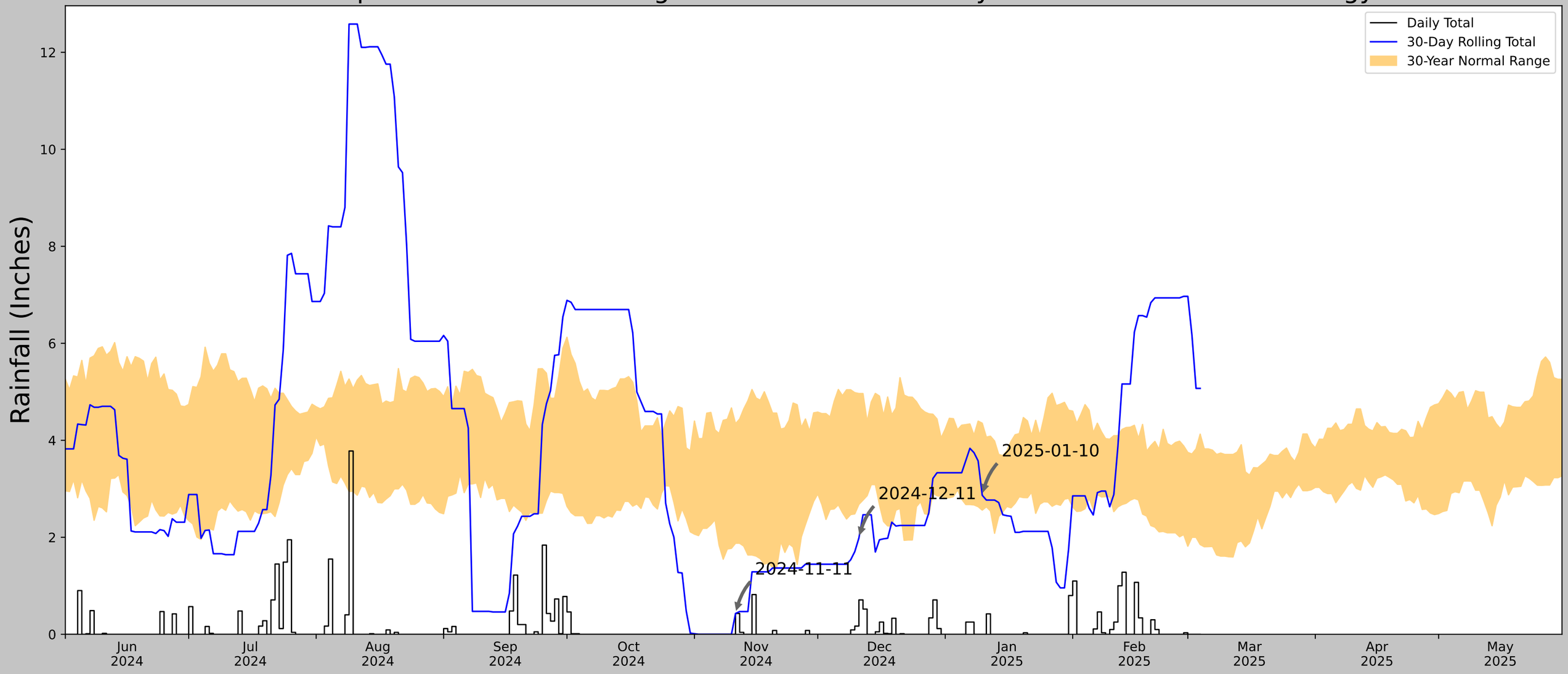
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.232	164.84	5.061	11343	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.711111, -79.465
Observation Date	2025-01-10
Elevation (ft)	811.822
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-01-10	2.560236	4.352756	2.866142	Normal	2	3	6
2024-12-11	2.679134	4.964567	1.984252	Dry	1	2	2
2024-11-11	1.877165	4.341732	0.429134	Dry	1	1	1
Result							Drier than Normal - 9

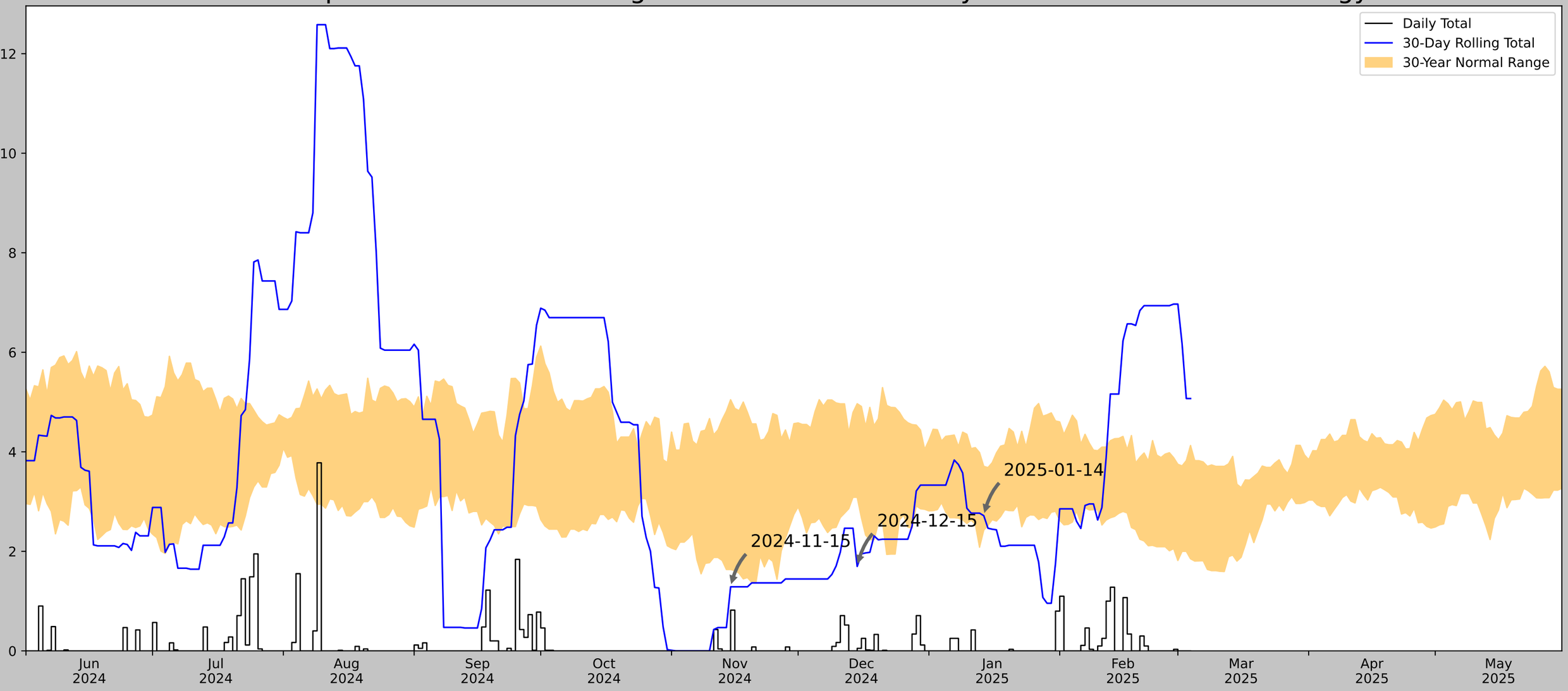
US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.232	164.84	5.061	11343	89
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0



Coordinates	36.711111, -79.465
Observation Date	2025-01-14
Elevation (ft)	811.822
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-01-14	2.427953	3.707874	2.716536	Normal	2	3	6
2024-12-15	3.085827	4.966929	1.69685	Dry	1	2	2
2024-11-15	1.635039	5.047638	1.287402	Dry	1	1	1
Result							Drier than Normal - 9

US Army Corps of Engineers

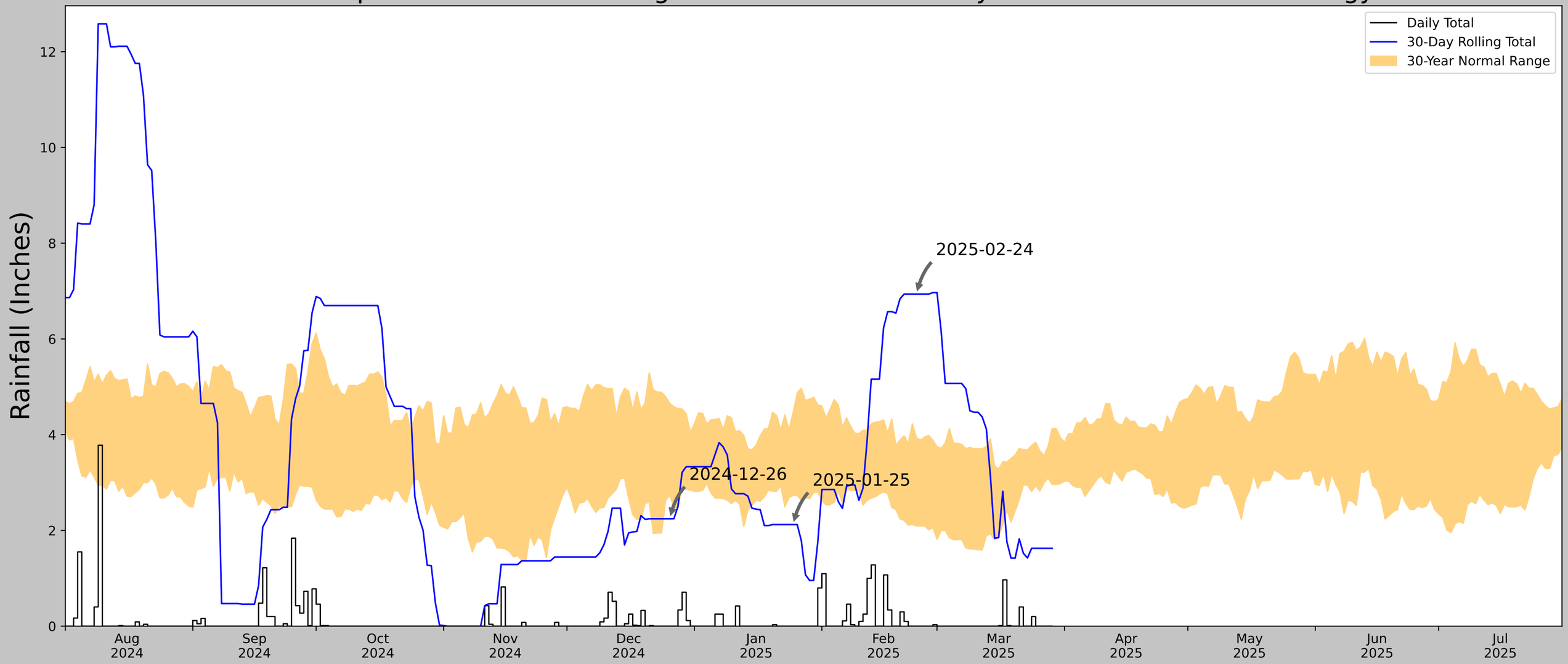
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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	8.232	164.84	5.061	11343	88
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	2
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.653333, -79.521389
Observation Date	2025-02-24
Elevation (ft)	681.224
Drought Index (PDSI)	Incipient wetness
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-02-24	2.09252	3.933858	6.937008	Wet	3	3	9
2025-01-25	2.732677	4.46378	2.122047	Dry	1	2	2
2024-12-26	2.733858	4.656299	2.244095	Dry	1	1	1
Result							Normal Conditions - 12

US Army Corps of Engineers

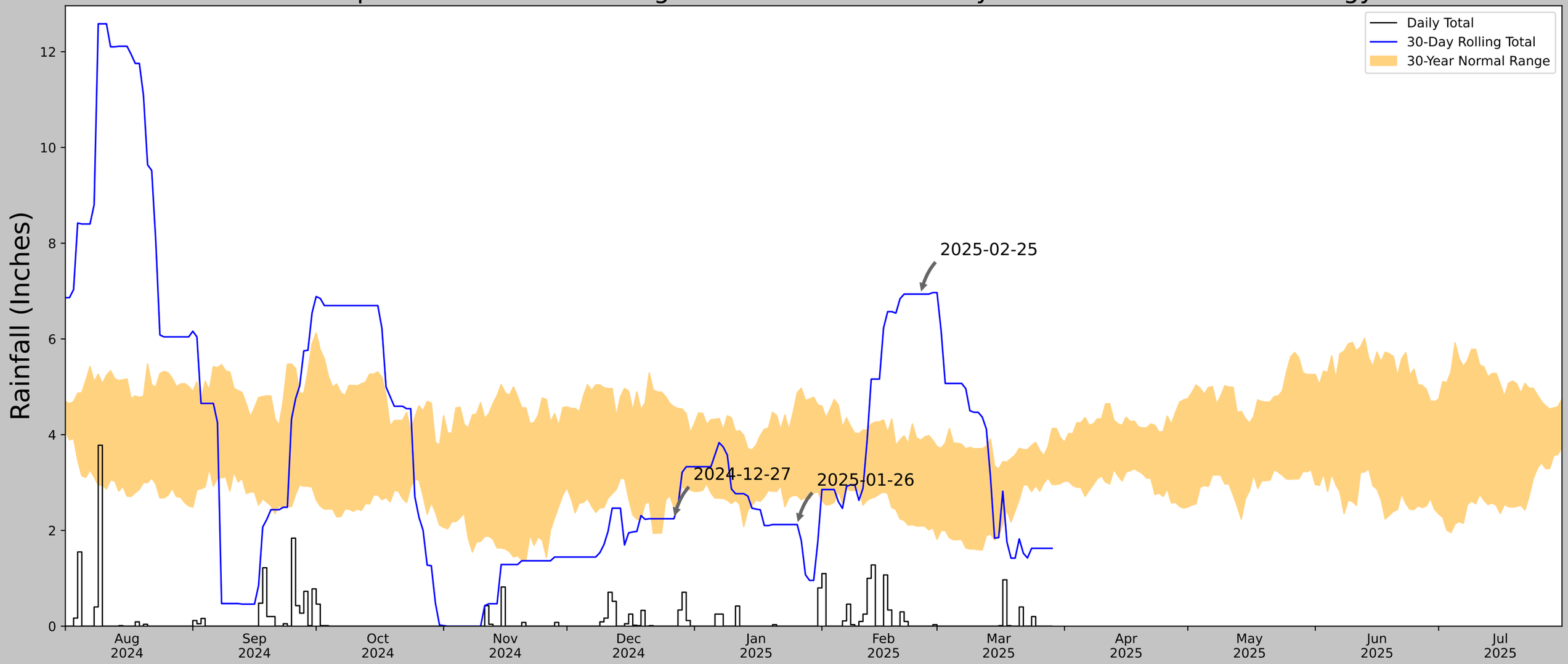
Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by:
U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

ERDC
ENGINEER RESEARCH & DEVELOPMENT CENTER

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	13.171	34.242	6.378	11343	86
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
JAVA 0.9 NNW	36.8497, -79.2316	612.861	10.067	34.121	4.874	0	1
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
GRETNA 0.5 WNW	36.9545, -79.3724	910.105	9.398	263.123	6.702	0	2
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	3	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.653333, -79.521389
Observation Date	2025-02-25
Elevation (ft)	681.224
Drought Index (PDSI)	Incipient wetness
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-02-25	2.09252	3.885433	6.937008	Wet	3	3	9
2025-01-26	2.726772	4.877166	2.122047	Dry	1	2	2
2024-12-27	2.485039	4.584646	2.244095	Dry	1	1	1
Result							Normal Conditions - 12

US Army Corps of Engineers

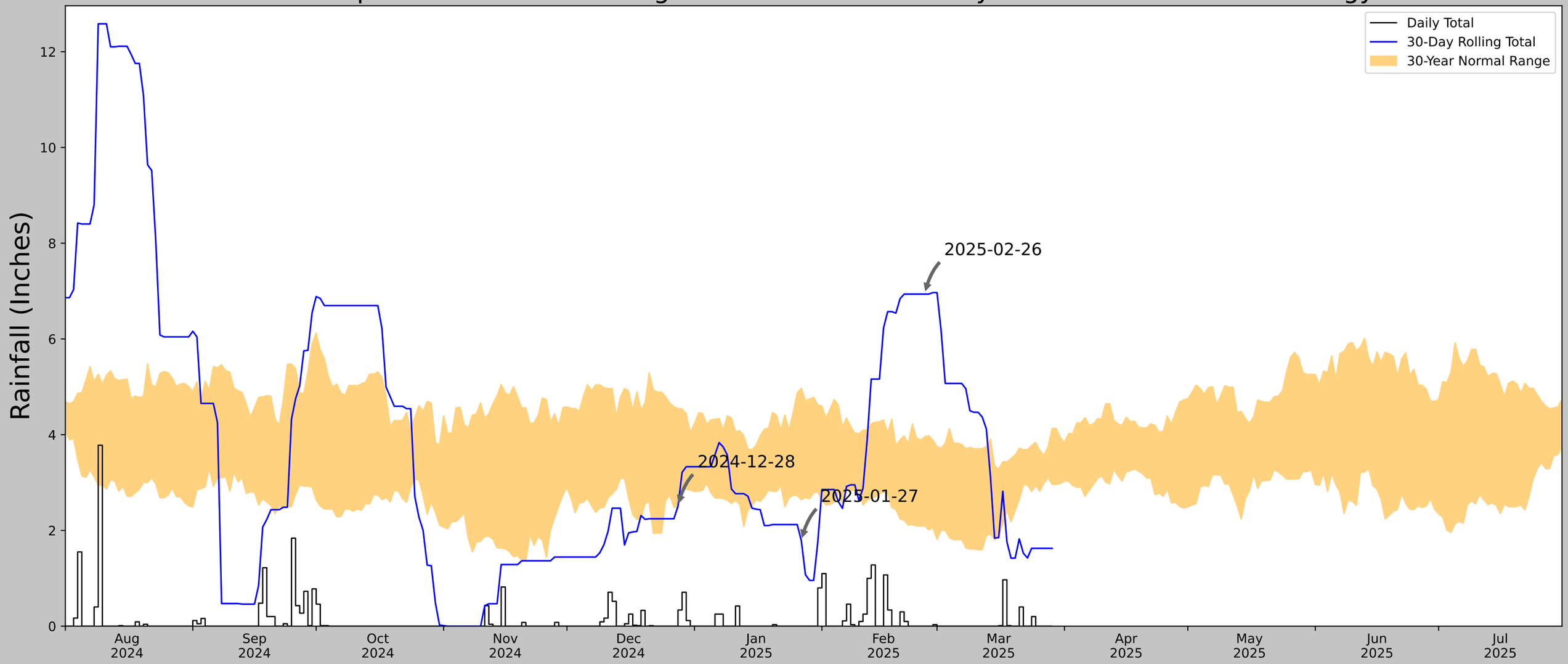
ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	13.171	34.242	6.378	11343	86
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
JAVA 0.9 NNW	36.8497, -79.2316	612.861	10.067	34.121	4.874	0	1
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
GRETNA 0.5 WNW	36.9545, -79.3724	910.105	9.398	263.123	6.702	0	2
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	3	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.653333, -79.521389
Observation Date	2025-02-26
Elevation (ft)	681.224
Drought Index (PDSI)	Incipient wetness
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-02-26	2.09252	3.954331	6.937008	Wet	3	3	9
2025-01-27	2.640158	4.970473	1.783465	Dry	1	2	2
2024-12-28	2.469685	4.547244	2.503937	Normal	2	1	2
Result							Normal Conditions - 13

US Army Corps of Engineers

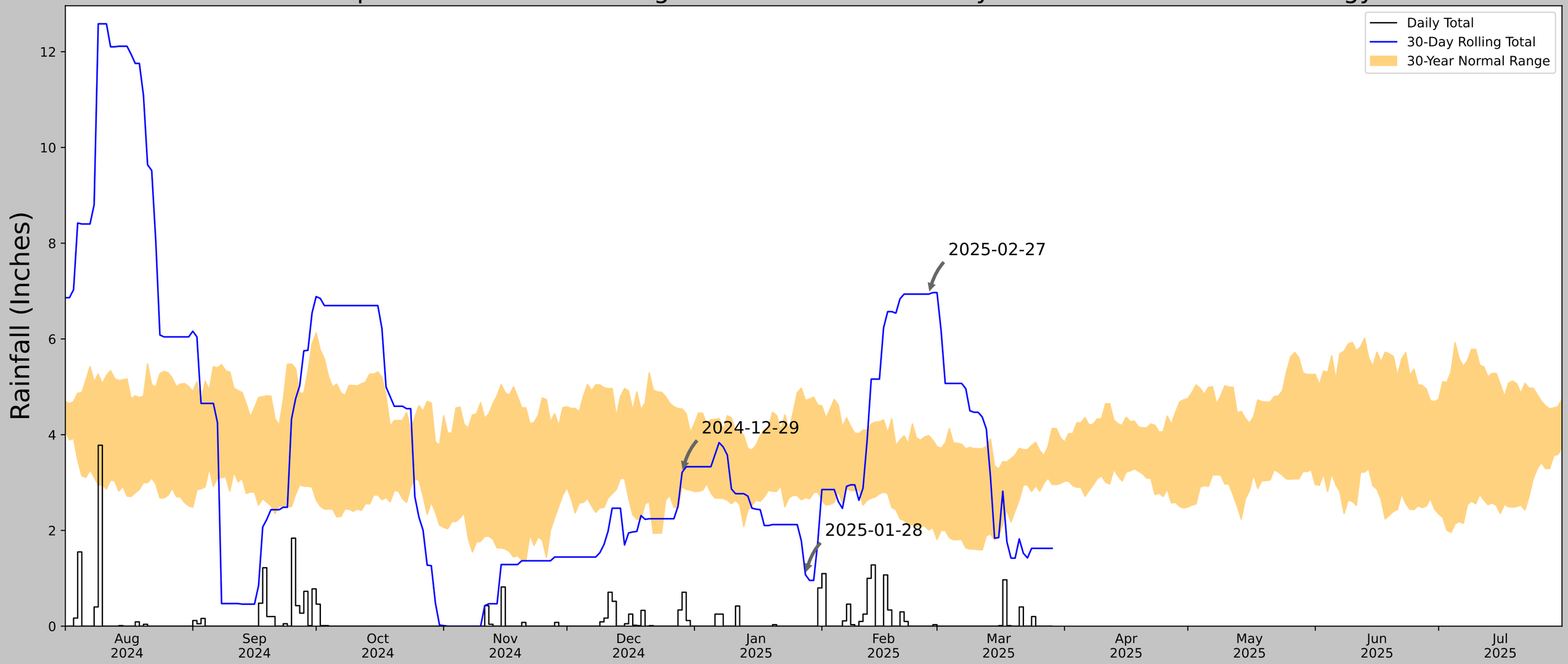
Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by:
U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

ERDC

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	13.171	34.242	6.378	11343	86
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
JAVA 0.9 NNW	36.8497, -79.2316	612.861	10.067	34.121	4.874	0	1
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
GRETNA 0.5 WNW	36.9545, -79.3724	910.105	9.398	263.123	6.702	0	2
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	3	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.653333, -79.521389
Observation Date	2025-02-27
Elevation (ft)	681.224
Drought Index (PDSI)	Incipient wetness
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-02-27	2.011417	3.98189	6.937008	Wet	3	3	9
2025-01-28	2.686614	4.715748	1.074803	Dry	1	2	2
2024-12-29	2.912992	4.537402	3.212599	Normal	2	1	2
Result							Normal Conditions - 13

US Army Corps of Engineers

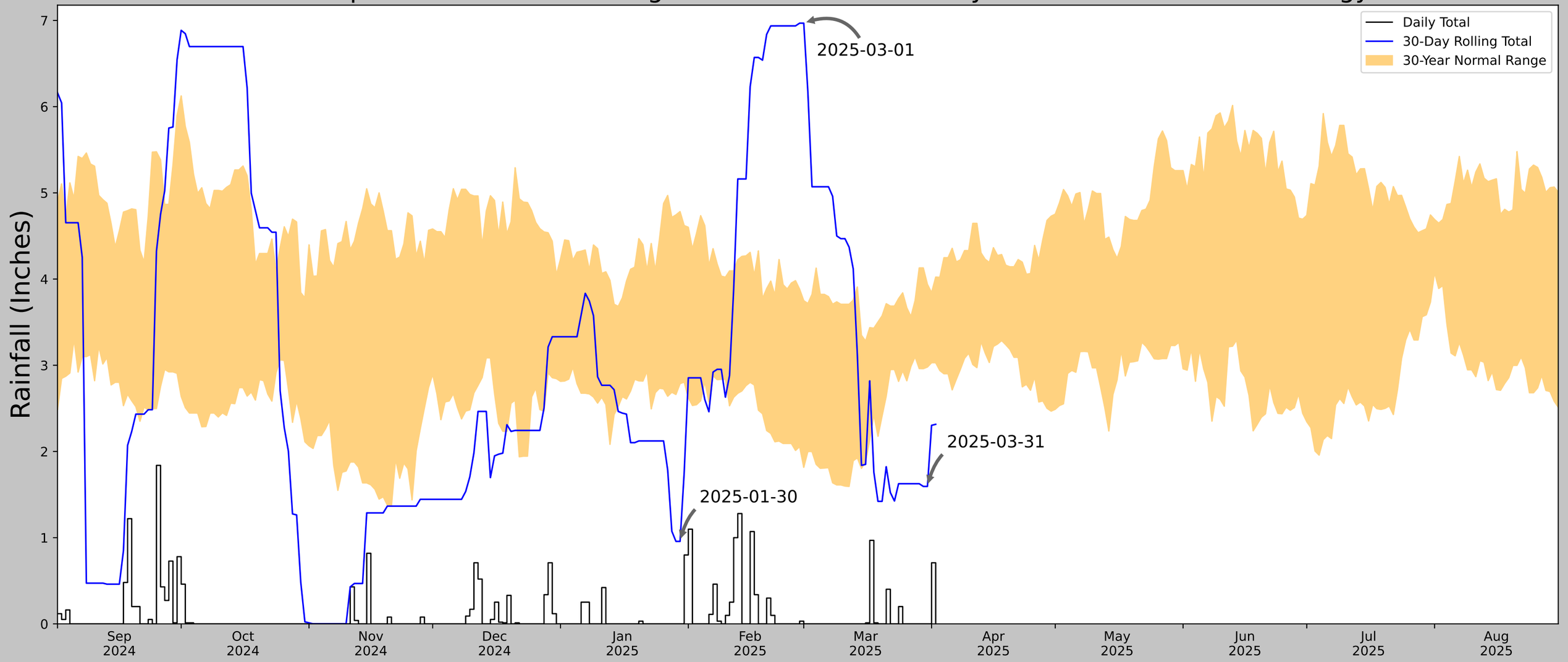
ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	13.171	34.242	6.378	11343	86
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	1
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
JAVA 0.9 NNW	36.8497, -79.2316	612.861	10.067	34.121	4.874	0	1
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
GRETNA 0.5 WNW	36.9545, -79.3724	910.105	9.398	263.123	6.702	0	2
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	3	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.787686, -79.384505
Observation Date	2025-03-31
Elevation (ft)	651.651
Drought Index (PDSI)	Incipient wetness (2025-02)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-03-31	2.979134	3.938977	1.594488	Dry	1	3	3
2025-03-01	1.815354	3.749606	6.968504	Wet	3	2	6
2025-01-30	2.786614	4.783071	0.956693	Dry	1	1	1
Result							Normal Conditions - 10

US Army Corps of Engineers

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Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CHATHAM	36.8219, -79.4103	646.982	2.761	4.669	1.255	11343	82
CHATHAM 4.9 ENE	36.8576, -79.3237	692.913	5.387	45.931	2.672	0	2
CHATHAM 5.9 SW	36.7512, -79.4635	812.992	5.703	166.01	3.513	4	0
JAVA 0.9 NNW	36.8497, -79.2316	612.861	10.067	34.121	4.874	0	1
RINGGOLD 2.6 NNW	36.643, -79.312	676.837	13.506	29.855	6.481	1	0
GRETNA 0.5 WNW	36.9545, -79.3724	910.105	9.398	263.123	6.702	0	3
PITTSVILLE 4.5 NNW	37.0508, -79.4822	683.071	16.306	36.089	7.926	1	0
DANVILLE RGNL AP	36.5728, -79.335	551.837	17.709	95.145	9.654	1	2
ALTAVISTA	37.1125, -79.2753	534.121	21.417	112.861	12.055	1	0
DANVILLE 2 SE	36.5628, -79.3633	392.06	18.09	254.922	12.752	2	0

EXHIBIT 11 - DEQ STREAM FORMS

DEQ STREAM FORMS							
Field Stream ID	**Map Stream ID**	**Cowardin**	**DEQ ID**	**Latitude**	**Longitude**	**Nearest Milepost**	**Sheet #**
E1-L003-VA	L003-1	Ephemeral	DEQ-A	36.5520	-79.6233	1387.8	2
			DEQ-B	36.5522	-79.6231	1387.8	2
			DEQ-C	36.5526	-79.6226	1387.9	2
E1-L008-VA	L008-1	Ephemeral	DEQ-A	36.7189	-79.4570	1402.7	14
			DEQ-B	36.7195	-79.4573	1402.7	14
			DEQ-C	36.7201	-79.4572	1402.8	14
E1-L013-VA	L013-1	Perennial	DEQ-A	36.7349	-79.4410	1404.1	15
			DEQ-B	36.7351	-79.4414	1404.1	15
E1-L018-VA	L018-1	Ephemeral	DEQ-A	36.6326	-79.5440	1395	8
			DEQ-B	36.6328	-79.5441	1395	8
	L018-2	Intermittent	DEQ-C	36.6331	-79.5443	1395	8
E1-L020-VA	L020-1	Ephemeral	DEQ-A	36.6338	-79.5426	1395.1	8
			DEQ-B	36.6338	-79.5428	1395.1	8
E1-L024-VA	L024-1	Intermittent	DEQ-C	36.6377	-79.5373	1395.5	8
	L024-2	Ephemeral	DEQ-A	36.6382	-79.5369	1395.5	8
			DEQ-B	36.6380	-79.5371	1395.5	8
E1-L025-VA	L025-1	Intermittent	DEQ-A	36.6375	-79.5375	1395.5	8
	L025-2	Ephemeral	DEQ-B	36.6375	-79.5375	1395.5	8
E1-L028-VA	L028-1	Ephemeral	DEQ-A	36.5892	-79.5855	1391.2	5
			DEQ-B	36.5891	-79.5856	1391.2	5
			DEQ-C	36.5891	-79.5857	1391.2	5
E1-L029-VA	L029-1	Intermittent	DEQ-A	36.5904	-79.5835	1391.3	5
		Intermittent	DEQ-B	36.5905	-79.5837	1391.3	5
	L029-2	Perennial	DEQ-C	36.5905	-79.5840	1391.3	5
E1-L030-VA	L030-1	Ephemeral	DEQ-A	36.5938	-79.5798	1391.6	5
			DEQ-B	36.5941	-79.5798	1391.6	5
E1-L034-VA	L034-1	Perennial	DEQ-A	36.6068	-79.5683	1392.7	6
			DEQ-B	36.6067	-79.5683	1392.7	6
E1-L035-VA	L035-1	Ephemeral	DEQ-A	36.6083	-79.5673	1392.9	6
			DEQ-B	36.6082	-79.5673	1392.8	6
			DEQ-C	36.6081	-79.5674	1392.8	6
E1-L038-VA	L038-1	Ephemeral	DEQ-A	36.5993	-79.5745	1392.1	6
			DEQ-B	36.5993	-79.5746	1392.1	6
E1-L039-VA	L039-1	Ephemeral	DEQ-A	36.6018	-79.5665	1392.5	6
			DEQ-B	36.6019	-79.5667	1392.5	6
E1-L041-VA	L041-1	Intermittent	DEQ-A	36.5963	-79.5774	1391.8	5
			DEQ-B	36.5961	-79.5775	1391.8	5
E1-L043-VA	L043-1	Ephemeral	DEQ-A	36.6175	-79.5599	M-0402 1393.60	7
E1-L044-VA	L044-1	Intermittent	DEQ-A	36.6236	-79.5531	1394.2	7
			DEQ-B	36.6242	-79.5530	1394.2	7

E1-L045-VA	L045-1	Intermittent	DEQ-A	36.6282	-79.5484	1394.6	8
			DEQ-B	36.6285	-79.5486	1394.6	8
E1-L050-VA	L050-2	Ephemeral	DEQ-A	36.6411	-79.5337	1395.8	9
	L050-3	Intermittent	DEQ-B	36.6414	-79.5337	1395.8	9
			DEQ-C	36.6415	-79.5337	1395.8	9
E1-L051-VA	L051-1	Intermittent	DEQ-A	36.6418	-79.5339	1395.8	9
			DEQ-B	36.6419	-79.5339	1395.8	9
E1-L052-VA	L052-1	Perennial	DEQ-A	36.6426	-79.5320	1395.9	9
		Perennial	DEQ-B	36.6423	-79.5322	1395.9	9
E1-L053-VA	L053-1	Intermittent	DEQ-A	36.6427	-79.5320	1395.9	9
			DEQ-B	36.6428	-79.5319	1395.9	9
E1-L054-VA	L054-1	Intermittent	DEQ-A	36.6433	-79.5315	1396	9
			DEQ-B	36.6431	-79.5316	1396	9
			DEQ-C	36.6429	-79.5319	1396	9
E2-L055-VA	L055-1	Ephemeral	DEQ-A	36.7172	-79.4597	1402.5	14
			DEQ-B	36.7174	-79.4597	1402.5	14
			DEQ-C	36.7175	-79.4599	1402.5	14
E1-L056-VA	L056-1	Ephemeral	DEQ-A	36.6428	-79.5320	1395.9	9
			DEQ-B	36.6428	-79.5320	1395.9	9
E2-L063-VA	L063-1	Ephemeral	DEQ-A	36.6936	-79.4830	1400.4	12
			DEQ-B	36.6936	-79.4831	1400.4	12
E2-L064-VA	L064-1	Ephemeral	DEQ-A	36.6934	-79.4831	1400.4	12
			DEQ-B	36.6935	-79.4832	1400.4	12
E2-L065-VA	L065-1	Ephemeral	DEQ-A	36.6935	-79.4829	1400.4	12
			DEQ-B	36.6935	-79.4831	1400.4	12
E2-L068-VA	L068-1	Ephemeral	DEQ-A	36.5546	-79.6208	1388	3
			DEQ-B	36.5547	-79.6209	1388	3
E2-L071-VA	L071-1	Ephemeral	DEQ-A	36.7669	-79.4082	1407	17
			DEQ-B	36.7670	-79.4080	1407	17
E2-L073-VA	L073-1	Ephemeral	DEQ-A	36.7685	-79.4085	1407.1	17
			DEQ-B	36.7687	-79.4086	1407.1	17
E2-L074-VA	L074-1	Ephemeral	DEQ-A	36.7697	-79.4075	1407.2	18
			DEQ-B	36.7696	-79.4078	1407.2	18
E2-L076-VA	L076-1	Intermittent	DEQ-A	36.7605	-79.4170	1406.4	17
			DEQ-B	36.7605	-79.4170	1406.4	17
			DEQ-C	36.7606	-79.4169	1406.4	17
E1-L077-VA	L077-1	Ephemeral	DEQ-A	36.7754	-79.3985	M-0307 1407.70	18
			DEQ-B	36.7753	-79.3985	M-0307 1407.70	18
			DEQ-C	36.7753	-79.3986	M-0307 1407.70	18
E2-L078-VA	L078-1	Ephemeral	DEQ-A	36.7573	-79.4199	1406.1	17
			DEQ-B	36.7571	-79.4198	1406.1	17
E1-L079-VA	L079-1	Ephemeral	DEQ-A	36.7574	-79.4200	1406.1	17
			DEQ-B	36.7576	-79.4202	1406.1	17

E1-L081-VA	L081-1	Perennial	DEQ-A	36.7534	-79.4232	1405.8	16
			DEQ-B	36.7534	-79.4232	1405.8	16
E1-L083-VA	L083-1	Ephemeral	DEQ-A	36.7528	-79.4246	1405.7	16
			DEQ-B	36.7531	-79.4246	1405.7	16
			DEQ-C	36.7532	-79.4245	1405.7	16
E1-L084-VA	L084-1	Perennial	DEQ-A	36.8282	-79.3430	1412.7	23
			DEQ-B	36.8282	-79.3433	1412.7	23
E1-L085-VA	L085-2	Intermittent	DEQ-A	36.8290	-79.3421	1412.8	23
			DEQ-B	36.8292	-79.3424	1412.8	23
E1-L086-VA	L086-1	Perennial	DEQ-A	36.8278	-79.3411	1412.8	23
			DEQ-B	36.8281	-79.3415	1412.8	23
			DEQ-C	36.8281	-79.3420	1412.8	23
E1-L087-VA	L087-1	Intermittent	DEQ-A	36.8281	-79.3413	1412.8	23
			DEQ-B	36.8281	-79.3414	1412.8	23
E1-L088-VA	L088-1	Intermittent	DEQ-A	36.7886	-79.3877	M-0437 1409.60	20
			DEQ-B	36.7887	-79.3870	M-0437 1409.60	20
E3-L089-VA	L089-1	Ephemeral	DEQ-A	36.6681	-79.5081	1398.2	10
			DEQ-B	36.6680	-79.5084	1398.2	10
E3-L091-VA	L091-1	Intermittent	DEQ-A	36.6684	-79.5080	1398.2	10
			DEQ-B	36.6684	-79.5079	1398.2	10
E1-L092-VA	L092-1	Intermittent	DEQ-A	36.7890	-79.3861	M-0437 1409.60	20
			DEQ-B	36.7887	-79.3860	M-0437 1409.60	20
E1-L093-VA	L093-1	Intermittent	DEQ-A	36.7888	-79.3861	M-0437 1409.60	20
			DEQ-B	36.7888	-79.3861	M-0437 1409.60	20
E1-L094-VA	L094-1	Intermittent	DEQ-A	36.7893	-79.3860	M-0437 1409.60	20
			DEQ-B	36.7892	-79.3862	M-0437 1409.60	20
E3-L097-VA	L097-1	Ephemeral	DEQ-A	36.6739	-79.5025	1398.7	11
E2-L102-VA	L102-1	Ephemeral	DEQ-A	36.7777	-79.3871	M-0307 1408.70	19
			DEQ-B	36.7778	-79.3869	M-0307 1408.70	19
E1-L105-VA	L105-1	Ephemeral	DEQ-A	36.7934	-79.3826	1409.4	20
			DEQ-B	36.7933	-79.3823	1409.4	20
E1-L112-VA	L112-1	Ephemeral	DEQ-A	36.8086	-79.3640	1410.9	21
			DEQ-B	36.8084	-79.3639	1410.9	21
E1-L117-VA	L117-1	Ephemeral	DEQ-A	36.8157	-79.3562	1411.5	22
E1-L118-VA	L118-1	Ephemeral	DEQ-A	36.8162	-79.3539	M-0402 1411.70	22
			DEQ-B	36.8161	-79.3536	M-0402 1411.70	22
E1-L120-VA	L120-1	Intermittent	DEQ-A	36.8211	-79.3493	M-0402 1412.10	22
			DEQ-B	36.8211	-79.3493	M-0402 1412.10	22
E1-L122-VA	L122-1	Intermittent	DEQ-A	36.8242	-79.3472	M-0312 1412.40	22, 23
			DEQ-B	36.8240	-79.3472	M-0312 1412.40	22, 23
E2-L124-VA	L124-1	Intermittent	DEQ-A	36.5566	-79.6179	M-0402 1388.20	3
			DEQ-B	36.5565	-79.6179	M-0402 1388.20	3

E1-L125-VA	L125-1	Perennial	DEQ-A	36.8246	-79.3465	M-0312 1412.40	23
			DEQ-B	36.8245	-79.3466	M-0312 1412.40	23
			DEQ-C	36.8244	-79.3467	M-0312 1412.40	23
E2-L128-VA	L128-1	Ephemeral	DEQ-A	36.5858	-79.5886	1390.9	5
			DEQ-B	36.5860	-79.5889	1390.9	5
E2-L129-VA	L129-1	Intermittent	DEQ-A	36.5856	-79.5882	1390.9	5
			DEQ-B	36.5856	-79.5881	1390.9	5
E2-L130-VA	L130-1	Intermittent	DEQ-A	36.5565	-79.6181	M-0402 1388.20	3
			DEQ-B	36.5563	-79.6180	M-0402 1388.20	3
E2-L133-VA	L133-1	Intermittent	DEQ-A	36.5573	-79.6178	M-0402 1388.30	3
			DEQ-B	36.5578	-79.6177	M-0402 1388.30	3
E3-L134-VA	L134-1	Intermittent	DEQ-A	36.8361	-79.3337	1413.29	23
			DEQ-B	36.8363	-79.3336	1413.29	23
E2-L136-VA	L136-1	Ephemeral	DEQ-A	36.5578	-79.6178	M-0402 1388.30	3
			DEQ-B	36.5577	-79.6177	M-0402 1388.30	3
E1-L137-VA	L137-2	Intermittent	DEQ-A	36.5574	-79.6165	M-0402 1388.30	3
			DEQ-B	36.5572	-79.6165	M-0402 1388.30	3
E3-L138-VA	L138-1	Ephemeral	DEQ-A	36.8354	-79.3343	1413.29	23
			DEQ-B	36.8358	-79.3340	1413.29	23
E1-L139-VA	L139-1	Perennial	DEQ-A	36.5659	-79.6080	1389.1	3
			DEQ-B	36.5658	-79.6075	1389.1	3
E1-L141-VA	L141-1	Ephemeral	DEQ-A	36.5656	-79.6080	1389.1	3
			DEQ-B	36.5656	-79.6079	1389.1	3
			DEQ-C	36.5657	-79.6077	1389.1	3
E1-L145-VA	L145-1	Ephemeral	DEQ-A	36.7577	-79.4203	1406.1	17
E2-L148-VA	L148-1	Ephemeral	DEQ-A	36.5747	-79.5992	1389.9	4
			DEQ-B	36.5741	-79.5993	1389.8	4
E2-L149-VA	L149-1	Ephemeral	DEQ-A	36.5737	-79.6002	1389.8	4
			DEQ-B	36.5737	-79.5999	1389.8	4
			DEQ-C	36.5737	-79.5997	1389.8	4
E2-L150-VA	L150-1	Intermittent	DEQ-A	36.5766	-79.5973	1390.1	4
			DEQ-B	36.5764	-79.5972	1390	4
E2-L151-VA	L151-1	Ephemeral	DEQ-A	36.5775	-79.5964	1390.1	4
			DEQ-B	36.5774	-79.5965	1390.1	4
E1-L152-VA	L152-1	Ephemeral	DEQ-A	36.8342	-79.3329	1413.29	23
			DEQ-B	36.8340	-79.3329	1413.29	23
			DEQ-C	36.8338	-79.3330	1413.29	23
E1-L154-VA	L154-1	Intermittent	DEQ-A	36.8344	-79.3329	1413.29	23
			DEQ-B	36.8349	-79.3328	1413.29	23
E1-L155-VA	L155-1	Intermittent	DEQ-A	36.8343	-79.3329	1413.29	23
		Intermittent	DEQ-B	36.8345	-79.3329	1413.29	23
E1-L156-VA	L156-1	Ephemeral	DEQ-A	36.8346	-79.3329	1413.29	23
			DEQ-B	36.8347	-79.3329	1413.29	23
			DEQ-C	36.8347	-79.3329	1413.29	23

E2-L157-VA	L157-1	Ephemeral	DEQ-A	36.8358	-79.3352	1413.29	23
			DEQ-B	36.8361	-79.3350	1413.29	23
			DEQ-C	36.8364	-79.3349	1413.29	23
E2-L158-VA	L158-1	Intermittent	DEQ-A	36.8366	-79.3349	1413.29	23
			DEQ-B	36.8367	-79.3348	1413.29	23
E2-L160-VA	L160-1	Ephemeral	DEQ-A	36.8363	-79.3362	1413.29	23
			DEQ-B	36.8366	-79.3361	1413.29	23
E3-L161-VA	L161-1	Ephemeral	DEQ-A	36.8346	-79.3378	1413.29	23
			DEQ-B	36.8349	-79.3378	1413.29	23
E1-L163-VA	L163-1	Intermittent	DEQ-A	36.8311	-79.3389	1413	23
			DEQ-B	36.8307	-79.3383	1413	23
E1-L164-VA	L164-2	Intermittent	DEQ-A	36.8311	-79.3391	1413	23
			DEQ-B	36.8313	-79.3395	1413	23
E1-L165-VA	L165-1	Ephemeral	DEQ-A	36.8316	-79.3400	1413	23
			DEQ-B	36.8316	-79.3400	1413	23
			DEQ-C	36.8315	-79.3401	1413	23
E1-L166-VA	L166-1	Intermittent	DEQ-A	36.8304	-79.3418	1412.9	23
			DEQ-B	36.8304	-79.3421	1412.9	23
			DEQ-C	36.8303	-79.3423	1412.9	23
E1-L167-VA	L167-1	Intermittent	DEQ-A	36.7722	-79.3959	M-0307 1407.90	19
			DEQ-B	36.7723	-79.3959	M-0307 1407.90	19
E1-L169-VA	L169-1	Ephemeral	DEQ-A	36.7847	-79.3803	M-0437 1409.20	20
			DEQ-B	36.7847	-79.3802	M-0437 1409.20	20
E1-L171-VA	L171-1	Ephemeral	DEQ-A	36.7431	-79.4355	M-0388 1404.80	16
			DEQ-B	36.7429	-79.4354	M-0388 1404.80	16
	L171-2	Perennial	DEQ-C	36.7427	-79.4352	M-0388 1404.80	16
			DEQ-D	36.7425	-79.4350	M-0388 1404.80	16
E1-L173-VA	L173-1	Ephemeral	DEQ-A	36.7428	-79.4355	M-0388 1404.80	16
			DEQ-B	36.7427	-79.4354	M-0388 1404.80	16
	L173-2	Perennial	DEQ-C	36.7425	-79.4353	M-0388 1404.80	16
			DEQ-D	36.7425	-79.4351	M-0388 1404.80	16
E1-L176-VA	L176-1	Ephemeral	DEQ-A	36.7882	-79.3822	M-0437 1409.50	20
			DEQ-B	36.7881	-79.3822	M-0437 1409.40	20
E1-L179-VA	L179-1	Intermittent	DEQ-A	36.7877	-79.3765	1409.4	20
			DEQ-B	36.7875	-79.3765	M-0437 1409.30	20

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: March 21, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Kyle Zinn, Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Swale

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.5519580657609 Long: -79.6233299821183 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L003-A; Attachment I; Sheet 2		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓Soil Survey	
✓Climatic data	✓Topographic Maps	
✓Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: March 21, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Kyle Zinn, Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Swale

Local relief (concave, convex, none): Concave Slope (%): 6%

Lat: 36.5522367812265 Long: -79.6231131547518 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L003-B; Attachment I; Sheet 2		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓Soil Survey	
✓Climatic data	✓Topographic Maps	
✓Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☑ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: March 21, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.5525937556314 Long: -79.6225588300431 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L003-C; Attachment I; Sheet 2		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓Soil Survey	
✓Climatic data	✓ Topographic Maps	
✓Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: March 28, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.7189115661497 Long: -79.4569752042442 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L008-A; Attachment I; Sheet 14		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: March 28, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.7194854932265 Long: -79.4572549116836 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L008-B; Attachment I; Sheet 14		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓Topographic Maps	
✓Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ Channel Bank Features

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☑ Channel Bars

- ☐ Shelving (on bar)
- ☑ Unvegetated (on bar)
- ☑ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: March 28, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.720099 Long: -79.457208 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L008-C; Attachment I; Sheet 14		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 3, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Floodplain

Local relief (concave, convex, none): Concave Slope (%): 0%

Lat: 36.7349456153141 Long: -79.4409564715327 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified: ☐ **Yes** ☑ **No** L013-A; Attachment I; Sheet 15
Stream bed present:	☐ **Yes**	☑ **No**	
Stream bank present:	☐ **Yes**	☑ **No**	
OHWM present:	☐ **Yes**	☑ **No**	

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads
☐ Regional Curve	✓ Soil Survey	
✓Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 3, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Floodplain

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.735076189038 Long: -79.4413685218378 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L013-B; Attachment I; Sheet 15		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads
☐ Regional Curve	✓ Soil Survey	
✓Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☑ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☑ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in field. This stream typically has annual flow, has groundwater influence, and flows during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☑ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 8, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.632609462037 Long: -79.5440263736311 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L018-A; Attachment I; Sheet 8		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 8, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.6327837314637 Long: -79.544120238325 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L018-B; Attachment I; Sheet 8		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☑ **Channel Bars**

- ☐ Shelving (on bar)
- ☑ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 8, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.6330791281 Long: -79.5442515719999 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.

Stream bed present: ☑ **Yes** ☐ **No**

Stream bank present: ☑ **Yes** ☐ **No**

OHWM present: ☑ **Yes** ☐ **No**

Stream Identified: ☑ **Yes** ☐ **No**

L018-C; Attachment I; Sheet 8

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**

☐ Gage data
✓ LIDAR
☐ Regional Curve
✓ Soil Survey
✓ Climatic data
✓ Topographic Maps
✓ Aerial photos
☐ Other

Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**

No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☑ **Channel Bars**

- ☐ Shelving (on bar)
- ☑ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☑ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☑ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☑ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: City of Danville Date: June 13, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.6337977324739 Long: -79.5426437219199 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L020-A; Attachment I; Sheet 8		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: City of Danville Date: June 13, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 5%

Lat: 36.633835502783 Long: -79.5427801202192 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.

Stream bed present:	☑ **Yes**	☐ **No**
Stream bank present:	☑ **Yes**	☐ **No**
OHWM present:	☑ **Yes**	☐ **No**

Stream Identified: ☑ **Yes** ☐ **No**

L020-B; Attachment I; Sheet 8

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**

☐ Gage data	☑ LIDAR
☐ Regional Curve	☑ Soil Survey
☑ Climatic data	☑ Topographic Maps
☑ Aerial photos	☐ Other

Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**

No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.6382384336788 Long: -79.5369258105907 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L024-A; Attachment I; Sheet 8		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.6379533458992 Long: -79.5371356467677 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L024-B; Attachment I; Sheet 8		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.6377222039366 Long: -79.5373167354951 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L024-C; Attachment I; Sheet 8		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☑ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☑ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 5%

Lat: 36.6375475443882 Long: -79.5374662650685 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L025-A; Attachment I; Sheet 8		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

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- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.6374810096344 Long: -79.5375052987492 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L025-B; Attachment I; Sheet 8		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
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- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
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☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: City of Danville Date: April 15, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith, Kyle Zinn, Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.5892305705444 Long: -79.5855229047401 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L028-A; Attachment I; Sheet 5		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 15, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith, Kyle Zinn, Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.5891218985326 Long: -79.5856240418973 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L028-B; Attachment I; Sheet 5		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: City of Danville Date: April 15, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith, Kyle Zinn, Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.5890540470842 Long: -79.5857440923648 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L028-C; Attachment I; Sheet 5		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 15, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.5904172210623 Long: -79.5835398419321 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L029-A; Attachment I; Sheet 5		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 15, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.5904842583678 Long: -79.5837419301176 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L029-B; Attachment I; Sheet 5		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 15, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.5905385430912 Long: -79.5839949892021 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L029-C; Attachment I; Sheet 5		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in field. This stream typically has annual flow, has groundwater influence, and flows during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☑ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 15, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.5938144340698 Long: -79.5798062192188 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L030-A; Attachment I; Sheet 5		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 15, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.5940712334047 Long: -79.5797712500433 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L030-B; Attachment I; Sheet 5		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 16, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.6068397667736 Long: -79.5683354192534 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified: ☐ **Yes** ☑ **No** L034-A; Attachment I; Sheet 6
Stream bed present:	☐ **Yes**	☑ **No**	
Stream bank present:	☐ **Yes**	☑ **No**	
OHWM present:	☐ **Yes**	☑ **No**	

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 16, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Swale

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.6067383367 Long: -79.568300133137 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L034-B; Attachment I; Sheet 6		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☑ **Channel Bars**

- ☐ Shelving (on bar)
- ☑ Unvegetated (on bar)
- ☑ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☑ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in field. This stream typically has annual flow, has groundwater influence, and flows during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☑ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 16, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.6082943656938 Long: -79.5672638201147 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L035-A; Attachment I; Sheet 6		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 16, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.6082065761963 Long: -79.567325434775 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L035-B; Attachment I; Sheet 6		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 17, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.60809878099 Long: -79.5673828643346 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.

Stream bed present:	☐ **Yes**	☑ **No**
Stream bank present:	☐ **Yes**	☑ **No**
OHWM present:	☐ **Yes**	☑ **No**

Stream Identified: ☐ **Yes** ☑ **No**

L035-C; Attachment I; Sheet 6

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**

☐ Gage data
☐ Regional Curve
✓ Climatic data
✓ Aerial photos
✓ LIDAR
✓ Soil Survey
✓ Topographic Maps
☐ Other

Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**

No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 17, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.5993044584061 Long: -79.5745404001467 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L038-A; Attachment I; Sheet 6		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 17, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.5992813395809 Long: -79.5745861754899 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L038-B; Attachment I; Sheet 6		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 17, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 5%

Lat: 36.6018105600271 Long: -79.5665414351318 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L039-A; Attachment I; Sheet 6		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 17, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 5%

Lat: 36.6018892575584 Long: -79.5666576468147 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L039-B; Attachment I; Sheet 6		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 18, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Floodplain

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.5962849692858 Long: -79.5773977989239 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified: ☐ **Yes** ☑ **No** L041-A; Attachment I; Sheet 5
Stream bed present:	☐ **Yes**	☑ **No**	
Stream bank present:	☐ **Yes**	☑ **No**	
OHWM present:	☐ **Yes**	☑ **No**	

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 18, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Floodplain

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.5961465772111 Long: -79.5774515792163 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L041-B; Attachment I; Sheet 5		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☑ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☑ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☑ Sediment transition or sorting (on bar)
- ☑ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☑ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☑ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 22, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.6175425544116 Long: -79.5599304390177 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L043-A; Attachment I; Sheet 7		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☑ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 23, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.6235780412211 Long: -79.5530819567704 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified: ☐ **Yes** ☑ **No** L044-A; Attachment I; Sheet 7
Stream bed present:	☐ **Yes**	☑ **No**	
Stream bank present:	☐ **Yes**	☑ **No**	
OHWM present:	☐ **Yes**	☑ **No**	

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 23, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 5%

Lat: 36.6242403250531 Long: -79.5530387652284 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L044-B; Attachment I; Sheet 7		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☑ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 23, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.6282313248808 Long: -79.5484369247314 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L045-A; Attachment I; Sheet 8		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: City of Danville Date: April 23, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.6284797840917 Long: -79.5485742674471 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L045-B; Attachment I; Sheet 8		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☑ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 29, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.641087998474 Long: -79.5337497097113 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L050-A; Attachment I; Sheet 9		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 29, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.6413565986019 Long: -79.5336822407399 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L050-B; Attachment I; Sheet 9		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 29, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.641533143334 Long: -79.5336976091959 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L050-C; Attachment I; Sheet 9		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 29, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.6418453404957 Long: -79.5338629295526 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L051-A; Attachment I; Sheet 9		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 29, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.6419157128682 Long: -79.5339131488882 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L051-B; Attachment I; Sheet 9		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☑ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☑ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 30, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 0%

Lat: 36.6425697189743 Long: -79.5319697129168 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L052-A; Attachment I; Sheet 9		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 30, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.6423205823547 Long: -79.5321560389971 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L052-B; Attachment I; Sheet 9		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☑ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☑ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in field. This stream typically has annual flow, has groundwater influence, and flows during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☑ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 30, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.642717 Long: -79.53201 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L053-A; Attachment I; Sheet 9		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 30, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.6427677181418 Long: -79.5319271679232 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L053-B; Attachment I; Sheet 9		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☑ **Channel Bars**

- ☐ Shelving (on bar)
- ☑ Unvegetated (on bar)
- ☑ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 30, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.6433470363394 Long: -79.531475775408 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L054-A; Attachment I; Sheet 9		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 30, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.6431389690783 Long: -79.5316386099341 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L054-B; Attachment I; Sheet 9		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 30, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.6429277460871 Long: -79.5318734247162 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L054-C; Attachment I; Sheet 9		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 30, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.7172074496157 Long: -79.459689826021 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L055-A; Attachment I; Sheet 14		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 30, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese, Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.717385915 Long: -79.4598222366667 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L055-B; Attachment I; Sheet 14		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 30, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.7174632817107 Long: -79.4598657750633 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L055-C; Attachment I; Sheet 14		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 30, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.6428210186989 Long: -79.5320420358756 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L056-A; Attachment I; Sheet 9		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: April 30, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Michaela Moss

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.6427741258123 Long: -79.5320249196383 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L056-B; Attachment I; Sheet 9		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 3, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.6935535666862 Long: -79.4829539911917 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L063-A; Attachment I; Sheet 12		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 3, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.6935739634068 Long: -79.4830921068539 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L063-B; Attachment I; Sheet 12		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 3, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.6934419423133 Long: -79.4830904354098 Datum: NAD-83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L064-A; Attachment I; Sheet 12		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 3, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.6934746194689 Long: -79.4831743512265 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L064-B; Attachment I; Sheet 12		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 3, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.6935171192052 Long: -79.4829426900743 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L065-A; Attachment I; Sheet 12		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 3, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.6935060833478 Long: -79.4830986369493 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L065-B; Attachment I; Sheet 12		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

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- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 4, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.5545886771689 Long: -79.6207642896243 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L068-A; Attachment I; Sheet 3		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
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- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

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- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 4, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.5546773984348 Long: -79.6209028729807 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L068-B; Attachment I; Sheet 3		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 7, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.7669394210872 Long: -79.4081625151571 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L071-A; Attachment I; Sheet 17		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**

☐ Gage data
☐ Regional Curve
✓ Climatic data
✓ Aerial photos
✓ LIDAR
✓ Soil Survey
✓ Topographic Maps
☐ Other

Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**

No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 7, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 5%

Lat: 36.766950943339 Long: -79.4080270939141 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L071-B; Attachment I; Sheet 17		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 8, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.5546773984348 Long: -79.6209028729807 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L073-A: Attachment I; Sheet 17		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 8, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.7687056591654 Long: -79.408620735347 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L073-B; Attachment I; Sheet 17		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 8, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.7696504066631 Long: -79.4074990427092 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L074-A; Attachment I; Sheet 18		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 8, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 5%

Lat: 36.7696337864185 Long: -79.4077751713621 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L074-B; Attachment I; Sheet 18		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 9, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.7604515514939 Long: -79.4169887757495 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L076-A; Attachment I; Sheet 17		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 9, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.7605375483844 Long: -79.4170007585811 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L076-B; Attachment I; Sheet 17		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☑ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☑ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 9, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.7605723131335 Long: -79.416934948329 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L076-C; Attachment I; Sheet 17		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 9, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Kyle Zinn

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 8%

Lat: 36.7754347520749 Long: -79.3985121393871 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L077-A; Attachment I; Sheet 18		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 9, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Kyle Zinn

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 8%

Lat: 36.7753201337367 Long: -79.3985344948094 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L077-B; Attachment I; Sheet 18		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 9, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Kyle Zinn

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.775259172991 Long: -79.3986487722968 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L077-C; Attachment I; Sheet 18		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 10, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss

Landform (hillslope, terrace, etc.): Swale

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.7572855644782 Long: -79.4199312242413 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L078-A; Attachment I; Sheet 17		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 10, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss

Landform (hillslope, terrace, etc.): Swale

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.7570722251634 Long: -79.4197984086219 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L078-B; Attachment I; Sheet 17		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss, Kyle Zinn

Landform (hillslope, terrace, etc.): Swale

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.7573744277972 Long: -79.4199503171159 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.

Stream bed present:	☐ **Yes**	☑ **No**
Stream bank present:	☐ **Yes**	☑ **No**
OHWM present:	☐ **Yes**	☑ **No**

Stream Identified: ☐ **Yes** ☑ **No**

L079-A; Attachment I; Sheet 17

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**

☐ Gage data	☑ LIDAR
☐ Regional Curve	☑ Soil Survey
☑ Climatic data	☑ Topographic Maps
☑ Aerial photos	☐ Other

Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**

No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss, Kyle Zinn

Landform (hillslope, terrace, etc.): Swale

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.7576060650477 Long: -79.4201910199352 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L079-B; Attachment I; Sheet 17		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss, Mike Smith

Landform (hillslope, terrace, etc.): Swale

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.7534065694963 Long: -79.4232323596857 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L081-A; Attachment I; Sheet 16		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss, Kyle Zinn

Landform (hillslope, terrace, etc.): Swale

Local relief (concave, convex, none): Concave Slope (%): 5%

Lat: 36.7533802875071 Long: -79.4232443366821 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L081-B; Attachment I; Sheet 16		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ Channel Bank Features

- ☑ Natural line impressed on bank (above or below bankfull)
- ☑ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☑ Channel Bars

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☑ Vegetation transition (on bar)
- ☑ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically flows during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☑ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 10, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Kyle Zinn

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 12%

Lat: 36.7527833746661 Long: -79.4245884873376 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L083-A; Attachment I; Sheet 16		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 10, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Kyle Zinn

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 12%

Lat: 36.7531037486856 Long: -79.4245888804261 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L083-B; Attachment I; Sheet 16		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☑ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 10, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Kyle Zinn

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.7532391035654 Long: -79.4244586865324 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L083-C; Attachment I; Sheet 16		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 29, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.8281727616262 Long: -79.3429555157168 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L084-A; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 29, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8281933144427 Long: -79.3433296315607 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L084-B; Attachment I; Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☑ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in field. This stream typically has annual flow, has groundwater influence, and flows during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☑ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: March 14, 2025

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8289921047037 Long: -79.3421326626674 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L085-A; Attachment I: Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 29, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.8291814919032 Long: -79.3424299545025 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L085-B; Attachment I: Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☑ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.8278405982605 Long: -79.3410538492093 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L086-A; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.):

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8281032122856 Long: -79.3415488401715 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L086-B; Attachment I; Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☑ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☑ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in field. This stream typically has annual flow, has groundwater influence, and flows during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☑ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Flat

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8281177616605 Long: -79.3420138152212 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L086-C; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.8281064364819 Long: -79.3413322946388 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L087-A; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8280621866169 Long: -79.3413851910078 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L087-B; Attachment I; Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 13, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.7886392622467 Long: -79.3877145584495 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L088-A; Attachment I; Sheet 20		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 13, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.7886662889645 Long: -79.387025497945 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L088-B; Attachment I; Sheet 20		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☑ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 13, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss, Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.6681263743577 Long: -79.5080999835494 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L089-A; Attachment I; Sheet 10		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 13, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss, Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.6679528379792 Long: -79.5084270222801 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L089-B; Attachment I; Sheet 10		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☑ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 13, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 0%

Lat: 36.6683541890833 Long: -79.5080166246586 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L091-A; Attachment I; Sheet 10		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 13, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 0%

Lat: 36.6683775116764 Long: -79.5079287852046 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L091-B; Attachment I; Sheet 10		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☑ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☑ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 13, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.7889920712573 Long: -79.3860603028677 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L092-A; Attachment I; Sheet 20		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 13, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.78869727725 Long: -79.386025217832 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L092-B; Attachment I; Sheet 20		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 13, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.7888279423066 Long: -79.3860925566921 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L093-A; Attachment I; Sheet 20		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 13, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.7888130859331 Long: -79.3860864540989 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L093-B; Attachment I; Sheet 20		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☑ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☑ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 13, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Kyle Zinn

Landform (hillslope, terrace, etc.): Flat

Local relief (concave, convex, none): Convex Slope (%): 3%

Lat: 36.789346 Long: -79.386050 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L094-A; Attachment I; Sheet 20		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be an upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 13, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Kyle Zinn

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.789214 Long: -79.386156 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L094-B; Attachment I; Sheet 20		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**

☐ Gage data
☐ Regional Curve
✓ Climatic data
✓ Aerial photos
✓ LIDAR
✓ Soil Survey
✓ Topographic Maps
☐ Other

Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**

No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 13, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Floodplain

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.6738781093547 Long: -79.5024611874659 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L097-A; Attachment I; Sheet 11		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☑ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☑ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 14, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.7777464306437 Long: -79.3871119669565 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L102-A; Attachment I; Sheet 19		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 14, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.7777550489052 Long: -79.3869229350386 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L102-B; Attachment I; Sheet 19		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 15, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.793418980347 Long: -79.3826052292917 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L105-A; Attachment I; Sheet 20		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 15, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.7933496218116 Long: -79.382284838129 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L105-B; Attachment I; Sheet 20		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 16, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8085864117951 Long: -79.364009026722 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L112-A; Attachment I; Sheet 21		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 16, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.8084483307291 Long: -79.3638963220946 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L112-B; Attachment I; Sheet 21		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☑ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 16, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.8156840612646 Long: -79.3562338419677 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L117-A; Attachment I; Sheet 22		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 16, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8162147325357 Long: -79.3538764593103 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L118-A; Attachment I; Sheet 22		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 16, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.8161435683615 Long: -79.3535791380842 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L118-B; Attachment I; Sheet 22		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 17, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith

Landform (hillslope, terrace, etc.): Flat

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.8211017558159 Long: -79.3493423982969 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L120-A; Attachment I; Sheet 22		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 17, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith

Landform (hillslope, terrace, etc.): Flat

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8211334683682 Long: -79.3493257011804 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.

Stream bed present:	☑ **Yes**	☐ **No**
Stream bank present:	☑ **Yes**	☐ **No**
OHWM present:	☑ **Yes**	☐ **No**

Stream Identified: ☑ **Yes** ☐ **No**

L120-B; Attachment I; Sheet 22

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**

☐ Gage data	☑ LIDAR
☐ Regional Curve	☑ Soil Survey
☑ Climatic data	☑ Topographic Maps
☑ Aerial photos	☐ Other

Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**

No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☑ **Channel Bars**

- ☐ Shelving (on bar)
- ☑ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
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- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 20, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Floodplain

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8241728055115 Long: -79.3472082140774 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L122-A; Attachment I; Sheets 22 and 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 20, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8240187440038 Long: -79.3471635201617 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L122-B; Attachment I; Sheets 22 and 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☑ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☑ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss, Mike Smith

Landform (hillslope, terrace, etc.): Flat

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.5566126389467 Long: -79.6178641912898 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L124-A; Attachment I; Sheet 3		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss, Mike Smith

Landform (hillslope, terrace, etc.): Flat

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.5565258850499 Long: -79.6179102975387 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L124-B; Attachment I; Sheet 3		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in field. This stream typically has annual flow, has groundwater influence, and does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 20, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Kyle Zinn

Landform (hillslope, terrace, etc.): Floodplain

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.824567 Long: -79.346463 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified: ☐ **Yes** ☑ **No** L125-A; Attachment I; Sheet 23
Stream bed present:	☐ **Yes**	☑ **No**	
Stream bank present:	☐ **Yes**	☑ **No**	
OHWM present:	☐ **Yes**	☑ **No**	

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 20, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Kyle Zinn

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.824463 Long: -79.346571 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L125-B; Attachment I; Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically flows during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☑ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 20, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Kyle Zinn

Landform (hillslope, terrace, etc.): Floodplain

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.824368 Long: -79.346665 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified: ☐ **Yes** ☑ **No** L125-C; Attachment I; Sheet 23
Stream bed present:	☐ **Yes**	☑ **No**	
Stream bank present:	☐ **Yes**	☑ **No**	
OHWM present:	☐ **Yes**	☑ **No**	

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: City of Danville Date: May 20, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.585800272001 Long: -79.5886285964909 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.

Stream bed present:	☐ **Yes**	☑ **No**
Stream bank present:	☐ **Yes**	☑ **No**
OHWM present:	☐ **Yes**	☑ **No**

Stream Identified: ☐ **Yes** ☑ **No**

L128-A; Attachment I; Sheet 5

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**

☐ Gage data	☑ LIDAR
☐ Regional Curve	☑ Soil Survey
☑ Climatic data	☑ Topographic Maps
☑ Aerial photos	☐ Other

Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**

No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: City of Danville Date: May 20, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.5859543763974 Long: -79.5888640758363 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.

Stream bed present:	☑ **Yes**	☐ **No**
Stream bank present:	☑ **Yes**	☐ **No**
OHWM present:	☑ **Yes**	☐ **No**

Stream Identified: ☑ **Yes** ☐ **No**

L128-B; Attachment I; Sheet 5

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**

☐ Gage data	☑ LIDAR
☐ Regional Curve	☑ Soil Survey
☑ Climatic data	☑ Topographic Maps
☑ Aerial photos	☐ Other

Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**

No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☑ **Channel Bars**

- ☐ Shelving (on bar)
- ☑ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: City of Danville Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss, Kyle Zinn

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.5856285683957 Long: -79.5881802377655 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L129-A; Attachment I; Sheet 5		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☑ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be a wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: City of Danville Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss, Jen Feese

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.5856025008455 Long: -79.5881482772077 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L129-B; Attachment I; Sheet 5		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss, Kyle Zinn

Landform (hillslope, terrace, etc.): Flat

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.5564627798818 Long: -79.6181232251088 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L130-A; Attachment I; Sheet 3		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss, Jen Feese

Landform (hillslope, terrace, etc.): Flat

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.5563437035104 Long: -79.6179648672615 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L130-B; Attachment I; Sheet 3		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in field. This stream typically has annual flow, has groundwater influence, and does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 21, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss

Landform (hillslope, terrace, etc.): Swale

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.5572527362107 Long: -79.6177908236605 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L133-A; Attachment I; Sheet 3		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 21, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss

Landform (hillslope, terrace, etc.): Swale

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.557778628856 Long: -79.6176595166382 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L133-B; Attachment I; Sheet 3		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☑ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has annual flow, has groundwater influence, and does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 21, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Flat

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8360893734332 Long: -79.3337018516375 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L134-A; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☑ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 21, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Flat

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.8363220513925 Long: -79.3336472338825 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L134-B; Attachment I; Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☑ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☑ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☑ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☑ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 21, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.5578395994008 Long: -79.6177971698018 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L136-A; Attachment I; Sheet 3		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 21, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 5%

Lat: 36.5577062789038 Long: -79.6177296360015 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L136-B; Attachment I; Sheet 3		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 21, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith

Landform (hillslope, terrace, etc.): Flat

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.5574127056324 Long: -79.6165083055049 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L137-A; Attachment I; Sheet 3		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 21, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith

Landform (hillslope, terrace, etc.): Flat

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.5572265566838 Long: -79.6164797897348 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L137-B; Attachment I; Sheet 3		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 21, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.8354132772014 Long: -79.3343086368892 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L138-A; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 21, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8357901930828 Long: -79.3340276799814 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L138-B; Attachment I; Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 21, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.5658737078656 Long: -79.6080017306361 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L139-A; Attachment I; Sheet 3		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 21, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.5658171369952 Long: -79.6075359944184 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L139-B; Attachment I; Sheet 3		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☑ Clear bankfull storm event indicators present

☑ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☑ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☑ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in field. This stream typically has annual flow, has groundwater influence, and flows during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☑ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 21, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.5655669948162 Long: -79.608004494677 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L141-A; Attachment I; Sheet 3		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 21, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.5655945116255 Long: -79.6078683363107 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L141-B; Attachment I; Sheet 3		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☑ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 21, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.5657044458927 Long: -79.607665245884 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L141-C; Attachment I; Sheet 3		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: June 13, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Kyle Zinn

Landform (hillslope, terrace, etc.): Swale

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.757663 Long: -79.420312 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L145-A; Attachment I; Sheet 17		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: City of Danville Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss, Mike Smith

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.5746506143107 Long: -79.5992326268663 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.

Stream bed present:	☐ **Yes**	☑ **No**
Stream bank present:	☐ **Yes**	☑ **No**
OHWM present:	☐ **Yes**	☑ **No**

Stream Identified: ☐ **Yes** ☑ **No**

L148-A; Attachment I; Sheet 4

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**

☐ Gage data	☑ LIDAR
☐ Regional Curve	☑ Soil Survey
☑ Climatic data	☑ Topographic Maps
☑ Aerial photos	☐ Other

Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**

No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: City of Danville Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss, Mike Smith

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 6%

Lat: 36.5740621067662 Long: -79.5992885740786 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.

Stream bed present:	☑ **Yes**	☐ **No**
Stream bank present:	☑ **Yes**	☐ **No**
OHWM present:	☑ **Yes**	☐ **No**

Stream Identified: ☑ **Yes** ☐ **No**

L148-B; Attachment I; Sheet 4

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**

☐ Gage data	☑ LIDAR
☐ Regional Curve	☑ Soil Survey
☑ Climatic data	☑ Topographic Maps
☑ Aerial photos	☐ Other

Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**

No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 22, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.5737213773423 Long: -79.6001944867954 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L149-A; Attachment I; Sheet 4		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 22, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.5736660291192 Long: -79.5999378339901 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L149-B; Attachment I; Sheet 4		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 22, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.573686695288 Long: -79.5996860491003 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L-149-C; Attachment I; Sheet 4		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: City of Danville Date: May 22, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith

Landform (hillslope, terrace, etc.): Swale

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.5765929770633 Long: -79.5972603209668 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L150-A; Attachment I; Sheet 4		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: City of Danville Date: May 22, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith

Landform (hillslope, terrace, etc.): Swale

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.576384340624 Long: -79.597238009301 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	**☑ Yes**	**☐ No**
Stream bed present:	**☑ Yes**	**☐ No**	L150-B; Attachment I; Sheet 4		
Stream bank present:	**☑ Yes**	**☐ No**			
OHWM present:	**☑ Yes**	**☐ No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ Channel Bank Features

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☑ Channel Bars

- ☐ Shelving (on bar)
- ☑ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 22, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.5774530826464 Long: -79.5964457961337 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L151-A; Attachment I; Sheet 4		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 22, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.5773833882821 Long: -79.5964576774719 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L151-B; Attachment I; Sheet 4		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.8342308965521 Long: -79.3329092190107 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L152-A; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8340140774223 Long: -79.3328771834001 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L152-B; Attachment I; Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☑ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.833780997641 Long: -79.3329569957146 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L152-C; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.8344148027253 Long: -79.3328712622111 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L154-A; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☑ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.834944878407 Long: -79.3328229318172 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L154-B; Attachment I; Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☑ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8343073730524 Long: -79.3329079283975 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified: ☐ **Yes** ☑ **No** L155-A; Attachment I; Sheet 23
Stream bed present:	☐ **Yes**	☑ **No**	
Stream bank present:	☐ **Yes**	☑ **No**	
OHWM present:	☐ **Yes**	☑ **No**	

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8344746079725 Long: -79.3329281553377 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L155-B; Attachment I; Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☑ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☑ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☑ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☑ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8345922648622 Long: -79.3328941540567 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L156-A; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8346830100561 Long: -79.3329414239001 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L156-B; Attachment I; Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Floodplain

Local relief (concave, convex, none): Concave Slope (%): 0%

Lat: 36.8347180003674 Long: -79.3329093571113 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L156-C; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8358138015747 Long: -79.3351831237346 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.

Stream bed present:	☐ **Yes**	☑ **No**
Stream bank present:	☐ **Yes**	☑ **No**
OHWM present:	☐ **Yes**	☑ **No**

Stream Identified: ☐ **Yes** ☑ **No**

L157-A; Attachment I; Sheet 23

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**

☐ Gage data	☑ LIDAR
☐ Regional Curve	☑ Soil Survey
☑ Climatic data	☑ Topographic Maps
☑ Aerial photos	☐ Other

Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**

No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.8361042882614 Long: -79.3350361278423 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L157-B; Attachment I; Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith

Landform (hillslope, terrace, etc.): Flat

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.8364384311324 Long: -79.334904469219 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.

Stream bed present:	☐ **Yes**	☑ **No**
Stream bank present:	☐ **Yes**	☑ **No**
OHWM present:	☐ **Yes**	☑ **No**

Stream Identified: ☐ **Yes** ☑ **No**

L157-C; Attachment I; Sheet 23

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**

☐ Gage data	☑ LIDAR
☐ Regional Curve	☑ Soil Survey
☑ Climatic data	☑ Topographic Maps
☑ Aerial photos	☐ Other

Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**

No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.8365925376842 Long: -79.3348846473668 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L158-A; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.8366537067742 Long: -79.3348394321619 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L158-B; Attachment I; Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.8363105264809 Long: -79.336236479553 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.

Stream bed present:	☐ **Yes**	☑ **No**
Stream bank present:	☐ **Yes**	☑ **No**
OHWM present:	☐ **Yes**	☑ **No**

Stream Identified: ☐ **Yes** ☑ **No**

L160-A; Attachment I; Sheet 23

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**

☐ Gage data	☑ LIDAR
☐ Regional Curve	☑ Soil Survey
☑ Climatic data	☑ Topographic Maps
☑ Aerial photos	☐ Other

Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**

No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Mike Smith

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.8365741171454 Long: -79.3361352680166 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L160-B; Attachment I; Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss, Jen Feese

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 5%

Lat: 36.8346412295179 Long: -79.3378244577977 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L161-A; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 24, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Michaela Moss

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 5%

Lat: 36.8348968632036 Long: -79.3378393824312 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L161-B; Attachment I; Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 30, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8311008649215 Long: -79.3389260494826 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L163-A; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☑ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 30, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.8307099097192 Long: -79.3382661265145 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L163-B; Attachment I; Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8311450114692 Long: -79.3390513116406 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L164-A; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☑ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.8313024001719 Long: -79.3395150184875 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L164-B; Attachment I; Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☑ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☑ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 30, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.831606165942 Long: -79.3400307594974 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L165-A; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 30, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8315618408468 Long: -79.3400456315214 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L165-B; Attachment I; Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☑ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 30, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Flat

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.8315255482493 Long: -79.3400721469745 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L165-C; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 5%

Lat: 36.8303632605126 Long: -79.3418357152001 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L166-A; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8303808189343 Long: -79.3420803853858 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L166-B; Attachment I; Sheet 23		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☑ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: May 31, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Flat

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.8302562835537 Long: -79.3422764674513 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L166-C; Attachment I; Sheet 23		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: August 13, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Kyle Zinn

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4

Lat: 36.7722019929825 Long: -79.3958795743069 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L167-A; Attachment I; Sheet 19		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be an upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: August 13, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Kyle Zinn

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2

Lat: 36.7722562742716 Long: -79.3958819340995 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L167-B; Attachment I; Sheet 19		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☑ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☑ **Channel Bars**

- ☐ Shelving (on bar)
- ☑ Unvegetated (on bar)
- ☑ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐Mudcracks (found within an unvegetated flow path/channel)
- ☑Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☑ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑**Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: August 19, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Kyle Zinn

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4

Lat: 36.7846673104406 Long: -79.380315335812 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L169-A; Attachment I; Sheet 20		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be an upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: August 19, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt, Kyle Zinn

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2

Lat: 36.7847400831424 Long: -79.380229103637 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L169-B; Attachment I; Sheet 20		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidencee of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☑Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☑ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: October 8, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Flat

Local relief (concave, convex, none): Convex Slope (%): 3%

Lat: 36.7430634816168 Long: -79.4355146606779 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L171-A; Attachment I; Sheet 16		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be an upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: October 8, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.7429348867656 Long: -79.4354200794084 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L171-B; Attachment I; Sheet 16		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: October 8, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.7426708545451 Long: -79.4351680455113 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L171-C; Attachment I; Sheet 16		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☑ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in field. This stream typically has annual flow, has groundwater influence, and flows during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☑ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: October 8, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Flat

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.7424913353821 Long: -79.434956155592 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L171-D; Attachment I; Sheet 16		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: October 8, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Convex Slope (%): 2%

Lat: 36.7427927397993 Long: -79.4354700767964 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L173-A; Attachment I; Sheet 16		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be an upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: October 8, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.7427149789367 Long: -79.435429123431 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L173-B; Attachment I; Sheet 16		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☑ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: October 8, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Valley

Local relief (concave, convex, none): Concave Slope (%): 2%

Lat: 36.7425493457655 Long: -79.4352537995487 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L173-C; Attachment I; Sheet 16		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☑ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☑ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☑ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in field. This stream typically has annual flow, has groundwater influence, and flows during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☑ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: October 8, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Lindsey Shortt

Landform (hillslope, terrace, etc.): Flat

Local relief (concave, convex, none): Concave Slope (%): 1%

Lat: 36.7424589013589 Long: -79.4350616708813 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L173-D; Attachment I; Sheet 16		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: October 15, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese, Mike Smith

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.7882306472186 Long: -79.3822214621303 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L176-A; Attachment I; Sheet 20		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	☑ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	☑ Soil Survey	
☑ Climatic data	☑ Topographic Maps	
☑ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be an upland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: October 15, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese, Mike Smith

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 4%

Lat: 36.7880989936815 Long: -79.3821648535563 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L176-B; Attachment I; Sheet 20		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidencee of thalweg
- ☑ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☑Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically flows only in response to stormwater events and lacks groundwater influence.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☑ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: October 15, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese, Mike Smith

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.7876961355961 Long: -79.3765269671673 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☐ **Yes**	☑ **No**
Stream bed present:	☐ **Yes**	☑ **No**	L179-A; Attachment I; Sheet 20		
Stream bank present:	☐ **Yes**	☑ **No**			
OHWM present:	☐ **Yes**	☑ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☐ **Channel Bank Features**

- ☐ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☐ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☐ **Channel Bed / Bedload Transport Evidence**

- ☐ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☐ Bedform features (riffle, pool, steps, etc.)
- ☐ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☐ Headcuts (with other evidence)
- ☐ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☐ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☐ **Change in Vegetation Type / Density**

- ☐ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☐ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☐ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☐ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☐ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☐ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Area determined to be wetland. Feature lacks continuous defined OHWM and bed and bank.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☐ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

DEQ Stream Identification Field Data Form

Project/Site: Southeast Supply Enhancement Project (SSEP) City/County: Pittsylvania County Date: October 15, 2024

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC

Investigator(s): Jen Feese, Mike Smith

Landform (hillslope, terrace, etc.): Hillslope

Local relief (concave, convex, none): Concave Slope (%): 3%

Lat: 36.7875386966748 Long: -79.3764969886465 Datum: NAD 83

SUMMARY OF FINDINGS – Attach site map showing sampling point locations within and upstream of the head of the stream.			Stream Identified:	☑ **Yes**	☐ **No**
Stream bed present:	☑ **Yes**	☐ **No**	L179-B; Attachment I; Sheet 20		
Stream bank present:	☑ **Yes**	☐ **No**			
OHWM present:	☑ **Yes**	☐ **No**			

Site overview from remote and online resources. **Check boxes for online resources used to evaluate site:**		Describe land use and flow regime conditions from online resources. **Were there any recent extreme events (flooding or drought)?**
☐ Gage data	✓ LIDAR	No recent extreme events during the time of field work. Surrounding land is composed of agricultural fields, forest, residential properties, and roads.
☐ Regional Curve	✓ Soil Survey	
✓ Climatic data	✓ Topographic Maps	
✓ Aerial photos	☐ Other	

Check the boxes next to the field indicators used in stream determination:

Geomorphic Indicators:

☑ **Channel Bank Features**

- ☑ Natural line impressed on bank (above or below bankfull)
- ☐ Undercut bank
- ☐ Break in slope (on bank or at valley bottom)
- ☑ Continuous bed and bank
- ☐ Shelving (Top of bank, natural levee, or other)
- ☐ Clear bankfull storm event indicators present

☐ **Channel Bars**

- ☐ Shelving (on bar)
- ☐ Unvegetated (on bar)
- ☐ Vegetation transition (on bar)
- ☐ Sediment transition or sorting (on bar)
- ☐ Upper limit of deposition (on bar)

☑ **Channel Bed / Bedload Transport Evidence**

- ☑ Depositional (deposited sediment, lateral bars, mid channel bars, etc.)
- ☑ Bedform features (riffle, pool, steps, etc.)
- ☑ Erosional (scour, smoothing, etc.)
- ☐ Secondary channel (lateral or parallel along the same valley or floodplain)
- ☐ Evidence of thalweg
- ☑ Headcuts (with other evidence)
- ☑ Hydric soil development (changes in the character of soil)
- ☐ Mudcracks (found within an unvegetated flow path/channel)
- ☑ Changes in particle-size distribution (sediment sorting)

Vegetation Indicators:

☑ **Change in Vegetation Type / Density**

- ☑ Vegetation absent (channel bed)
- ☐ Vegetation matted down or bent (channel bed or bars)
- ☑ Exposed roots below intact soil later (channel banks)
- ☐ Destruction of terrestrial vegetation (channel banks, top of bank, etc.)
- ☑ Change in plant community (transition from channel bed to floodplain)

Ancillary Indicators:

- ☑ Wracking/Presence of organic litter (along channel banks or floodplain)
- ☐ Presence of obstacle marks (i.e. erosion/sedimentation around large obstacles in flow path)
- ☑ Leaf litter disturbed or absent
- ☐ Water staining
- ☐ Weathered clast or bedrock
- ☑ Deposited sediment within leaf pack (floodplain)

Other observed Indicators and/or additional observations?

Describe rational for location of stream and provide supporting evidence for stream identification: Stream OHWM present and identified in the field. This stream typically has seasonal flow, has groundwater influence, and typically does not flow during the late summer low flow period in non-drought years.

Chesapeake Bay Preservation Act Flow Regime Determination (if applicable):

Site within CBPA locality? ☐ **Yes** ☑ **No**

If Yes, which flow regime determination was used:

☐ NC DWQ ☐Fairfax ☐James City County

Flow Regime Determination Results: ☐ **Ephemeral** ☑ **Intermittent** ☐ **Perennial**

Note: Please refer to the "USACE 2022 National OHWM Field Delineation Manual for Rivers and Streams: Interim Version" at http://dx.doi.org/10.21079/11681/46102 for detail on terminology.

EXHIBIT 12 - NC DWQ STREAM FORMS

NC DWQ STREAM IDENTIFICATION TABLE						
Field Stream ID	**Map Stream ID (Attachment I)**	**Cowardin**	**Latitude**	**Longitude**	**Nearest Milepost**	**Sheet #**
E1-L001-VA	L001-1	Intermittent	36.54443	-79.63076	1387.1	2
E1-L002-VA	L002-1	Perennial	36.54611	-79.62902	1387.3	2
E1-L003-VA	L003-1	Ephemeral	36.55235	-79.62294	1387.8	2
E1-L004-VA	L004-1	Perennial	36.55302	-79.62234	1387.9	2
E1-L006-VA	L006-1	Perennial	36.65811	-79.51825	1397.3	10
E1-L007-VA	L007-1	Perennial	36.65773	-79.51845	1397.3	10
E1-L008-VA	L008-1	Ephemeral	36.71938	-79.45722	1402.7	14
	L008-2	Intermittent	36.71996	-79.45718	1402.8	14
E1-L009-VA	L009-1	Perennial	36.72038	-79.45672	1402.8	14
E1-L010-VA	L010-1	Perennial	36.72182	-79.45482	1403	14
E1-L011-VA	L011-1	Intermittent	36.72022	-79.45703	1402.8	14
E1-L012-VA	L012-1	Perennial	36.72915	-79.44658	1403.6	15
E1-L013-VA	L013-1	Perennial	36.73504	-79.44125	1404.1	15
E1-L014-VA	L014-1	Perennial	36.73484	-79.44142	1404.1	15
E1-L015-VA	L015-1	Intermittent	36.65600	-79.51980	1397.1	10
E1-L016-VA	L016-1	Perennial	36.60278	-79.56762	1392.5	6
E1-L017-VA	L017-1	Perennial	36.60293	-79.56739	1392.5	6
E1-L018-VA	L018-1	Ephemeral	36.63298	-79.54419	1395	8
	L018-2	Intermittent	36.63308	-79.54425	1395	8
E1-L019-VA	L019-1	Perennial	36.63369	-79.54293	1395	8
E1-L020-VA	L020-1	Ephemeral	36.63384	-79.54277	1395.1	8
E1-L021-VA	L021-1	Perennial	36.63590	-79.54038	1395.3	8
E1-L022-VA	L022-1	Perennial	36.63623	-79.54103	1395.3	8
E1-L023-VA	L023-1	Perennial	36.63730	-79.53963	1395.4	8
E1-L024-VA	L024-1	Intermittent	36.63725	-79.53793	1395.4	8
	L024-2	Ephemeral	36.63796	-79.53712	1395.5	8
	L024-3	Perennial	36.63655	-79.53865	1395.4	8

E1-L025-VA	L025-1	Intermittent	36.63745	-79.53761	1395.5	8
	L025-2	Ephemeral	36.63753	-79.53748	1395.5	8
E1-L027-VA	L027-1	Intermittent	36.58744	-79.58649	1391	5
E1-L028-VA	L028-1	Ephemeral	36.58912	-79.58563	1391.2	5
E1-L029-VA	L029-1	Intermittent	36.59046	-79.58367	1391.3	5
	L029-2	Perennial	36.59055	-79.58401	1391.3	5
E1-L030-VA	L030-1	Ephemeral	36.59394	-79.57977	1391.6	5
	L030-2	Intermittent	36.59429	-79.57980	1391.7	5
E1-L031-VA	L031-1	Perennial	36.65378	-79.52116	1396.9	9,10
E1-L032-VA	L032-1	Perennial	36.65239	-79.52267	1396.8	9
E1-L033-VA	L033-1	Perennial	36.60670	-79.56834	1392.7	6
E1-L034-VA	L034-1	Perennial	36.60668	-79.56829	1392.7	6
E1-L035-VA	L035-1	Ephemeral	36.60819	-79.56733	1392.8	6
E1-L036-VA	L036-1	Perennial	36.60369	-79.57074	1392.5	6
E1-L037-VA	L037-1	Perennial	36.59925	-79.57470	1392.1	6
E1-L038-VA	L038-1	Ephemeral	36.59928	-79.57458	1392.1	6
E1-L039-VA	L039-1	Ephemeral	36.60186	-79.56663	1392.5	6
	L039-2	Intermittent	36.60191	-79.56683	1392.5	6
E1-L040-VA	L040-1	Perennial	36.59600	-79.57764	1391.8	5
E1-L041-VA	L041-1	Intermittent	36.59599	-79.57747	1391.8	5
E1-L042-VA	L042-1	Perennial	36.61382	-79.56259	M-0402 1393.30	7
E1-L043-VA	L043-1	Ephemeral	36.61759	-79.55999	M-0402 1393.60	7
	L043-2	Intermittent	36.61730	-79.55968	M-0402 1393.60	7
E1-L044-VA	L044-1	Intermittent	36.62360	-79.55309	1394.2	7
E1-L045-VA	L045-1	Intermittent	36.62835	-79.54851	1394.6	8
E1-L046-VA	L046-1	Intermittent	36.63831	-79.53844	1395.5	8
E1-L047-VA	L047-1	Ephemeral	36.63804	-79.53695	1395.5	8
E1-L050-VA	L050-1	Intermittent	36.64098	-79.53378	1395.8	9
	L050-2	Ephemeral	36.64111	-79.53374	1395.8	9
	L050-3	Intermittent	36.64127	-79.53367	1395.8	9
E1-L051-VA	L051-1	Intermittent	36.64190	-79.53390	1395.8	9
E1-L052-VA	L052-1	Perennial	36.64233	-79.53216	1395.9	9
E1-L053-VA	L053-1	Intermittent	36.64281	-79.53191	1396	9

E1-L054-VA	L054-1	Intermittent	36.64311	-79.53168	1396	9
E2-L055-VA	L055-1	Ephemeral	36.71735	-79.45974	1402.5	14
E1-L056-VA	L056-1	Ephemeral	36.64280	-79.53204	1395.9	9
E1-L057-VA	L057-1	Perennial	36.77414	-79.40097	M-0307 1407.80	18,19
E2-L058-VA	L058-1	Perennial	36.70802	-79.46833	1401.7	13
E1-L059-VA	L059-1	Intermittent	36.65193	-79.52223	1396.8	9
E2-L060-VA	L060-1	Perennial	36.70612	-79.46993	1401.6	13
E2-L061-VA	L061-1	Perennial	36.70226	-79.47378	1401.2	13
E2-L062-VA	L062-1	Perennial	36.69911	-79.47687	1401	13
E2-L063-VA	L063-1	Ephemeral	36.69357	-79.48307	1400.4	12
E2-L064-VA	L064-1	Ephemeral	36.69347	-79.48312	1400.4	12
E2-L065-VA	L065-1	Ephemeral	36.69350	-79.48312	1400.4	12
E2-L066-VA	L066-1	Perennial	36.68926	-79.48658	1400.1	12
E2-L067-VA	L067-1	Perennial	36.68939	-79.48673	1400.1	12
E2-L068-VA	L068-1	Ephemeral	36.55464	-79.62085	1388	3
E2-L071-VA	L071-1	Ephemeral	36.76696	-79.40798	1407	17
E1-L072-VA	L072-1	Perennial	36.77304	-79.39987	M-0307 1407.60	18,19
E2-L073-VA	L073-1	Ephemeral	36.76867	-79.40860	1407.1	17
	L073-2	Intermittent	36.76892	-79.40870	1407.1	17
E2-L074-VA	L074-1	Ephemeral	36.76963	-79.40772	1407.2	18
E1-L075-VA	L075-1	Perennial	36.77551	-79.39981	M-0307 1407.70	18
E2-L076-VA	L076-1	Intermittent	36.76050	-79.41699	1406.4	17
E1-L077-VA	L077-1	Ephemeral	36.77531	-79.39855	M-0307 1407.70	18
E2-L078-VA	L078-1	Ephemeral	36.75713	-79.41987	1406.1	17
E1-L079-VA	L079-1	Ephemeral	36.75752	-79.42004	1406.1	17
E1-L080-VA	L080-1	Perennial	36.75445	-79.42329	1405.8	16
E1-L081-VA	L081-1	Perennial	36.75338	-79.42324	1405.8	16
E2-L082-VA	L082-1	Perennial	36.75326	-79.42396	1405.7	16
E1-L083-VA	L083-1	Ephemeral	36.75285	-79.42456	1405.7	16
E1-L084-VA	L084-1	Perennial	36.82819	-79.34326	1412.7	23
E1-L085-VA	L085-1	Perennial	36.82922	-79.34289	1412.8	23
	L085-2	Intermittent	36.82910	-79.34226	1412.8	23
E1-L086-VA	L086-1	Perennial	36.82809	-79.34154	1412.8	23

E1-L087-VA	L087-1	Intermittent	36.82806	-79.34138	1412.8	23
E1-L088-VA	L088-1	Intermittent	36.78860	-79.38746	M-0437 1409.60	20
E1-L089-VA	L089-1	Ephemeral	36.66801	-79.50833	1398.2	10
E3-L090-VA	L090-1	Perennial	36.66838	-79.50770	1398.2	10,11
E3-L091-VA	L091-1	Intermittent	36.66835	-79.50796	1398.2	10
E1-L092-VA	L092-1	Intermittent	36.78870	-79.38602	M-0437 1409.60	20
	L092-2	Perennial	36.78836	-79.38594	M-0437 1409.50	20
E1-L093-VA	L093-1	Intermittent	36.78881	-79.38608	M-0437 1409.60	20
E1-L094-VA	L094-1	Intermittent	36.78918	-79.38614	M-0437 1409.60	20
E3-L095-VA	L095-1	Perennial	36.67378	-79.50236	1398.7	11
E1-L096-VA	L096-1	Perennial	36.78377	-79.39154	M-0307 1408.80	20
E3-L097-VA	L097-1	Ephemeral	36.67385	-79.50245	1398.7	11
E1-L098-VA	L098-1	Perennial	36.68376	-79.49516	1399.5	11,12
E1-L099-VA	L099-1	Perennial	36.68196	-79.49732	1399.3	11
E1-L100-VA	L100-1	Perennial	36.68178	-79.49760	1399.3	11
E2-L102-VA	L102-1	Ephemeral	36.77775	-79.38704	M-0307 1408.70	19
E1-L103-VA	L103-1	Perennial	36.77940	-79.38611	M-0307 1408.80	19,20
E1-L104-VA	L104-1	Perennial	36.68232	-79.49330	1399.5	11,12
E1-L105-VA	L105-1	Ephemeral	36.79334	-79.38219	1409.4	20
E1-L107-VA	L107-1	Intermittent	36.79260	-79.38159	1409.4	20
E2-L108-VA	L108-1	Perennial	36.78743	-79.38147	M-0437 1409.40	20
E1-L110-VA	L110-1	Perennial	36.80834	-79.36390	1410.9	21
E3-L111-VA	L111-1	Intermittent	36.74629	-79.43011	1405.1	16
E1-L112-VA	L112-1	Ephemeral	36.80847	-79.36392	1410.9	21
E1-L113-VA	L113-1	Intermittent	36.81205	-79.35983	1411.2	22
E2-L114-VA	L114-1	Intermittent	36.83703	-79.33535	1413.29	23
E1-L115-VA	L115-1	Perennial	36.81548	-79.35602	1411.5	22
E1-L116-VA	L116-1	Intermittent	36.81555	-79.35614	1411.5	22
E1-L117-VA	L117-1	Ephemeral	36.81569	-79.35624	1411.6	22
E1-L118-VA	L118-1	Ephemeral	36.81615	-79.35363	M-0402 1411.70	22
E1-L119-VA	L119-1	Intermittent	36.82116	-79.34937	M-0402 1412.10	22
E1-L120-VA	L120-1	Intermittent	36.82113	-79.34933	M-0402 1412.10	22
E1-L121-VA	L121-1	Perennial	36.82387	-79.34778	M-0312 1412.30	22,23

E1-L122-VA	L122-1	Intermittent	36.82380	-79.34737	M-0312 1412.40	22,23
E1-L123-VA	L123-1	Intermittent	36.82399	-79.34735	M-0312 1412.40	23
E2-L124-VA	L124-1	Intermittent	36.55653	-79.61791	M-0402 1388.20	3
	L124-2	Perennial	36.55614	-79.61755	M-0402 1388.20	3
E1-L125-VA	L125-1	Perennial	36.82448	-79.34655	M-0312 1412.40	23
E2-L126-VA	L126-1	Intermittent	36.58698	-79.58710	1391	5
	L126-2	Perennial	36.58725	-79.58745	1391	5
E2-L127-VA	L127-1	Perennial	36.58710	-79.58704	1391	5
E2-L128-VA	L128-1	Ephemeral	36.58594	-79.58884	1390.9	5
E2-L129-VA	L129-1	Intermittent	36.58561	-79.58815	1390.9	5
E2-L130-VA	L130-1	Intermittent	36.55642	-79.61806	M-0402 1388.20	3
E2-L133-VA	L133-1	Intermittent	36.55767	-79.61768	M-0402 1388.30	3
	L133-2	Ephemeral	36.55841	-79.61710	M-0402 1388.30	3
E3-L134-VA	L134-1	Intermittent	36.83621	-79.33367	1413.29	23
E2-L136-VA	L136-1	Ephemeral	36.55771	-79.61773	M-0402 1388.30	3
E1-L137-VA	L137-1	Perennial	36.55701	-79.61651	M-0402 1388.30	3
	L137-2	Intermittent	36.55722	-79.61648	M-0402 1388.30	3
E3-L138-VA	L138-1	Ephemeral	36.83562	-79.33415	1413.29	23
	L138-2	Intermittent	36.83592	-79.33394	1413.29	23
E1-L139-VA	L139-1	Perennial	36.56585	-79.60769	1389.1	3
E2-L140-VA	L140-1	Intermittent	36.56068	-79.61280	1388.7	3
E1-L141-VA	L141-1	Ephemeral	36.56562	-79.60782	1389.1	3
E1-L142-VA	L142-1	Perennial	36.56732	-79.60626	1389.2	3
E2-L144-VA	L144-1	Intermittent	36.57040	-79.60342	1389.5	4
E1-L145-VA	L145-1	Ephemeral	36.75766	-79.42031	1406.1	17
E2-L146-VA	L146-1	Perennial	36.57402	-79.59971	1389.8	4
E2-L148-VA	L148-1	Ephemeral	36.57400	-79.59941	1389.9	4
E2-L149-VA	L149-1	Ephemeral	36.57367	-79.59993	1389.8	4
E2-L150-VA	L150-1	Intermittent	36.57631	-79.59722	1390	4
E2-L151-VA	L151-1	Ephemeral	36.57685	-79.59683	1390.1	4
E1-L152-VA	L152-1	Ephemeral	36.83400	-79.33288	1413.29	23
E1-L153-VA	L153-1	Perennial	36.83707	-79.33635	1413.29	23

E1-L154-VA	L154-1	Intermittent	36.83499	-79.33280	1413.29	23
	L154-2	Perennial	36.83530	-79.33276	1413.29	23
E1-L155-VA	L155-1	Intermittent	36.83452	-79.33290	1413.29	23
E1-L156-VA	L156-1	Ephemeral	36.83466	-79.33293	1413.29	23
E2-L157-VA	L157-1	Ephemeral	36.83610	-79.33504	1413.29	23
E2-L158-VA	L158-1	Intermittent	36.83664	-79.33485	1413.29	23
E1-L159-VA	L159-1	Perennial	36.83625	-79.33733	1413.29	23
E2-L160-VA	L160-1	Ephemeral	36.83637	-79.33616	1413.29	23
E3-L161-VA	L161-1	Ephemeral	36.83510	-79.33801	1413.29	23
E1-L162-VA	L162-1	Perennial	36.74182	-79.43412	M-0388 1404.80	16
E1-L163-VA	L163-1	Intermittent	36.83081	-79.33841	1413	23
E1-L164-VA	L164-1	Perennial	36.83084	-79.34127	1413	23
	L164-2	Intermittent	36.83131	-79.33956	1413	23
E1-L165-VA	L165-1	Ephemeral	36.83156	-79.34005	1413	23
E1-L166-VA	L166-1	Intermittent	36.83038	-79.34206	1412.9	23
E1-L167-VA	L167-1	Intermittent	36.77227	-79.39589	M-0307 1407.90	19
E1-L168-VA	L168-1	Perennial	36.77402	-79.40298	1407.4	18
E1-L169-VA	L169-1	Ephemeral	36.78471	-79.38024	M-0437 1409.20	20
E1-L171-VA	L171-1	Ephemeral	36.74294	-79.43543	M-0388 1404.80	16
	L171-2	Perennial	36.74267	-79.43517	M-0388 1404.80	16
E1-L173-VA	L173-1	Ephemeral	36.74273	-79.43543	M-0388 1404.80	16
	L173-2	Perennial	36.74255	-79.43526	M-0388 1404.80	16
E1-L174-VA	L174-1	Perennial	36.60485	-79.56292	1392.8	6
E1-L175-VA	L175-1	Perennial	36.60527	-79.56401	1392.8	6
E1-L176-VA	L176-1	Ephemeral	36.78806	-79.38218	M-0437 1409.40	20
E1-L177-VA	L177-1	Perennial	36.78768	-79.37997	M-0437 1409.40	20
E1-L178-VA	L178-1	Perennial	36.78732	-79.38027	M-0437 1409.40	20
E1-L179-VA	L179-1	Intermittent	36.78749	-79.37650	1409.4	20
E1-L180-VA	L180-1	Perennial	36.78144	-79.38913	M-0307 1408.80	19,20
	L180-2	Ephemeral	36.78165	-79.38924	M-0307 1408.80	19,20
E1-L181-VA	L181-1	Perennial	36.78149	-79.38810	M-0307 1408.80	19,20

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: March 19, 2024	**Data Point:** L001-A; Stream L001-1
Evaluator: Mike Smith, Kyle Zinn, Lindsey Shortt, Michaela Moss, Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.5444596833333, -79.6303291183333
Total Points: 26.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Intermittent**	

A. Geomorphology Subtotal = 9	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 9.25					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	1
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes: *Juncus effusus* in the stream

Sketch: Attachment I; Sheet 2

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: March 20, 2024	**Data Point:** L002-A; Stream L002-1
Evaluator: Kyle Zinn, Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.5460233333333, -79.628601495
Total Points: 33.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Perennial	

A. Geomorphology Subtotal = 14.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	3
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 9.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	1
25. Algae	0	0.5	1	1.5	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 2

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 30, 2024	**Data Point:** L003-A; Stream L003-1
Evaluator: Kyle Zinn, Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.552353, -79.622928
Total Points: 13.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Ephemeral**	

A. Geomorphology Subtotal = 7	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 5					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 2

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: March 21, 2024	**Data Point:** L004-A; Stream L004-1
Evaluator: Kyle Zinn, Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.5525917916667, -79.6220099766667
Total Points: 41.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Perennial**	

A. Geomorphology Subtotal = 20.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	3
4. Particle size of stream substrate	0	1	2	3	3
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 10					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 10.75					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	3
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0.5
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	1
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes: Fish, frog observed. *Juncus effusus* in the stream bed.

Sketch: Attachment I; Sheet 2

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: March 26, 2024	**Data Point:** L006-A; Stream L006-1
Evaluator: Kyle Zinn, Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.6581116672999, -79.5182521872
Total Points: 34 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Perennial	

A. Geomorphology Subtotal = 19.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	3
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 10

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 24, 2024	**Data Point:** L007-A; Stream L007-1
Evaluator: Lindsey Shortt, Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.657729, -79.518489
Total Points: 40.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 22.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	3
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 9.25					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0.5
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 10

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 30, 2024	**Data Point:** L008-A; Stream L008-1
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.71919, -79.457069
Total Points: 18.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Ephemeral**	

A. Geomorphology Subtotal = 10.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 3					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 14

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: March 28, 2024	**Data Point:** L008-B; Stream L008-2
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.719992765, -79.4571758616667
Total Points: 24.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Intermittent**	

A. Geomorphology Subtotal = 13	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	3
5. Active/relict floodplain	0	1	2	3	3
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 6.5					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 14

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: March 28, 2024	**Data Point:** L009-A; Stream L009-1
Evaluator: Kyle Zinn, Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.720404, -79.456534
Total Points: 40.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 23	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	3
4. Particle size of stream substrate	0	1	2	3	3
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 14

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: March 28, 2024	**Data Point:** L010-A; Stream L010-1
Evaluator: Kyle Zinn, Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.722401275, -79.4548831833333
Total Points: 32.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Perennial**	

A. Geomorphology Subtotal = 17.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	3
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	1.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 14

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: March 28, 2024	**Data Point:** L011-A; Stream L011-1
Evaluator: Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.7202108233333, -79.4570353216667
Total Points: 28 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Intermittent**	

A. Geomorphology Subtotal = 14.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 14

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 3, 2024	**Data Point:** L012-A; Stream L012-1
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.7291544976, -79.4465775911999
Total Points: 36.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 16.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	3
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 10.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	3
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 15

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 3, 2024	**Data Point:** L013-A; Stream L013-1
Evaluator: Kyle Zinn, Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.7350438769, -79.4412466970999
Total Points: 31.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Perennial**	

A. Geomorphology Subtotal = 14	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 15

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 3, 2024	**Data Point:** L014-A; Stream L014-1
Evaluator: Kyle Zinn, Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.734838155, -79.4414506583333
Total Points: 35.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Perennial**	

A. Geomorphology Subtotal = 17.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	3
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 9.75					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 15

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 4, 2024 and January 10, 2025	**Data Point:** L015-A; Stream L015-1
Evaluator: Lindsey Shortt, Michaela Moss, Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.6553966116667, -79.5191844866667
Total Points: 23 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Intermittent**	

A. Geomorphology Subtotal = 12.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a] Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	3
4. Particle size of stream substrate	0	1	2	3	3
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5.5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 10. This reach was updated as a result of additional fieldwork conducted on January 10, 2025.

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 16, 2024	**Data Point:** L016-A; Stream L016-1
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.6028840416667, -79.5674016716667
Total Points: 34.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Perennial	

A. Geomorphology Subtotal = 17.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	2
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 6

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 16, 2024	**Data Point:** L017-A; Stream L017-1
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.6029250858, -79.5673858865999
Total Points: 31.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Perennial**	

A. Geomorphology Subtotal = 12	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 10					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	2
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 9.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	3
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 6

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 30, 2024	**Data Point:** L018-A; Stream L018-1
Evaluator: Kyle Zinn, Lindsey Shortt, Michaela Moss, Alex Bailey	**County:** Pittsylvania County	**Lat/Long:** 36.632955, -79.544147
Total Points: 9.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Ephemeral**	

A. Geomorphology Subtotal = 4	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 8

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 30, 2024	**Data Point:** L018-B; Stream L018-2
Evaluator: Kyle Zinn, Lindsey Shortt, Michaela Moss, Alex Bailey	**County:** Pittsylvania County	**Lat/Long:** 36.6330791281, -79.544251571
Total Points: 25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Intermittent**	

A. Geomorphology Subtotal = 15	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	3
9. Grade control	0	0.5	1	1.5	1.5
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 8

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 8, 2024	**Data Point:** L019-A; Stream L019-1
Evaluator: Kyle Zinn, Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.63364012, -79.542989275
Total Points: 32.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 16.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	1.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	0.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.5					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 8

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 8, 2024	**Data Point:** L020-A; Stream L020-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.633843, -79.542757
Total Points: 9.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 0.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	0
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 8

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 9, 2024	**Data Point:** L021-A; Stream L021-1 (Sandy River)
Evaluator: Mike Smith, Alex Bailey	**County:** Pittsylvania County	**Lat/Long:** 36.635899, -79.5403848
Total Points: 39.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Perennial**	

A. Geomorphology Subtotal = 19.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 10.5					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	1
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	1
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 8

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 9, 2024	**Data Point:** L022-A; Stream L022-1 (Hardys Creek)
Evaluator: Mike Smith, Kyle Zinn, Alex Bailey	**County:** Pittsylvania County	**Lat/Long:** 36.6362338508999, -79.54103244799
Total Points: 43.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 24.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	3
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	3
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 9.25					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 8

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 30, 2024	**Data Point:** L024-A; Stream L024-2
Evaluator: Kyle Zinn, Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.638125, -79.537048
Total Points: 12 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Ephemeral**	

A. Geomorphology Subtotal = 6	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 8

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 24, 2024	**Data Point:** L024-B; Stream L024-1
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.63741382, -79.5377292466667
Total Points: 24.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Intermittent**	

A. Geomorphology Subtotal = 12.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	3
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 6.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 8

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 24, 2024	**Data Point:** L024-C; Stream L024-3
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.63653745, -79.5386006783333
Total Points: 32 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Perennial**	

A. Geomorphology Subtotal = 17	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	3
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	1
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 8

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 24, 2024	**Data Point:** L025-A; Stream L025-1
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.6374475766667, -79.53758986333
Total Points: 19.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 8	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 6.5					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 8

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 24, 2024	**Data Point:** L025-B; Stream L025-2
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.6375409933333, -79.537446395
Total Points: 10 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Ephemeral**	

A. Geomorphology Subtotal = 4.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 8

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 15, 2024	**Data Point:** L027-A; Stream L027-1
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.5874885716667, -79.5864818033333
Total Points: 25.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Intermittent**	

A. Geomorphology Subtotal = 10.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	2
14. Leaf litter	1.5	1	0.5	0	0.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	1
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 5

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 30, 2024	**Data Point:** L028-A; Stream L028-1
Evaluator: Kyle Zinn, Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.589218, -79.585525
Total Points: 10.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Ephemeral**	

A. Geomorphology Subtotal = 5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 5

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 15, 2024	**Data Point:** L029-A; Stream L029-1
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.5904842583678, -79.5837419301176
Total Points: 21.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 10	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 5.5					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	0.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 5

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 15, 2024	**Data Point:** L029-B; Stream L029-2
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.5905456799, -79.5840118770999
Total Points: 32.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 15.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	0.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 9.75					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 5

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 30, 2024	**Data Point:** L030-A; Stream L030-1
Evaluator: Mike Smith, Kyle Zinn, Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.594221, -79.579786
Total Points: 15 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 9	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 5

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 15, 2024	**Data Point:** L030-B; Stream L030-2
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.594240825, -79.57981094
Total Points: 27.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 13	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	1.5
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	0.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 5

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 9, 2024	**Data Point:** L031-A; Stream L031-1
Evaluator: Mike Smith, Alex Bailey	**County:** Pittsylvania County	**Lat/Long:** 36.6537914833333, -79.5209267033333
Total Points: 34 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Perennial	

A. Geomorphology Subtotal = 16.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheets 9 and 10

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 9, 2024	**Data Point:** L032-A; Stream L032-1
Evaluator: Mike Smith, Kyle Zinn, Alex Bailey	**County:** Pittsylvania County	**Lat/Long:** 36.652180915, -79.52238462
Total Points: 32.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 16.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 9.25					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 9

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 16, 2024	**Data Point:** L033-A; Stream L033-1
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.6068073933333, -79.568417095
Total Points: 36.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Perennial	

A. Geomorphology Subtotal = 17.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	3
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 10.75					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	3
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 6

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 16, 2024	**Data Point:** L034-A; Stream L034-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.6067, -79.5683
Total Points: 31.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 14.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	3
4. Particle size of stream substrate	0	1	2	3	3
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	2
14. Leaf litter	1.5	1	0.5	0	0.5
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.25					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	3
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	1
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 6

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 16, 2024	**Data Point:** L035-A; Stream L035-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.6082065761964, -79.5673254347749
Total Points: 10.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 4.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 6

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 17, 2024	**Data Point:** L036-A; Stream L036-1
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.603478635, -79.5706408683333
Total Points: 39.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 20	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	3
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 10.75					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	1
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 6

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 25, 2024	**Data Point:** L038-A; Stream L038-1
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.599298, -79.57459
Total Points: 13 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Ephemeral**	

A. Geomorphology Subtotal = 7	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 6

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 17, 2024	**Data Point:** L039-A; Stream L039-2
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.6019094915, -79.566829752
Total Points: 23.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Intermittent**	

A. Geomorphology Subtotal = 9.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	2
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5.5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 6

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 26, 2024	**Data Point:** L039-B; Stream L039-1
Evaluator: Kyle Zinn, Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.6019313524, -79.566932564
Total Points: 13.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 7.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 3.75					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 6

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 18, 2024	**Data Point:** L040-A; Stream L040-1
Evaluator: Lindsey Shortt, Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.5959995529999, -79.5776436772
Total Points: 37.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Perennial**	

A. Geomorphology Subtotal = 21.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	3
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.75					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	1
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 5

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 18, 2024	**Data Point:** L041-A; Stream L041-1
Evaluator: Kyle Zinn, Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.5960241666667, -79.5774610883333
Total Points: 27 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 12	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.5					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 5

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 22, 2024	**Data Point:** L042-A; Stream L042-1
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.6139600633333, -79.5619911016667
Total Points: 38.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Perennial**	

A. Geomorphology Subtotal = 22.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	3
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 10					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	2
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	1
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 7

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 22, 2024	**Data Point:** L043-A; Stream L043-2
Evaluator: Kyle Zinn, Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.6172729016667, -79.5596898583333
Total Points: 26.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 11	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	2
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.25					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 7

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 30, 2024	**Data Point:** L043-B; Stream L043-1
Evaluator: Kyle Zinn, Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.6175425544116, -79.559930439017
Total Points: 15 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 7.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 6					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 7

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 23, 2024	**Data Point:** L044-A; Stream L044-1
Evaluator: Kyle Zinn, Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.6242403250531, -79.5530387652284
Total Points: 20 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Intermittent**	

A. Geomorphology Subtotal = 10.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 5.5					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 7

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 23, 2024	**Data Point:** L045-A; Stream L045-1
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.6283538639, -79.548510232
Total Points: 22.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 11	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 8

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: August 15, 2024	**Data Point:** L046-A; Stream L046-1
Evaluator: Lindsey Shortt, Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.6387707, -79.5379373
Total Points: 23.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Intermittent**	

A. Geomorphology Subtotal = 11	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 6.5					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 8

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 26, 2024	**Data Point:** L047-A; Stream L047-1
Evaluator: Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.6380351876999, -79.5369527880999
Total Points: 9 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	0.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 3					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 8

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 29, 2024	**Data Point:** L050-A; Stream L050-3
Evaluator: Mike Smith, Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.6413565986019, -79.533682240739
Total Points: 22 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 11.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 5.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 9

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 29, 2024	**Data Point:** L050-B; Stream L050-2
Evaluator: Lindsey Shortt, Mike Smith	**County:** Pittsylvania County	**Lat/Long:** 36.641087998474, -79.53374970971
Total Points: 10.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Ephemeral**	

A. Geomorphology Subtotal = 5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	0.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 9

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 29, 2024	**Data Point:** L050-C; Stream L050-1
Evaluator: Mike Smith, Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.6409799285, -79.533783620
Total Points: 23 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 12.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 5.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 9

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 29, 2024	**Data Point:** L051-A; Stream L051-1
Evaluator: Lindsey Shortt, Mike Smith	**County:** Pittsylvania County	**Lat/Long:** 36.641936885, -79.5339129616667
Total Points: 21 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 12	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 9

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 30, 2024	**Data Point:** L052-A; Stream L052-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.642479865, -79.5321142533333
Total Points: 31.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Perennial**	

A. Geomorphology Subtotal = 15	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 9

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 30, 2024	**Data Point:** L053-A; Stream L053-1
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.6427883116667, -79.531936845
Total Points: 24.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 9.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 9

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 30, 2024	**Data Point:** L054-A; Stream L054-1
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.6431389690783, -79.5316386099341
Total Points: 24.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Intermittent**	

A. Geomorphology Subtotal = 11.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 9

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 30, 2024	**Data Point:** L055-A; Stream L055-1
Evaluator: Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.7173581017465, -79.4597410096391
Total Points: 13.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 6.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 14

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 30, 2024	**Data Point:** L056-A; Stream L056-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.6427994635, -79.5320308333
Total Points: 9.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 4	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	0
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	0.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 9

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: April 30, 2024	**Data Point:** L058-A; Stream L058-1
Evaluator: Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.7080243604, -79.468332084699
Total Points: 39.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Perennial	

A. Geomorphology Subtotal = 22	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	3
4. Particle size of stream substrate	0	1	2	3	3
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	3
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 9.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0.5
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 13

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 1, 2024	**Data Point:** L059-A; Stream L059-1
Evaluator: Lindsey Shortt, Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.651855, -79.522234
Total Points: 21.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 7	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 9

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 1, 2024	**Data Point:** L060-A; Stream L060-1
Evaluator: Michaela Moss, Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.7063049416667, -79.4700660283333
Total Points: 37.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 20.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				1.5

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 13

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 2, 2024	**Data Point:** L061-A; Stream L061-1
Evaluator: Michaela Moss, Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.7022624652, -79.47378259059
Total Points: 34.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Perennial**	

A. Geomorphology Subtotal = 16.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 10					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	1
25. Algae	0	0.5	1	1.5	1
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 13

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 1, 2024	**Data Point:** L062-A; Stream L062-1
Evaluator: Mike Smith, Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.6991057076999, -79.476871110199
Total Points: 32.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Perennial	

A. Geomorphology Subtotal = 16	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 13

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 3, 2024	**Data Point:** L063-A; Stream L063-1
Evaluator: Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.693587085, -79.483064753333
Total Points: 12 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 5.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 12

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 3, 2024	**Data Point:** L064-A; Stream L064-1
Evaluator: Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.6934746194689, -79.483174351226
Total Points: 11.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 7	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 0.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	0
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 12

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 3, 2024	**Data Point:** L065-A; Stream L065-1
Evaluator: Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.6935090166667, -79.48309759
Total Points: 10 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 6	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 0					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	0
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 12

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 3, 2024	**Data Point:** L067-A; Stream L067-1
Evaluator: Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.689359015, -79.486583465
Total Points: 41 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Perennial	

A. Geomorphology Subtotal = 21.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	3
4. Particle size of stream substrate	0	1	2	3	3
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 11					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	2
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	1
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 12

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 4, 2024	**Data Point:** L068-A; Stream L068-1
Evaluator: Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.554638165, -79.6208418983333
Total Points: 13 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 6	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 5					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 3

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 7, 2024	**Data Point:** L071-A; Stream L071-1
Evaluator: Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.766950943339, -79.408027093914
Total Points: 14 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 9.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 0.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	0.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 17

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 8, 2024	**Data Point:** L073-A; Stream L073-1
Evaluator: Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.7687056591654, -79.408620735347
Total Points: 9 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	0.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 3					
18. Fibrous roots in streambed	3	2	1	0	0
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 17

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 8, 2024	**Data Point:** L073-B; Stream L073-2
Evaluator: Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.7689172883333, -79.408698593333
Total Points: 27.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 13.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 17

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 8, 2024	**Data Point:** L074-A; Stream L074-1
Evaluator: Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.7696407483333, -79.407782536666
Total Points: 12.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 8.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	0.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 2					
18. Fibrous roots in streambed	3	2	1	0	0
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 18

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 14, 2024	**Data Point:** L075-A; Stream L075-1
Evaluator: Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.7755066816, -79.399805138
Total Points: 36 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 16	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	3
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 11					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	2
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 9					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 18

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 9, 2024	**Data Point:** L076-A; Stream L076-1
Evaluator: Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.7604879283333, -79.416974516666
Total Points: 23 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 11.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 6					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5.5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 17

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 9, 2024	**Data Point:** L077-A; Stream L077-1
Evaluator: Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.7753193016667, -79.398527725
Total Points: 11 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 7	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	0.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 3					
18. Fibrous roots in streambed	3	2	1	0	0
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 18

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 10, 2024	**Data Point:** L078-A; Stream L078-1
Evaluator: Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.7570722251634, -79.419798408621
Total Points: 11.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 5.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	1
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 17

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 31, 2024	**Data Point:** L079-A; Stream L079-1
Evaluator: Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.757615, -79.420257
Total Points: 15 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Ephemeral**	

A. Geomorphology Subtotal = 9	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 17

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 10, 2024 and January 9, 2025	**Data Point:** L080-A; Stream L080-1
Evaluator: Kyle Zinn, Mike Smith	**County:** Pittsylvania County	**Lat/Long:** 36.7544541414999, -79.4232926387
Total Points: 30.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 13	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7.75					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 16. This reach was updated as a result of additional fieldwork conducted on January 9, 2025.

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 31, 2024	**Data Point:** L081-A; Stream L081-1
Evaluator: Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.7533802875071, -79.423244336682
Total Points: 30.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Perennial	

A. Geomorphology Subtotal = 13	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 10.25					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 16.

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 10, 2024	**Data Point:** L082-A; Stream L082-1
Evaluator: Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.7531840266667, -79.423574658333
Total Points: 39.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 21.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.75					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 16

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 10, 2024	**Data Point:** L083-A; Stream L083-1
Evaluator: Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.7531037486856, -79.424588880426
Total Points: 13.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 7.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	0.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 16

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 29, 2024	**Data Point:** L084-A; Stream L084-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8281825283333, -79.343003675
Total Points: 30.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 14.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 29, 2024 and February 24, 2025	**Data Point:** L085-A; Stream L085-1
Evaluator: Mike Smith	**County:** Pittsylvania County	**Lat/Long:** 36.82921034333, -79.3431089833
Total Points: 31 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Perennial	

A. Geomorphology Subtotal = 14.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a] Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	1
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 29, 2024	**Data Point:** L085-B, Stream L085-2
Evaluator: Mike Smith	**County:** Pittsylvania County	**Lat/Long:** 36.8291814919032, -79.342429954502
Total Points: 28 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 13.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 31, 2024	**Data Point:** L086-A; Stream L086-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.82804692, -79.3414552
Total Points: 33.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 16.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	3
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 9.25					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 31, 2024	**Data Point:** L087-A; Stream L087-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8280621866169, -79.341385191007
Total Points: 21.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 10.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 13, 2024	**Data Point:** L088-A; Stream L088-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.7886662889645, -79.387025497945
Total Points: 22.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Intermittent**	

A. Geomorphology Subtotal = 9.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 6.5					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 20

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 13, 2024	**Data Point:** L089-A; Stream L089-1
Evaluator: Michaela Moss, Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.66810007, -79.508156558333
Total Points: 13 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 9	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 2					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	1
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 10

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 31, 2024	**Data Point:** L090-A; Stream L090-1
Evaluator: Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.6683845411999, -79.5076975849
Total Points: 34.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 16	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 9.75					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheets 10 and 11

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 13, 2024	**Data Point:** L091-A; Stream L091-1
Evaluator: Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.6683775116764, -79.507928785204
Total Points: 27.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 12	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.25					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 10

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 13, 2024	**Data Point:** L092-A; Stream L092-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.7886197483333, -79.3859842516667
Total Points: 25.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 13	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	3
4. Particle size of stream substrate	0	1	2	3	3
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 6					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 20

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 13, 2024 and March 31, 2025	**Data Point:** L092-B; Stream L092-2
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.7883628255999, -79.385939088499
Total Points: 37.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Perennial**	

A. Geomorphology Subtotal = 20.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a] Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 20

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 13, 2024	**Data Point:** L093-A; Stream L093-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.7888130859331, -79.386086454098
Total Points: 24 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 12.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	3
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7.5					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 20

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 13, 2024	**Data Point:** L094-A; Stream L094-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.7891773071999, -79.3861399996
Total Points: 21.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Intermittent**	

A. Geomorphology Subtotal = 8	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 6					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 20

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 13, 2024	**Data Point:** L095-A; Stream L095-1
Evaluator: Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.673775956, -79.50236223829
Total Points: 41.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 22	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	3
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	3
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 11.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	2
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 11

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 13, 2024	**Data Point:** L096-A; Stream L096-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.7837698083333, -79.3915702283333
Total Points: 30.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Perennial**	

A. Geomorphology Subtotal = 18	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	3
4. Particle size of stream substrate	0	1	2	3	3
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 6.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.25					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 20

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 13, 2024	**Data Point:** L097-A; Stream L097-1
Evaluator: Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.6738781093547, -79.5024611874659
Total Points: 13 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 7.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 11

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 13, 2024	**Data Point:** L098-A; Stream L098-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.6838396816667, -79.49536736
Total Points: 34.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Perennial	

A. Geomorphology Subtotal = 16.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 10.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	1
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheets 11 and 12

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 13, 2024	**Data Point:** L099-A; Stream L099-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.6819470016667, -79.49724795
Total Points: 33.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Perennial**	

A. Geomorphology Subtotal = 19	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 11

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 13, 2024	**Data Point:** L100-A; Stream L100-1
Evaluator: Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.6817823081999, -79.4975991158
Total Points: 33.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Perennial	

A. Geomorphology Subtotal = 17	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	3
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.5					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 11

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 14, 2024	**Data Point:** L102-A; Stream L102-1
Evaluator: Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.777754, -79.387104
Total Points: 9.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Ephemeral**	

A. Geomorphology Subtotal = 4.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 19

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 15, 2024	**Data Point:** L104-A; Stream L104-1
Evaluator: Michaela Moss, Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.6823935783333, -79.493325345
Total Points: 45.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Perennial	

A. Geomorphology Subtotal = 24	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	3
4. Particle size of stream substrate	0	1	2	3	3
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	3
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 12.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	3
21. Aquatic Mollusks	0	1	2	3	2
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheets 11 and 12

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 15, 2024	**Data Point:** L105-A; Stream L105-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.7933588116667, -79.382200841666
Total Points: 11 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 6.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 3					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 20

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 15, 2024	**Data Point:** L107-A; Stream L107-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.7926024363, -79.3815942427
Total Points: 23.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Intermittent**	

A. Geomorphology Subtotal = 12	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 6.5					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 4.75					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 20

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 15, 2024		**Data Point:** L108-A; Stream L108-1		
Evaluator: Lindsey Shortt	**County:** Pittsylvania County		**Lat/Long:** 36.7874320532, -79.38147379		
Total Points: 34.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**				
A. Geomorphology Subtotal = 17.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		3
[a] artificial ditches are not rated; see discussions in manual					
B. Hydrology Subtotal = 8					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3
C. Biology Subtotal = 8.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 20

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 15, 2024	**Data Point:** L111-A; Stream L111-1
Evaluator: Michaela Moss, Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.7464306533333, -79.4303082466667
Total Points: 28.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Intermittent**	

A. Geomorphology Subtotal = 12.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9.5					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	3
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 16

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 16, 2024	**Data Point:** L112-A; Stream L112-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8085736316667, -79.364004956667
Total Points: 11 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 5					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 21

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 16, 2024	**Data Point:** L113-A; Stream L113-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8118596283333, -79.35974831
Total Points: 24.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Intermittent**	

A. Geomorphology Subtotal = 10.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 22

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 23, 2024	**Data Point:** L114-A; Stream L114-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8370935633, -79.335363891
Total Points: 26.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Intermittent**	

A. Geomorphology Subtotal = 12.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 16, 2024	**Data Point:** L115-A; Stream L115-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8155745483333, -79.3560893383333
Total Points: 34.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 18	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	3
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 9.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	1
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 22

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 16, 2024	**Data Point:** L116-A; Stream L116-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.815552163, -79.3561403910999
Total Points: 23 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 10	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 6					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	1
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 22

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 16, 2024	**Data Point:** L117-A; Stream L117-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8156840612646, -79.3562338419677
Total Points: 10 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 4.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 22

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 16, 2024	**Data Point:** L118-A; Stream L118-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8161021233333, -79.3534442366667
Total Points: 12.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 5.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 3					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 22

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 17, 2024	**Data Point:** L119-A; Stream L119-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8217063883333, -79.3501715283333
Total Points: 27 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 10.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 22

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 17, 2024	**Data Point:** L120-A; Stream L120-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8211334683682, -79.3493257011804
Total Points: 22.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Intermittent**	

A. Geomorphology Subtotal = 10.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 6.5					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5.5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 22

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 20, 2024	**Data Point:** L122-A; Stream L122-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8240187440038, -79.3471635201617
Total Points: 22.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Intermittent**	

A. Geomorphology Subtotal = 9	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 6.5					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheets 22 and 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 20, 2024		**Data Point:** L123-A; Stream L123-1		
Evaluator: Lindsey Shortt	**County:** Pittsylvania County		**Lat/Long:** 36.8239401216667, -79.3473272966667		
Total Points: 26.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Intermittent**				
A. Geomorphology Subtotal = 11.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0
[a] artificial ditches are not rated; see discussions in manual					
B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3
C. Biology Subtotal = 6.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 21, 2024	**Data Point:** L124-A; Stream L124-1
Evaluator: Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.5565258850499, -79.617910297538
Total Points: 26.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 11	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 3

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 20, 2024	**Data Point:** L124-B; Stream L124-2
Evaluator: Lindsey Shortt, Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.5563367, -79.6178398
Total Points: 32.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 16	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 3

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 20, 2024	**Data Point:** L125-A; Stream L125-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.824375, -79.3466633
Total Points: 31 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 15	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 20, 2024	**Data Point:** L126-A; Stream L126-1
Evaluator: Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.5869821236, -79.587097690
Total Points: 21.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 7.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 5

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: February 24, 2025	**Data Point:** L126-B; Stream L126-2
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.5872513897, -79.587452521
Total Points: 35.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Perennial	

A. Geomorphology Subtotal = 19	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	2
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 5

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: February 26, 2025	**Data Point:** L127-A; Stream L127-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.5870976438, -79.587042183
Total Points: 34.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 15	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 11					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	2
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.75					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	1
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 5

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 31, 2024	**Data Point:** L128-A; Stream L128-1
Evaluator: Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.5859543763974, -79.588864075836
Total Points: 14 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 8	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 5

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 31, 2024	**Data Point:** L129-A; Stream L129-1
Evaluator: Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.5856025008455, -79.588148277207
Total Points: 19.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 8	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.5					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 5

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 20, 2024 and January 14, 2025	**Data Point:** L130-A; Stream L130-1
Evaluator: Lindsey Shortt, Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.5563437035104, -79.617964867261
Total Points: 24.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Intermittent**	

A. Geomorphology Subtotal = 9	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7.5					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.25					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	1
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 3. This reach was updated as a result of additional fieldwork conducted on January 14, 2025.

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: November 19, 2024	**Data Point:** L133-A; Stream L133-2
Evaluator: Jen Feese, Mike Smith, Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.5584099471, -79.617104521599
Total Points: 13.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 6	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	0
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 5.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 3. Although flow was observed during the May 2024 delineation fieldwork, no flow was observed during the November 19, 2024, DEQ SSWD site visit. Per DEQ's request, a re-evaluation of this stream reach was conducted and resulted in lower scores and an ephemeral designation.

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: November 19, 2024	**Data Point:** L133-B; Stream L133-1
Evaluator: Jen Feese, Mike Smith, Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.557778628856, -79.61765951663
Total Points: 20.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 10	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 4					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	0
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 3. Although flow was observed during the May 2024 delineation fieldwork, no flow was observed during the November 19, 2024, DEQ SSWD site visit. Per DEQ's request, a re-evaluation of this stream reach was conducted and resulted in lower scores and an intermittent designation.

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 21, 2024	**Data Point:** L134-A; Stream L134-1
Evaluator: Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.8363220513925, -79.3336472338825
Total Points: 27.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 13.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5.5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 21, 2024	**Data Point:** L136-A; Stream L136-1
Evaluator: Lindsey Shortt, Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.5577062789038, -79.617729636001
Total Points: 9 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Ephemeral**	

A. Geomorphology Subtotal = 2.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	0
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 5					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 3

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 21, 2024	**Data Point:** L137-A; Stream L137-2
Evaluator: Lindsey Shortt, Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.5572265566838, -79.616479789734
Total Points: 23.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 7	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.75					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 3

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 21, 2024	**Data Point:** L137-B; Stream L137-1
Evaluator: Lindsey Shortt, Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.5570091799, -79.616512704
Total Points: 33.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 17	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	1.5
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 3

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 21, 2024	**Data Point:** L138-A; Stream L138-2
Evaluator: Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.8358074183333, -79.33400346
Total Points: 28 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 14	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7.5					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23.

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: November 20, 2024	**Data Point:** L138-B; Stream L138-1
Evaluator: Jen Feese, Mike Smith	**County:** Pittsylvania County	**Lat/Long:** 36.8356192492, -79.334154384
Total Points: 11.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23. During the DEQ SSWD site visit on November 20, 2024, DEQ determined that this portion of Stream L138 was ephemeral.

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 21, 2024	**Data Point:** L139-A; Stream L139-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.5658171369952, -79.607535994418
Total Points: 31.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Perennial**	

A. Geomorphology Subtotal = 15	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 6					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 10.25					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 3

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 21, 2024	**Data Point:** L140-A; Stream L140-1
Evaluator: Lindsey Shortt, Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.560548, -79.612656
Total Points: 25.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Intermittent**	

A. Geomorphology Subtotal = 9	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 3

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 21, 2024	**Data Point:** L141-A; Stream L141-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.5655945116255, -79.607868336310
Total Points: 11.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 6	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 3					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 3

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 21, 2024	**Data Point:** L142-A; Stream L142-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.567182, -79.605992
Total Points: 33.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 15	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 9.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 3

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 22, 2024	**Data Point:** L144-A; Stream L144-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.570107, -79.603047
Total Points: 23.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Intermittent**	

A. Geomorphology Subtotal = 8	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 4

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 22, 2024	**Data Point:** L145-A; Stream L145-1
Evaluator: Linsday Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.7576558812, -79.420310611
Total Points: 15 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 7.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 6					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 17

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 22, 2024	**Data Point:** L148-A; Stream L148-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.5740621067662, -79.599288574078
Total Points: 10.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 3	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	0
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 6					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 4

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 22, 2024	**Data Point:** L149-A; Stream L149-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.5736660291192, -79.599937833990
Total Points: 12 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 4	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 6					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 4

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: June 4, 2024	**Data Point:** L150-A; Stream L150-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.576384340624, -79.59723800930
Total Points: 22.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Intermittent**	

A. Geomorphology Subtotal = 10	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 6.5					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 4

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 22, 2024; November 20, 2024	**Data Point:** L151-A; Stream L151-1
Evaluator: Kyle Zinn, Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.5773833882821, -79.596457677471
Total Points: 15 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Ephemeral**	

A. Geomorphology Subtotal = 7.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 3					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4.5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 4 Per the November 20, 2024 DEQ SSWD site visit, DEQ determined that all of Stream Reach 151 was ephemeral. This stream assessment was updated during the November 2024 fieldwork.

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 23, 2024	**Data Point:** L152-A; Stream L152-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8340140774223, -79.3328771834001
Total Points: 10.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 3.5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	1
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 23, 2024	**Data Point:** L153-A; Stream L153-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.837176, -79.336913
Total Points: 33.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 16	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.75					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 23, 2024	**Data Point:** L154-A; Stream L154-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.834944878407, -79.3328229318172
Total Points: 23 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 12	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 6					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 23, 2024	**Data Point:** L154-B; Stream L154-2
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8353003695999, -79.3327561149999
Total Points: 33.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Perennial**	

A. Geomorphology Subtotal = 18	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 23, 2024	**Data Point:** L155-A; Stream L155-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8344746079725, -79.3329281553377
Total Points: 24.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 8.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 23, 2024	**Data Point:** L156-A; Stream L156-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8346830100561, -79.3329414239001
Total Points: 12 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 6.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 23, 2024	**Data Point:** L157-A; Stream L157-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8361042882614, -79.3350361278423
Total Points: 11 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 3.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	0
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 6					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 23, 2024	**Data Point:** L158-A; Stream L158-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8366537067742, -79.3348394321619
Total Points: 24.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 9	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 23, 2024	**Data Point:** L159-A; Stream L159-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8362492454999, -79.3373335073
Total Points: 34.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Perennial**	

A. Geomorphology Subtotal = 17.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	3
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.25					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: June 24, 2023	**Data Point:** L160-A; Stream L160-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8365741171454, -79.336135268016
Total Points: 10.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 4.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 24, 2024	**Data Point:** L161-A; Stream L161-1
Evaluator: Michaela Moss	**County:** Pittsylvania County	**Lat/Long:** 36.8350164616667, -79.337962025
Total Points: 17 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 11	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 3					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 3					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	1
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 30, 2024	**Data Point:** L162-A; Stream L162-1
Evaluator: Michaela Moss, Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.7415654566667, -79.4340221566667
Total Points: 40.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 16.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	3
6. Depositional bars or benches	0	1	2	3	3
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 13					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	3
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	1.5
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 11					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	1
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	1.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				1.5

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 16

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 30, 2024	**Data Point:** L163-A; Stream L163-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8307099097192, -79.338266126514
Total Points: 24.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Intermittent**	

A. Geomorphology Subtotal = 8.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.75					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 31, 2024	**Data Point:** L164-A; Stream L164-2
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.83130786, -79.339490705
Total Points: 20.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Intermittent**	

A. Geomorphology Subtotal = 9	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 6.5					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 31, 2024	**Data Point:** L164-B; Stream L164-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8305816266667, -79.3419725883333
Total Points: 35.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 18	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 8.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.75					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 30, 2024	**Data Point:** L165-A; Stream L165-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8315618408468, -79.3400456315214
Total Points: 11.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Ephemeral	

A. Geomorphology Subtotal = 6	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 3					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: May 31, 2024	**Data Point:** L166-A; Stream L166-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.8303808189343, -79.3420803853858
Total Points: 23 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** Intermittent	

A. Geomorphology Subtotal = 12	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	2
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 6					
12. Presence of Baseflow	0	1	2	3	1
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 23

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: August 13, 2024	**Data Point:** L167-A; Stream L167-1
Evaluator: Kyle Zinn, Mike Smith	**County:** Pittsylvania County	**Lat/Long:** 36.772269866667, -79.39589436541
Total Points: 28.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Intermittent**	

A. Geomorphology Subtotal = 13.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0.5
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 19

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: August 19, 2024	**Data Point:** L169-A; Stream L169-1
Evaluator: Lindsey Shortt, Kyle Zinn	**County:** Pittsylvania County	**Lat/Long**: 36.784765354132, -79.380211383333
Total Points: 9.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Ephemeral**	

A. Geomorphology Subtotal = 6	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 2					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	1
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 20.

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: October 8, 2024	**Data Point:** L171-A; Stream L171-1
Evaluator: Kyle Zinn, Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.742968, -79.435464
Total Points: 9.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Ephemeral**	

A. Geomorphology Subtotal = 5.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	0
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	0.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 3					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	2
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 16

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: October 8, 2024		**Data Point:** L171-B; Stream L171-2		
Evaluator: Kyle Zinn, Lindsey Shortt	**County:** Pittsylvania County		**Lat/Long:** 36.742741, -79.435230		
Total Points: 32 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**				
A. Geomorphology Subtotal = 12.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	0
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	0
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		0
[a] artificial ditches are not rated; see discussions in manual					
B. Hydrology Subtotal = 11					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	3
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	1
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3
C. Biology Subtotal = 8.5					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	1
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				1.5

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 16

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: October 8, 2024	**Data Point:** L173-A; Stream L173-1
Evaluator: Kyle Zinn, Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.742758, -79.435451
Total Points: 12 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Ephemeral**	

A. Geomorphology Subtotal = 8.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1.5
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 1.5					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	0.5
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 2					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	1
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 16

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: October 8, 2024	**Data Point:** L173-B; Stream L173-2
Evaluator: Kyle Zinn, Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.742587, -79.435305
Total Points: 37 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 16	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 12.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	3
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	1.5
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.5					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				1.5

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 16

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: October 9, 2024	**Data Point:** L174-A; Stream L174-1
Evaluator: Lindsey Shortt, Kyle Zinn	**County:** Pittsylvania County	**Lat/Long:** 36.604842, -79.562934
Total Points: 33.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 16	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	2
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.25					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 6

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: October 9, 2024	**Data Point:** L175-A; Stream L175-1
Evaluator: Lindsey Shortt, Kyle Zinn	**County:** Pittsylvania County	Lat/Long: 36.605295, -79.564022
Total Points: 36.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 18	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	3
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 10					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	2
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.75					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Algae	0	0.5	1	1.5	0.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 6

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: October 15, 2024	**Data Point:** L176-A; L176-1
Evaluator: Mike Smith, Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.78805567, -79.3821944
Total Points: 14 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Ephemeral**	

A. Geomorphology Subtotal = 6	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	0
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	0
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0
10. Natural valley	0	0.5	1	1.5	0
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 2					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0

C. Biology Subtotal = 6					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 20

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: October 15, 2024	**Data Point:** L177-A; Stream L177-1
Evaluator: Mike Smith, Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.7876811, -79.3799682
Total Points: 37.75 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 19	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 10					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 8.75					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	2
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 20

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: October 15, 2024	**Data Point:** L178-A; Stream L178-1
Evaluator: Mike Smith, Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.7873190, -79.3802733
Total Points: 36.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 19	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	3
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0.5
11. Second or greater order channel	No = 0		Yes = 3		3

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9.5					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	2
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	1
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 7.75					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	1
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 20

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: October 15, 2024	**Data Point:** L179-A; Stream L179-1
Evaluator: Lindsey Shortt	**County:** Pittsylvania County	**Lat/Long:** 36.7874925, -79.3764960
Total Points: 22 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination:** **Intermittent**	

A. Geomorphology Subtotal = 9	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a] Continuity of channel bed and bank	0	1	2	3	2
2. Sinuosity of channel along thalweg	0	1	2	3	0
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	1
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	1
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	0
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7					
12. Presence of Baseflow	0	1	2	3	2
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	0.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6					
18. Fibrous roots in streambed	3	2	1	0	2
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	1
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheet 20

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: October 29, 2024		**Data Point:** L180-A; Stream L180-2		
Evaluator: Mike Smith	**County:** Pittsylvania County		**Lat/Long:** 36.7816532, -79.3892398		
Total Points: 13.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Ephemeral**				
A. Geomorphology Subtotal = 6.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	1
2. Sinuosity of channel along thalweg	0	1	2	3	1
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	0
4. Particle size of stream substrate	0	1	2	3	1
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	0
7. Recent alluvial deposits	0	1	2	3	2
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 3					
12. Presence of Baseflow	0	1	2	3	0
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1
15. Sediment on plants or debris	0	0.5	1	1.5	1.5
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		0
C. Biology Subtotal = 4					
18. Fibrous roots in streambed	3	2	1	0	1
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheets 19 and 20

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: October 30, 2024	**Data Point:** L180-B; Stream L180-1
Evaluator: Mike Smith	**County:** Pittsylvania County	**Lat/Long:** 36.7814406, -79.3891340
Total Points: 31.5 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 16.5	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	2
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	2
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	1
6. Depositional bars or benches	0	1	2	3	2
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	3
9. Grade control	0	0.5	1	1.5	0.5
10. Natural valley	0	0.5	1	1.5	0
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 9					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	1
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheets 19 and 20

NC DWQ Stream Identification Form Version 4.11

Project/Site: Southeast Supply Enhancement Project (SSEP)	**Date**: October 30, 2024	**Data Point:** L181-A; Stream L181-1
Evaluator: Mike Smith, Jen Feese	**County:** Pittsylvania County	**Lat/Long:** 36.7814881, -79.388095
Total Points: 31.25 Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	**Stream Determination: Perennial**	

A. Geomorphology Subtotal = 17	**Absent**	**Weak**	**Moderate**	**Strong**	Score
1[a]. Continuity of channel bed and bank	0	1	2	3	3
2. Sinuosity of channel along thalweg	0	1	2	3	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	3
4. Particle size of stream substrate	0	1	2	3	2
5. Active/relict floodplain	0	1	2	3	2
6. Depositional bars or benches	0	1	2	3	1
7. Recent alluvial deposits	0	1	2	3	1
8. Headcuts	0	1	2	3	0
9. Grade control	0	0.5	1	1.5	1
10. Natural valley	0	0.5	1	1.5	1
11. Second or greater order channel	No = 0		Yes = 3		0

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology Subtotal = 7.5					
12. Presence of Baseflow	0	1	2	3	3
13. Iron oxidizing bacteria	0	1	2	3	0
14. Leaf litter	1.5	1	0.5	0	1.5
15. Sediment on plants or debris	0	0.5	1	1.5	0
16. Organic debris lines or piles	0	0.5	1	1.5	0
17. Soil-based evidence of high water table?	No = 0		Yes = 3		3

C. Biology Subtotal = 6.75					
18. Fibrous roots in streambed	3	2	1	0	3
19. Rooted upland plants in streambed	3	2	1	0	3
20. Macrobenthos (note diversity and abundance)	0	1	2	3	0
21. Aquatic Mollusks	0	1	2	3	0
22. Fish	0	0.5	1	1.5	0
23. Crayfish	0	0.5	1	1.5	0
24. Amphibians	0	0.5	1	1.5	0
25. Algae	0	0.5	1	1.5	0
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0				0.75

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: Attachment I; Sheets 19 and 20

EXHIBIT 13 - DATA POINTS

DATA POINT						
Flag ID	**Type**	**Source**	**Latitude**	**Longitude**	**Nearest Milepost**	**Sheet #**
DP-1	Upland	William's Survey	36.5443	-79.6311	1387.1	2
DP-2	Wetland	William's Survey	36.5443	-79.6311	1387.1	2
DP-3	Upland	William's Survey	36.5427	-79.6321	1387	2
DP-4	Wetland	William's Survey	36.5422	-79.6326	1386.9	2
DP-5	Wetland	William's Survey	36.5427	-79.6324	1387	2
DP-6	Wetland	William's Survey	36.5436	-79.6320	1387	2
DP-7	Upland	William's Survey	36.5463	-79.6286	1387.3	2
DP-8	Wetland	William's Survey	36.5463	-79.6285	1387.3	2
DP-9	Wetland	William's Survey	36.5512	-79.6181	1387.9	2
DP-10	Upland	William's Survey	36.5512	-79.6182	1387.9	2
DP-11	Wetland	William's Survey	36.5511	-79.6137	M-0402 1388.20	3
DP-12	Upland	William's Survey	36.5510	-79.6138	M-0402 1388.20	3
DP-13	Wetland	William's Survey	36.5508	-79.6139	M-0402 1388.20	3
DP-14	Wetland	William's Survey	36.5508	-79.6142	M-0402 1388.20	3
DP-15	Wetland	William's Survey	36.5510	-79.6143	M-0402 1388.20	3
DP-16	Upland	William's Survey	36.5511	-79.6146	M-0402 1388.20	3
DP-17	Wetland	William's Survey	36.5509	-79.6153	1388	3
DP-18	Upland	William's Survey	36.5510	-79.6152	1388	3
DP-19	Wetland	William's Survey	36.6632	-79.5128	1397.8	10
DP-20	Upland	William's Survey	36.6637	-79.5112	1397.9	10
DP-21	Upland	William's Survey	36.6634	-79.5127	1397.8	10
DP-22	Wetland	William's Survey	36.6628	-79.5122	1397.8	10
DP-23	Upland	William's Survey	36.6627	-79.5122	1397.8	10
DP-24	Wetland	William's Survey	36.6632	-79.5120	1397.8	10
DP-25	Upland	William's Survey	36.6632	-79.5120	1397.8	10
DP-26	Wetland	William's Survey	36.6603	-79.5157	1397.5	10
DP-27	Wetland	William's Survey	36.6599	-79.5164	1397.4	10
DP-28	Upland	William's Survey	36.6599	-79.5165	1397.4	10
DP-29	Wetland	William's Survey	36.6577	-79.5175	1397.3	10
DP-30	Wetland	William's Survey	36.6575	-79.5188	1397.2	10
DP-31	Wetland	William's Survey	36.7193	-79.4573	1402.7	14
DP-32	Upland	William's Survey	36.7193	-79.4573	1402.7	14
DP-33	Wetland	William's Survey	36.7187	-79.4569	1402.7	14
DP-34	Upland	William's Survey	36.7188	-79.4570	1402.7	14
DP-35	Wetland	William's Survey	36.7200	-79.4574	1402.8	14
DP-36	Wetland	William's Survey	36.7191	-79.4571	1402.7	14
DP-37	Upland	William's Survey	36.7196	-79.4575	1402.7	14
DP-38	Wetland	William's Survey	36.7228	-79.4549	1403	14
DP-39	Wetland	William's Survey	36.7224	-79.4548	1403	14
DP-40	Upland	William's Survey	36.7221	-79.4547	1403	14
DP-41	Wetland	William's Survey	36.7238	-79.4538	1403.1	14

DP-42	Upland	William's Survey	36.7236	-79.4536	1403.1	14
DP-43	Wetland	William's Survey	36.7235	-79.4537	1403.1	14
DP-44	Wetland	William's Survey	36.7292	-79.4468	1403.6	15
DP-45	Wetland	William's Survey	36.7291	-79.4458	1403.7	15
DP-46	Upland	William's Survey	36.7290	-79.4462	1403.6	15
DP-47	Wetland	William's Survey	36.7291	-79.4461	1403.7	15
DP-48	Wetland	William's Survey	36.7367	-79.4388	1404.3	15
DP-49	Upland	William's Survey	36.7367	-79.4390	1404.3	15
DP-50	Wetland	William's Survey	36.7348	-79.4407	1404.1	15
DP-51	Upland	William's Survey	36.7346	-79.4408	1404.1	15
DP-52	Wetland	William's Survey	36.7348	-79.4415	1404.1	15
DP-53	Wetland	William's Survey	36.7355	-79.4411	1404.2	15
DP-54	Upland	William's Survey	36.6575	-79.5187	1397.2	10
DP-55	Wetland	William's Survey	36.5529	-79.6225	1387.9	2
DP-56	Upland	William's Survey	36.5528	-79.6225	1387.9	2
DP-57	Upland	Ecobot	36.7192	-79.4570	1402.7	14
DP-58	Upland	William's Survey	36.6578	-79.5177	1397.3	10
DP-59	Wetland	William's Survey	36.6324	-79.5440	1395	8
DP-60	Upland	William's Survey	36.6326	-79.5440	1395	8
DP-61	Wetland	William's Survey	36.6361	-79.5411	1395.3	8
DP-62	Upland	William's Survey	36.6361	-79.5412	1395.3	8
DP-63	Wetland	William's Survey	36.6328	-79.5433	1395	8
DP-64	Upland	William's Survey	36.6328	-79.5434	1395	8
DP-65	Wetland	William's Survey	36.5873	-79.5866	1391	5
DP-66	Upland	William's Survey	36.5875	-79.5865	1391.1	5
DP-67	Wetland	William's Survey	36.5888	-79.5851	1391.2	5
DP-68	Upland	William's Survey	36.5889	-79.5853	1391.2	5
DP-69	Wetland	William's Survey	36.5890	-79.5856	1391.2	5
DP-70	Wetland	William's Survey	36.5904	-79.5835	1391.3	5
DP-71	Upland	William's Survey	36.5905	-79.5836	1391.3	5
DP-72	Upland	William's Survey	36.5939	-79.5798	1391.6	5
DP-73	Wetland	William's Survey	36.5937	-79.5798	1391.6	5
DP-74	Wetland	William's Survey	36.6005	-79.5633	1392.5	6
DP-75	Wetland	William's Survey	36.6007	-79.5625	1392.6	6
DP-76	Upland	William's Survey	36.6006	-79.5626	1392.6	6
DP-77	Upland	William's Survey	36.6068	-79.5684	1392.7	6
DP-78	Wetland	William's Survey	36.6069	-79.5684	1392.7	6
DP-79	Wetland	William's Survey	36.6062	-79.5681	1392.7	6
DP-80	Wetland	William's Survey	36.6060	-79.5681	1392.7	6
DP-81	Upland	William's Survey	36.6065	-79.5682	1392.7	6
DP-82	Wetland	William's Survey	36.6029	-79.5673	1392.5	6
DP-83	Upland	William's Survey	36.6028	-79.5673	1392.5	6
DP-84	Wetland	William's Survey	36.5998	-79.5651	1392.4	6
DP-85	Upland	William's Survey	36.5999	-79.5651	1392.4	6

DP-86	Upland	William's Survey	36.6081	-79.5674	1392.8	6
DP-87	Wetland	William's Survey	36.6039	-79.5710	1392.5	6
DP-88	Upland	William's Survey	36.6040	-79.5710	1392.5	6
DP-89	Wetland	William's Survey	36.6035	-79.5706	1392.5	6
DP-90	Upland	William's Survey	36.6035	-79.5707	1392.5	6
DP-91	Wetland	William's Survey	36.5988	-79.5744	1392.1	6
DP-92	Upland	William's Survey	36.5989	-79.5744	1392.1	6
DP-93	Wetland	William's Survey	36.5987	-79.5742	1392.1	6
DP-94	Wetland	William's Survey	36.6019	-79.5669	1392.5	6
DP-95	Upland	William's Survey	36.6018	-79.5668	1392.5	6
DP-96	Upland	Ecobot	36.5960	-79.5772	1391.8	5
DP-97	Wetland	William's Survey	36.5961	-79.5773	1391.8	5
DP-98	Wetland	Ecobot	36.5958	-79.5771	1391.8	5
DP-99	Upland	William's Survey	36.5953	-79.5789	1391.7	5
DP-100	Wetland	William's Survey	36.6137	-79.5629	M-0402 1393.30	7
DP-101	Upland	William's Survey	36.6138	-79.5629	M-0402 1393.30	7
DP-102	Upland	William's Survey	36.6139	-79.5620	M-0402 1393.30	7
DP-103	Upland	William's Survey	36.6139	-79.5620	M-0402 1393.30	7
DP-104	Wetland	William's Survey	36.6143	-79.5615	M-0402 1393.40	7
DP-105	Upland	William's Survey	36.6143	-79.5616	M-0402 1393.40	7
DP-106	Wetland	William's Survey	36.6173	-79.5597	M-0402 1393.60	7
DP-107	Upland	William's Survey	36.6172	-79.5598	M-0402 1393.60	7
DP-108	Wetland	William's Survey	36.6234	-79.5531	1394.2	7
DP-109	Upland	William's Survey	36.6234	-79.5531	1394.2	7
DP-110	Upland	William's Survey	36.6257	-79.5507	1394.4	7
DP-111	Upland	William's Survey	36.6261	-79.5507	1394.4	7
DP-112	Upland	William's Survey	36.6256	-79.5505	1394.4	7
DP-113	Wetland	William's Survey	36.6280	-79.5483	1394.6	8
DP-114	Upland	William's Survey	36.6281	-79.5482	1394.6	8
DP-115	Wetland	William's Survey	36.6286	-79.5486	1394.6	8
DP-116	Wetland	William's Survey	36.6371	-79.5380	1395.4	8
DP-117	Upland	William's Survey	36.6372	-79.5379	1395.4	8
DP-118	Wetland	William's Survey	36.6418	-79.5338	1395.8	9
DP-119	Upland	William's Survey	36.6418	-79.5338	1395.8	9
DP-120	Upland	William's Survey	36.7171	-79.4597	1402.5	14
DP-121	Wetland	William's Survey	36.7175	-79.4599	1402.5	14
DP-122	Wetland	William's Survey	36.6430	-79.5323	1396	9
DP-123	Upland	William's Survey	36.6429	-79.5319	1396	9
DP-124	Wetland	William's Survey	36.6427	-79.5320	1395.9	9
DP-125	Upland	William's Survey	36.7125	-79.4645	1402.1	14
DP-126	Wetland	William's Survey	36.7075	-79.4682	1401.7	13
DP-127	Upland	William's Survey	36.7075	-79.4683	1401.7	13
DP-128	Upland	William's Survey	36.6521	-79.5224	1396.8	9
DP-129	Upland	William's Survey	36.6521	-79.5223	1396.8	9

DP-130	Upland	William's Survey	36.6520	-79.5223	1396.8	9
DP-131	Wetland	William's Survey	36.6518	-79.5235	1396.8	9
DP-132	Upland	William's Survey	36.6518	-79.5235	1396.8	9
DP-133	Wetland	William's Survey	36.7063	-79.4701	1401.6	13
DP-134	Wetland	William's Survey	36.7061	-79.4699	1401.6	13
DP-135	Upland	William's Survey	36.7061	-79.4698	1401.6	13
DP-136	Wetland	William's Survey	36.7018	-79.4735	1401.2	13
DP-137	Wetland	William's Survey	36.7024	-79.4738	1401.2	13
DP-138	Upland	William's Survey	36.7021	-79.4735	1401.2	13
DP-139	Upland	William's Survey	36.6997	-79.4770	1401	13
DP-140	Wetland	William's Survey	36.6988	-79.4768	1400.9	13
DP-141	Upland	William's Survey	36.6989	-79.4769	1400.9	13
DP-142	Upland	William's Survey	36.6916	-79.4846	1400.3	12
DP-143	Wetland	William's Survey	36.6897	-79.4866	1400.1	12
DP-144	Upland	William's Survey	36.6895	-79.4866	1400.1	12
DP-145	Upland	William's Survey	36.7707	-79.4030	M-0307 1407.50	18
DP-146	Upland	William's Survey	36.7737	-79.4035	1407.4	18
DP-147	Wetland	William's Survey	36.7735	-79.4035	1407.4	18
DP-148	Wetland	William's Survey	36.7735	-79.4023	M-0307 1407.60	18
DP-149	Upland	William's Survey	36.7735	-79.4023	M-0307 1407.60	18
DP-150	Wetland	William's Survey	36.7733	-79.4007	M-0307 1407.60	18
DP-151	Upland	William's Survey	36.7733	-79.4007	M-0307 1407.60	18
DP-152	Upland	William's Survey	36.7660	-79.4096	1406.9	17
DP-153	Wetland	William's Survey	36.7684	-79.4085	1407.1	17
DP-154	Wetland	William's Survey	36.7734	-79.3985	M-0307 1407.70	18
DP-155	Wetland	William's Survey	36.7734	-79.3988	M-0307 1407.70	18
DP-156	Upland	William's Survey	36.7734	-79.3989	M-0307 1407.70	18
DP-157	Upland	William's Survey	36.7686	-79.4086	1407.1	17
DP-158	Upland	William's Survey	36.7632	-79.4144	1406.6	17
DP-159	Wetland	William's Survey	36.7627	-79.4150	1406.5	17
DP-160	Upland	William's Survey	36.7628	-79.4149	1406.6	17
DP-161	Upland	William's Survey	36.7628	-79.4147	1406.6	17
DP-162	Upland	William's Survey	36.7623	-79.4145	1406.5	17
DP-163	Wetland	William's Survey	36.7745	-79.4007	M-0307 1407.70	18
DP-164	Upland	William's Survey	36.7744	-79.4003	M-0307 1407.70	18
DP-165	Wetland	William's Survey	36.7606	-79.4168	1406.4	17
DP-166	Wetland	William's Survey	36.7608	-79.4165	1406.4	17
DP-167	Upland	William's Survey	36.7604	-79.4171	1406.3	17
DP-168	Wetland	William's Survey	36.7602	-79.4176	1406.3	17
DP-169	Upland	William's Survey	36.7603	-79.4177	1406.3	17
DP-170	Wetland	William's Survey	36.7750	-79.3991	M-0307 1407.70	18
DP-171	Wetland	William's Survey	36.7744	-79.3985	M-0307 1407.70	18
DP-172	Upland	William's Survey	36.7743	-79.3994	M-0307 1407.70	18
DP-173	Wetland	William's Survey	36.7598	-79.4182	1406.3	17

DP-174	Upland	William's Survey	36.7598	-79.4185	1406.3	17
DP-175	Upland	William's Survey	36.7602	-79.4211	1406.2	17
DP-176	Wetland	William's Survey	36.7595	-79.4177	1406.3	17
DP-177	Upland	William's Survey	36.7594	-79.4175	1406.3	17
DP-178	Wetland	William's Survey	36.7597	-79.4178	1406.3	17
DP-179	Wetland	William's Survey	36.7534	-79.4245	1405.7	16
DP-180	Upland	William's Survey	36.7532	-79.4242	1405.7	16
DP-181	Wetland	William's Survey	36.6684	-79.5081	1398.2	10
DP-182	Upland	William's Survey	36.6684	-79.5080	1398.2	10
DP-183	Wetland	William's Survey	36.7887	-79.3879	M-0437 1409.60	20
DP-184	Upland	William's Survey	36.7885	-79.3881	M-0437 1409.50	20
DP-185	Wetland	William's Survey	36.6683	-79.5074	1398.2	10,11
DP-186	Upland	William's Survey	36.6682	-79.5074	1398.2	10
DP-187	Wetland	William's Survey	36.6735	-79.5020	1398.7	11
DP-188	Upland	William's Survey	36.6739	-79.5023	1398.7	11
DP-189	Upland	William's Survey	36.6736	-79.5020	1398.7	11
DP-190	Wetland	William's Survey	36.6737	-79.5014	1398.7	11
DP-191	Upland	William's Survey	36.6825	-79.4932	1399.5	11,12
DP-192	Wetland	William's Survey	36.7872	-79.3810	M-0437 1409.40	20
DP-193	Upland	William's Survey	36.7872	-79.3809	M-0437 1409.40	20
DP-194	Wetland	Ecobot	36.8067	-79.3659	1410.7	21
DP-195	Wetland	William's Survey	36.8035	-79.3691	1410.4	21
DP-196	Upland	William's Survey	36.8034	-79.3691	1410.4	21
DP-197	Wetland	William's Survey	36.7462	-79.4301	1405.1	16
DP-198	Upland	William's Survey	36.7462	-79.4302	1405.1	16
DP-199	Wetland	William's Survey	36.8086	-79.3641	1410.9	21
DP-200	Upland	William's Survey	36.8087	-79.3634	1410.9	21
DP-201	Wetland	William's Survey	36.8088	-79.3633	1410.9	21
DP-202	Wetland	William's Survey	36.8116	-79.3602	1411.2	22
DP-203	Upland	William's Survey	36.8118	-79.3603	1411.2	22
DP-204	Wetland	Ecobot	36.8107	-79.3611	1411.1	22
DP-205	Wetland	William's Survey	36.8164	-79.3543	M-0402 1411.70	22
DP-206	Upland	William's Survey	36.8164	-79.3545	M-0402 1411.70	22
DP-207	Wetland	William's Survey	36.8203	-79.3511	M-0402 1412.00	22
DP-208	Upland	William's Survey	36.8202	-79.3511	M-0402 1412.00	22
DP-209	Wetland	William's Survey	36.5870	-79.5870	1391	5
DP-210	Upland	William's Survey	36.5871	-79.5871	1391	5
DP-211	Wetland	William's Survey	36.5845	-79.5898	1390.8	5
DP-212	Upland	William's Survey	36.5843	-79.5899	1390.8	5
DP-213	Wetland	Ecobot	36.5846	-79.5902	1390.8	5
DP-214	Upland	William's Survey	36.5824	-79.5918	M-0402 1390.60	5
DP-215	Upland	Ecobot	36.5825	-79.5919	M-0402 1390.60	4,5
DP-216	Wetland	William's Survey	36.8240	-79.3473	M-0312 1412.40	23
DP-217	Upland	William's Survey	36.8239	-79.3474	M-0312 1412.40	23

DP-218	Wetland	William's Survey	36.8239	-79.3473	M-0312 1412.40	23
DP-219	Upland	William's Survey	36.8362	-79.3336	1413.29	23
DP-220	Wetland	William's Survey	36.8361	-79.3337	1413.29	23
DP-221	Upland	William's Survey	36.5579	-79.6167	M-0402 1388.40	3
DP-222	Wetland	William's Survey	36.5584	-79.6162	M-0402 1388.40	3
DP-223	Wetland	William's Survey	36.5564	-79.6187	M-0402 1388.20	3
DP-224	Upland	William's Survey	36.5570	-79.6180	M-0402 1388.30	3
DP-225	Wetland	William's Survey	36.5613	-79.6131	1388.7	3
DP-226	Upland	William's Survey	36.5613	-79.6130	1388.7	3
DP-227	Wetland	William's Survey	36.5694	-79.6042	1389.4	4
DP-228	Upland	William's Survey	36.5694	-79.6044	1389.4	4
DP-229	Upland	William's Survey	36.5661	-79.6015	1389.3	4
DP-230	Wetland	William's Survey	36.5663	-79.6009	1389.4	4
DP-231	Upland	William's Survey	36.8353	-79.3342	1413.29	23
DP-232	Wetland	William's Survey	36.8351	-79.3344	1413.29	23
DP-233	Upland	William's Survey	36.8349	-79.3347	1413.29	23
DP-234	Wetland	William's Survey	36.8348	-79.3347	1413.29	23
DP-235	Wetland	William's Survey	36.5724	-79.6019	1389.7	4
DP-236	Upland	William's Survey	36.5724	-79.6018	1389.7	4
DP-237	Wetland	William's Survey	36.7720	-79.3952	M-0307 1407.90	19
DP-238	Upland	William's Survey	36.7720	-79.3952	M-0307 1407.90	19
DP-239	Upland	William's Survey	36.8360	-79.3342	1413.29	23
DP-240	Upland	William's Survey	36.5758	-79.5985	1390	4
DP-241	Wetland	William's Survey	36.5756	-79.5986	1389.9	4
DP-242	Wetland	William's Survey	36.5762	-79.5972	1390	4
DP-243	Upland	Ecobot	36.5762	-79.5974	1390	4
DP-244	Wetland	William's Survey	36.5767	-79.5974	1390.1	4
DP-245	Upland	William's Survey	36.8359	-79.3339	1413.29	23
DP-246	Wetland	William's Survey	36.8357	-79.3340	1413.29	23
DP-247	Upland	Ecobot	36.8355	-79.3341	1413.29	23
DP-248	Wetland	William's Survey	36.8358	-79.3326	1413.29	23
DP-249	Upland	William's Survey	36.8358	-79.3325	1413.29	23
DP-250	Wetland	William's Survey	36.8357	-79.3326	1413.29	23
DP-251	Wetland	William's Survey	36.8366	-79.3350	1413.29	23
DP-252	Upland	William's Survey	36.8365	-79.3350	1413.29	23
DP-253	Wetland	William's Survey	36.8336	-79.3329	1413.29	23
DP-254	Upland	William's Survey	36.8335	-79.3365	1413.29	23
DP-255	Wetland	William's Survey	36.8355	-79.3353	1413.29	23
DP-256	Upland	William's Survey	36.8356	-79.3354	1413.29	23
DP-257	Wetland	William's Survey	36.8297	-79.3421	1412.8	23
DP-258	Wetland	William's Survey	36.8288	-79.3422	1412.8	23
DP-259	Wetland	Ecobot	36.8287	-79.3422	1412.8	23
DP-260	Upland	William's Survey	36.8298	-79.3419	1412.9	23
DP-261	Wetland	William's Survey	36.8280	-79.3416	1412.8	23

DP-262	Wetland	Ecobot	36.7415	-79.4339	M-0388 1404.70	16
DP-263	Wetland	Ecobot	36.7416	-79.4343	M-0388 1404.70	16
DP-264	Upland	Ecobot	36.7417	-79.4341	M-0388 1404.80	16
DP-265	Wetland	William's Survey	36.8309	-79.3389	1413	23
DP-266	Upland	William's Survey	36.8309	-79.3390	1413	23
DP-267	Wetland	William's Survey	36.8314	-79.3401	1413	23
DP-268	Upland	William's Survey	36.8312	-79.3404	1413	23
DP-269	Wetland	William's Survey	36.8313	-79.3395	1413	23
DP-270	Upland	William's Survey	36.8313	-79.3407	1413	23
DP-271	Upland	William's Survey	36.8298	-79.3373	1413	23
DP-272	Wetland	William's Survey	36.8294	-79.3373	1413	23
DP-273	Upland	Ecobot	36.7745	-79.3986	M-0307 1407.70	18
DP-274	Upland	Ecobot	36.7838	-79.3920	M-0307 1408.80	20
DP-275	Wetland	William's Survey	36.5511	-79.6159	1388	3
DP-276	Wetland	William's Survey	36.5510	-79.6166	1388	2,3
DP-277	Upland	Ecobot	36.5526	-79.6225	1387.9	2
DP-278	Upland	Ecobot	36.5573	-79.6172	M-0402 1388.30	3
DP-279	Wetland	Ecobot	36.5659	-79.6080	1389.1	3
DP-280	Upland	Ecobot	36.5659	-79.6083	1389.1	3
DP-281	Wetland	William's Survey	36.5675	-79.6057	1389.3	3
DP-282	Upland	Ecobot	36.5846	-79.5899	1390.8	5
DP-283	Upland	Ecobot	36.6682	-79.5080	1398.2	10
DP-284	Upland	Ecobot	36.6918	-79.4835	1400.3	12
DP-285	Upland	Ecobot	36.6912	-79.4839	1400.3	12
DP-286	Upland	Ecobot	36.7757	-79.3989	M-0307 1407.70	18
DP-287	Wetland	Ecobot	36.7580	-79.4188	1406.2	17
DP-288	Upland	Ecobot	36.7580	-79.4187	1406.2	17
DP-289	Upland	Ecobot	36.7573	-79.4199	1406.1	17
DP-290	Upland	Ecobot	36.8233	-79.3473	M-0312 1412.30	22
DP-291	Upland	Ecobot	36.5717	-79.6027	1389.6	4
DP-292	Upland	Ecobot	36.5737	-79.5996	1389.8	4
DP-293	Upland	Ecobot	36.5761	-79.5982	1390	4
DP-294	Upland	Ecobot	36.5775	-79.5965	1390.1	4
DP-295	Upland	Ecobot	36.8185	-79.3525	M-0402 1411.90	22
DP-296	Upland	William's Survey	36.7712	-79.4028	M-0307 1407.50	18
DP-297	Wetland	William's Survey	36.7723	-79.3967	M-0307 1407.80	19
DP-298	Upland	William's Survey	36.7731	-79.3980	M-0307 1407.80	18,19
DP-299	Upland	William's Survey	36.5992	-79.5781	1392	6
DP-300	Upland	William's Survey	36.5990	-79.5768	1392	6
DP-301	Upland	William's Survey	36.5988	-79.5760	1392	6
DP-302	Upland	William's Survey	36.5993	-79.5774	1392	6
DP-303	Upland	William's Survey	36.7721	-79.3969	M-0307 1407.80	19
DP-304	Wetland	Ecobot	36.7431	-79.4351	M-0388 1404.80	16
DP-305	Upland	William's Survey	36.7432	-79.4351	M-0388 1404.80	16

DP-306	Wetland	William's Survey	36.7424	-79.4354	M-0388 1404.80	16
DP-307	Wetland	William's Survey	36.7422	-79.4353	M-0388 1404.80	16
DP-308	Upland	William's Survey	36.7423	-79.4355	M-0388 1404.80	16
DP-309	Wetland	William's Survey	36.6050	-79.5627	1392.8	6
DP-310	Upland	William's Survey	36.6050	-79.5625	1392.8	6
DP-311	Upland	William's Survey	36.7881	-79.3831	M-0437 1409.50	20
DP-312	Upland	William's Survey	36.7877	-79.3802	M-0437 1409.40	20
DP-313	Wetland	William's Survey	36.7878	-79.3803	M-0437 1409.40	20
DP-314	Wetland	William's Survey	36.7872	-79.3804	M-0437 1409.30	20
DP-315	Upland	William's Survey	36.7873	-79.3804	M-0437 1409.40	20
DP-316	Wetland	William's Survey	36.7873	-79.3800	M-0437 1409.30	20
DP-317	Upland	William's Survey	36.7874	-79.3801	M-0437 1409.30	20
DP-326	Wetland	Ecobot	36.8060	-79.3670	1410.7	21
DP-327	Upland	William's Survey	36.7782	-79.3914	M-0307 1408.60	19
DP-328	Wetland	William's Survey	36.5868	-79.5870	1391	5
DP-329	Upland	William's Survey	36.5868	-79.5871	1391	5
DP-330	Upland	William's Survey	36.5988	-79.5742	1392.1	6
DP-331	Upland	William's Survey	36.5986	-79.5743	1392.1	6
DP-332	Upland	William's Survey	36.6135	-79.5631	M-0402 1393.30	7
DP-333	Upland	Ecobot	36.6134	-79.5633	M-0402 1393.30	7
DP-334	Upland	William's Survey	36.6228	-79.5534	1394.1	7
DP-335	Upland	William's Survey	36.6225	-79.5537	1394.1	7
DP-336	Upland	William's Survey	36.7730	-79.3996	M-0307 1407.70	18
DP-337	Wetland	William's Survey	36.7732	-79.3995	M-0307 1407.70	18
DP-338	Upland	William's Survey	36.5581	-79.6165	M-0402 1388.40	3
DP-339	Upland	William's Survey	36.5590	-79.6161	M-0402 1388.40	3
DP-340	Upland	William's Survey	36.5586	-79.6168	M-0402 1388.40	3
DP-341	Upland	William's Survey	36.5564	-79.6174	M-0402 1388.30	3
DP-342	Upland	William's Survey	36.8175	-79.3531	M-0402 1411.80	22
DP-343	Upland	William's Survey	36.5581	-79.6164	M-0402 1388.40	3
DP-344	Upland	William's Survey	36.5576	-79.6170	M-0402 1388.30	3
DP-345	Upland	Williams's Survey	36.5584	-79.6161	M-0402 1388.40	3
DP-346	Wetland	Ecobot	36.5585	-79.6162	M-0402 1388.40	3
DP-347	Upland	Williams's Survey	36.5676	-79.6057	1389.3	3
DP-348	Upland	Williams's Survey	36.5695	-79.6050	1389.4	4
DP-349	Wetland	Williams's Survey	36.5706	-79.6036	1389.5	4
DP-350	Wetland	Williams's Survey	36.5705	-79.6035	1389.5	4
DP-351	Wetland	Williams's Survey	36.5702	-79.6033	1389.5	4
DP-352	Upland	Williams's Survey	36.5704	-79.6034	1389.5	4
DP-353	Upland	Williams's Survey	36.5525	-79.6218	1387.9	2
DP-354	Upland	Williams's Survey	36.7042	-79.4710	1401.4	13
DP-355	Upland	Williams's Survey	36.8062	-79.3669	1410.7	21
DP-356	Upland	Ecobot	36.8063	-79.3667	1410.7	21
DP-357	Upland	Williams's Survey	36.8063	-79.3665	1410.7	21

DP-358	Upland	William's Survey	36.8211	-79.3494	M-0402 1412.10	22
DP-359	Upland	William's Survey	36.5512	-79.6166	1388	2,3
DP-360	Wetland	Ecobot	36.8117	-79.3594	1411.2	22
DP-361	Wetland	William's Survey	36.8114	-79.3597	1411.2	22
DP-362	Upland	William's Survey	36.5577	-79.6175	M-0402 1388.30	3
DP-363	Wetland	William's Survey	36.8031	-79.3693	1410.4	21
DP-364	Upland	William's Survey	36.5571	-79.6176	M-0402 1388.30	3
DP-365	Upland	William's Survey	36.7578	-79.4189	1406.1	17
DP-366	Upland	William's Survey	36.7578	-79.4190	1406.1	17
DP-367	Upland	William's Survey	36.5442	-79.6301	1387.1	2
DP-368	Wetland	William's Survey	36.5887	-79.5849	1391.2	5
DP-369	Wetland	William's Survey	36.7191	-79.4572	1402.7	14
DP-370	Upland	William's Survey	36.5567	-79.6181	M-0402 1388.20	3
DP-371	Upland	William's Survey	36.5868	-79.5870	1391	5
DP-372	Upland	William's Survey	36.5569	-79.6178	M-0402 1388.30	3
DP-373	Wetland	William's Survey	36.5566	-79.6179	M-0402 1388.20	3
DP-374	Upland	William's Survey	36.6736	-79.5016	1398.7	11
DP-375	Upland	William's Survey	36.6735	-79.5015	1398.7	11
DP-376	Upland	William's Survey	36.6136	-79.5631	M-0402 1393.30	7
DP-377	Upland	William's Survey	36.6265	-79.5503	1394.4	8
DP-378	Upland	William's Survey	36.6139	-79.5620	M-0402 1393.30	7
DP-379	Wetland	William's Survey	36.7017	-79.4735	1401.2	13
DP-380	Upland	William's Survey	36.5577	-79.6165	M-0402 1388.40	3
DP-381	Wetland	William's Survey	36.5575	-79.6165	M-0402 1388.30	3
DP-382	Wetland	William's Survey	36.5573	-79.6164	M-0402 1388.30	3
DP-383	Upland	William's Survey	36.5574	-79.6164	M-0402 1388.30	3
DP-384	Wetland	William's Survey	36.5572	-79.6165	M-0402 1388.30	3
DP-385	Upland	William's Survey	36.5572	-79.6165	M-0402 1388.30	3
DP-386	Wetland	William's Survey	36.5610	-79.6130	1388.7	3
DP-387	Upland	William's Survey	36.5610	-79.6130	1388.7	3
DP-388	Upland	William's Survey	36.5694	-79.6045	1389.4	4
DP-389	Wetland	William's Survey	36.5858	-79.5886	1390.9	5
DP-390	Wetland	William's Survey	36.5856	-79.5882	1390.9	5
DP-391	Upland	William's Survey	36.5858	-79.5885	1390.9	5
DP-392	Wetland	William's Survey	36.5873	-79.5867	1391	5
DP-393	Wetland	William's Survey	36.5940	-79.5797	1391.6	5
DP-394	Wetland	William's Survey	36.5958	-79.5775	1391.8	5
DP-395	Upland	William's Survey	36.5959	-79.5775	1391.8	5
DP-396	Wetland	William's Survey	36.5990	-79.5747	1392.1	6
DP-397	Wetland	William's Survey	36.5991	-79.5748	1392.1	6
DP-398	Upland	William's Survey	36.5991	-79.5747	1392.1	6
DP-399	Wetland	William's Survey	36.6064	-79.5682	1392.7	6
DP-400	Wetland	William's Survey	36.6065	-79.5684	1392.7	6
DP-401	Upland	William's Survey	36.6065	-79.5683	1392.7	6

DP-402	Wetland	William's Survey	36.6076	-79.5675	1392.8	6
DP-403	Wetland	William's Survey	36.6139	-79.5623	M-0402 1393.30	7
DP-404	Upland	William's Survey	36.6139	-79.5625	M-0402 1393.30	7
DP-405	Wetland	William's Survey	36.5763	-79.5972	1390	4
DP-406	Upland	William's Survey	36.5763	-79.5972	1390	4
DP-407	Wetland	William's Survey	36.6138	-79.5625	M-0402 1393.30	7
DP-408	Wetland	William's Survey	36.6329	-79.5433	1395	8
DP-409	Wetland	William's Survey	36.6332	-79.5432	1395	8
DP-410	Wetland	William's Survey	36.6333	-79.5431	1395.1	8
DP-411	Wetland	William's Survey	36.6325	-79.5434	1395	8
DP-412	Upland	William's Survey	36.6332	-79.5431	1395	8
DP-413	Wetland	William's Survey	36.6370	-79.5381	1395.4	8
DP-414	Wetland	William's Survey	36.6373	-79.5378	1395.5	8
DP-415	Wetland	William's Survey	36.6375	-79.5376	1395.5	8
DP-416	Upland	William's Survey	36.6373	-79.5380	1395.4	8
DP-417	Wetland	William's Survey	36.6521	-79.5225	1396.8	9
DP-418	Wetland	William's Survey	36.6737	-79.5019	1398.7	11
DP-419	Wetland	William's Survey	36.6736	-79.5020	1398.7	11
DP-420	Wetland	William's Survey	36.6824	-79.4933	1399.5	11
DP-421	Wetland	William's Survey	36.6989	-79.4767	1400.9	13
DP-422	Upland	William's Survey	36.6989	-79.4769	1400.9	13
DP-423	Upland	William's Survey	36.6989	-79.4767	1401	13
DP-424	Wetland	William's Survey	36.7021	-79.4737	1401.2	13
DP-425	Wetland	William's Survey	36.7022	-79.4737	1401.2	13
DP-426	Wetland	William's Survey	36.7024	-79.4737	1401.2	13
DP-427	Upland	William's Survey	36.7020	-79.4737	1401.2	13
DP-428	Wetland	William's Survey	36.7061	-79.4698	1401.6	13
DP-429	Wetland	William's Survey	36.7062	-79.4700	1401.6	13
DP-430	Wetland	William's Survey	36.7060	-79.4698	1401.6	13
DP-431	Upland	William's Survey	36.7060	-79.4699	1401.6	13
DP-432	Wetland	William's Survey	36.7079	-79.4684	1401.7	13
DP-433	Upland	William's Survey	36.7079	-79.4683	1401.7	13
DP-434	Wetland	William's Survey	36.7201	-79.4569	1402.8	14
DP-435	Upland	William's Survey	36.7203	-79.4568	1402.8	14
DP-436	Wetland	William's Survey	36.7204	-79.4568	1402.8	14
DP-437	Wetland	William's Survey	36.7206	-79.4564	1402.8	14
DP-438	Upland	William's Survey	36.7204	-79.4566	1402.8	14
DP-439	Wetland	William's Survey	36.7226	-79.4548	1403	14
DP-440	Upland	William's Survey	36.7223	-79.4550	1403	14
DP-441	Upland	William's Survey	36.6630	-79.5126	1397.8	10
DP-442	Wetland	William's Survey	36.7291	-79.4466	1403.6	15
DP-443	Wetland	William's Survey	36.7292	-79.4465	1403.6	15
DP-444	Wetland	William's Survey	36.7292	-79.4463	1403.7	15
DP-445	Upland	William's Survey	36.7292	-79.4463	1403.7	15

DP-446	Wetland	William's Survey	36.7350	-79.4413	1404.1	15
DP-447	Wetland	William's Survey	36.7353	-79.4408	1404.2	15
DP-448	Wetland	William's Survey	36.7350	-79.4409	1404.2	15
DP-449	Upland	William's Survey	36.7353	-79.4406	1404.2	15
DP-450	Wetland	William's Survey	36.7419	-79.4351	M-0388 1404.70	16
DP-451	Wetland	William's Survey	36.7417	-79.4351	M-0388 1404.70	16
DP-452	Wetland	William's Survey	36.7465	-79.4303	1405.1	16
DP-453	Wetland	William's Survey	36.7464	-79.4301	1405.1	16
DP-454	Upland	William's Survey	36.7465	-79.4301	1405.1	16
DP-455	Wetland	William's Survey	36.7532	-79.4239	1405.7	16
DP-456	Upland	William's Survey	36.7532	-79.4239	1405.7	16
DP-457	Wetland	William's Survey	36.7542	-79.4231	1405.8	16
DP-458	Wetland	William's Survey	36.7543	-79.4232	1405.8	16
DP-459	Wetland	William's Survey	36.7541	-79.4231	1405.8	16
DP-460	Upland	William's Survey	36.7540	-79.4232	1405.8	16
DP-461	Wetland	William's Survey	36.7713	-79.4014	M-0307 1407.60	18
DP-462	Upland	William's Survey	36.7713	-79.4009	M-0307 1407.60	18
DP-463	Wetland	William's Survey	36.7718	-79.4004	M-0307 1407.60	18
DP-464	Upland	William's Survey	36.7715	-79.4004	M-0307 1407.60	18
DP-465	Wetland	William's Survey	36.7713	-79.4002	M-0307 1407.60	18
DP-466	Wetland	William's Survey	36.7923	-79.3816	1409.4	20
DP-467	Wetland	William's Survey	36.7924	-79.3816	1409.4	20
DP-468	Wetland	William's Survey	36.7925	-79.3816	1409.4	20
DP-469	Wetland	William's Survey	36.7925	-79.3815	1409.4	20
DP-470	Upland	William's Survey	36.7923	-79.3816	1409.4	20
DP-471	Wetland	William's Survey	36.8090	-79.3635	1410.9	21
DP-472	Wetland	William's Survey	36.8163	-79.3540	M-0402 1411.70	22
DP-473	Wetland	William's Survey	36.8208	-79.3495	M-0402 1412.10	22
DP-474	Wetland	William's Survey	36.8309	-79.3402	1413	23
DP-475	Wetland	William's Survey	36.8314	-79.3395	1413	23
DP-476	Upland	William's Survey	36.8340	-79.3361	1413.29	23
DP-477	Upland	William's Survey	36.8346	-79.3356	1413.29	23
DP-478	Upland	William's Survey	36.8352	-79.3351	1413.29	23
DP-479	Upland	William's Survey	36.8357	-79.3347	1413.29	23
DP-480	Wetland	William's Survey	36.7799	-79.3861	M-0307 1408.80	19,20
DP-481	Upland	William's Survey	36.7802	-79.3860	M-0307 1408.90	19,20
DP-482	Upland	William's Survey	36.8330	-79.3336	1413.29	23
DP-483	Wetland	William's Survey	36.6630	-79.5126	1397.8	10
DP-488	Upland	William's Survey	36.7876	-79.3852	M-0437 1409.50	20
DP-489	Wetland	William's Survey	36.7880	-79.3849	M-0437 1409.50	20
DP-490	Wetland	William's Survey	36.7880	-79.3847	M-0437 1409.50	20
DP-491	Upland	William's Survey	36.7880	-79.3848	M-0437 1409.50	20
DP-492	Wetland	William's Survey	36.7880	-79.3848	M-0437 1409.50	20
DP-493	Upland	William's Survey	36.7881	-79.3847	M-0437 1409.50	20

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-20

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-1

Investigator(s): KZ, MM, LS Section, Township, Range:

Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 2-4%

Subregion (LRR or MLRA): P 136 Lat: 36.54423642 Long: -79.63109566 Datum: WGS 84

Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No ___	**Is the Sampled Area within a Wetland?**	Yes ___	No ✔
Hydric Soil Present?	Yes ___	No ✔			
Wetland Hydrology Present?	Yes ___	No ✔			

Remarks:

Only one (i.e., hydrophytic vegetation) of the three wetland parameters was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches):_____
Water Table Present?	Yes _____	No ✔	Depth (inches):_____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches):_____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-1

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Liquidambar styraciflua	35	✔	FAC
2. Pinus taeda	35	✔	FAC
3. Carpinus caroliniana	25	✔	FAC
4. Fagus grandifolia	10		FACU
5.			
6.			
7.			
	105	= Total Cover	
50% of total cover: 52.5	20% of total cover: 21		

Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Fagus grandifolia	8	✔	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	8	= Total Cover	
50% of total cover: 4	20% of total cover: 1.6		

Herb Stratum (Plot size: 5 ft r)			
1. Lonicera japonica	8	✔	FACU
2. Smilax rotundifolia	4	✔	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	12	= Total Cover	
50% of total cover: 6	20% of total cover: 2.4		

Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.66 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	99	x 3 =	297
FACU species	26	x 4 =	104
UPL species	0	x 5 =	0
Column Totals:	125 (A)		401 (B)

Prevalence Index = B/A = 3.20

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✔ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL Sampling Point: DP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 4	10YR 5/3	100					Sandy Loam	
4 - 18	10YR 5/3	70					Sandy Loam	
4 - 18	2.5Y 7/6	30					Sandy Loam	Secondary matrix color
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-20

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-2

Investigator(s): KZ, MM, LS Section, Township, Range:

Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 2%

Subregion (LRR or MLRA): P 136 Lat: 36.54430287 Long: -79.63112237 Datum: WGS 84

Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No ___	**Is the Sampled Area within a Wetland?**	Yes ✔	No ___
Hydric Soil Present?	Yes ✔	No ___			
Wetland Hydrology Present?	Yes ✔	No ___			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ✔ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ✔ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches): _____

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-2

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Liquidambar styraciflua	25	✔	FAC
2. Acer rubrum	20	✔	FAC
3. Pinus taeda	20	✔	FAC
4. Carpinus caroliniana	8		FAC
5.			
6.			
7.			
	73 = Total Cover		
50% of total cover: 36.5	20% of total cover: 14.6		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Acer rubrum	15	✔	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	15 = Total Cover		
50% of total cover: 7.5	20% of total cover: 3		
Herb Stratum (Plot size: 5 ft r)			
1. Lonicera japonica	5	✔	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	5 = Total Cover		
50% of total cover: 2.5	20% of total cover: 1		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	88	x 3 =	264
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	93 (A)		284 (B)

Prevalence Index = B/A = 3.05

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL Sampling Point: DP-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 2	10YR 5/3	100					Sandy Loam	
2 - 8	10YR 6/2	95	10YR 6/6	5	C	PL	Sandy Loam	
8 - 18	10YR 6/6	95	10YR 6/2	5	D	M	Sandy Loam	
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✔ **No** ____

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-20

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-3

Investigator(s): KZ, MM, LS Section, Township, Range:

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Linear Slope (%): 2%

Subregion (LRR or MLRA): P 136 Lat: 36.54271765 Long: -79.63213591 Datum: WGS 84

Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ___	**No ✔**	**Is the Sampled Area within a Wetland?**	Yes ___	No ✔
Hydric Soil Present?	Yes ___	No ✔			
Wetland Hydrology Present?	Yes ___	No ✔			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches):_____
Water Table Present?	Yes _____	No ✔	Depth (inches):_____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches):_____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-3

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Herb Stratum (Plot size: 5 ft r)			
1. Poa pratensis	85	✔	FACU
2. Plantago lanceolata	5		UPL
3. Alliaria petiolata	3		FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	93 = Total Cover		
50% of total cover: 46.50	20% of total cover: 18.60		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	88	x 4 =	352
UPL species	5	x 5 =	25
Column Totals:	93 (A)		377 (B)

Prevalence Index = B/A = 4.05

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✔

Remarks: (Include photo numbers here or on a separate sheet.)

No tree, sapling/shrub, or woody vine strata were observed at this data point.

SOIL Sampling Point: DP-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 3	10YR 5/4	100					Clay Loam	
3 - 10	2.5Y 5/3	95	7.5YR 5/6	5	C	M	Clay Loam	
10 - 18	2.5YR 5/3	70	7.5YR 5/8	5	C	M	Clay Loam	
10 - 18	7.5YR 4/6	20	2.5Y 5/2	5	D	M	Clay Loam	Secondary matrix and redox color
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-20

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-4

Investigator(s): KZ, MM, LS Section, Township, Range:

Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): Linear Slope (%): 2%

Subregion (LRR or MLRA): P 136 Lat: 36.54272584 Long: -79.63213408 Datum: WGS 84

Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No ___	**Is the Sampled Area within a Wetland?**	Yes ✔	No ___
Hydric Soil Present?	Yes ✔	No ___			
Wetland Hydrology Present?	Yes ✔	No ___			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ✔ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches): _____

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-4

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Herb Stratum (Plot size: 5 ft r)			
1. Juncus effusus	35	✔	FACW
2. Holcus lanatus	30	✔	FAC
3. Dichanthelium clandestinum	10		FAC
4. Lonicera japonica	3		FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	78 = Total Cover		
50% of total cover: 39.00	20% of total cover: 15.60		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	35	x 2 =	70
FAC species	40	x 3 =	120
FACU species	3	x 4 =	12
UPL species	0	x 5 =	0
Column Totals:	78 (A)		202 (B)

Prevalence Index = B/A = 2.58

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ✔ 2 - Dominance Test is >50%
- ✔ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✔ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

No tree, sapling/shrub, or woody vine strata were observed at this data point.

SOIL Sampling Point: DP-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 2	10YR 5/4	100					Clay Loam	
2 - 7	2.5Y 5/2	50	7.5YR 5/6	30	C	PL	Clay	
2 - 7	2.5Y 5/3	10	2.5Y 6/2	10	D	M	Clay	Secondary matrix and redox color
7 - 18	2.5Y 5/2	40	7.5YR 5/8	30	C	PL	Clay	
7 - 18	10YR 4/2	20	10YR 6/2	10	D	M	Clay	Secondary matrix and redox color
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-20

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-5

Investigator(s): KZ, MM, LS Section, Township, Range:

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Concave Slope (%): 0-2%

Subregion (LRR or MLRA): P 136 Lat: 36.54271689 Long: -79.63244504 Datum: WGS 84

Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	**No** ___	**Is the Sampled Area within a Wetland?**	Yes ✔	No ___
Hydric Soil Present?	Yes ✔	No ___			
Wetland Hydrology Present?	Yes ✔	No ___			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ✔ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ✔ No _____ Depth (inches): 3

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-5

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	70	✔	FAC
2. Liquidambar styraciflua	10		FAC
3.			
4.			
5.			
6.			
7.			
	80 = Total Cover		
50% of total cover: 40.00	20% of total cover: 16.00		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Acer rubrum	25	✔	FAC
2. Carpinus caroliniana	15	✔	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	40 = Total Cover		
50% of total cover: 20.00	20% of total cover: 8.00		
Herb Stratum (Plot size: 5 ft r)			
1. Dulichium arundinaceum	7	✔	OBL
2. Juncus effusus	5	✔	FACW
3. Lonicera japonica	3	✔	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	15 = Total Cover		
50% of total cover: 7.50	20% of total cover: 3.00		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83.33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	7	x 1 =	7
FACW species	5	x 2 =	10
FAC species	120	x 3 =	360
FACU species	3	x 4 =	12
UPL species	0	x 5 =	0
Column Totals:	135 (A)		389 (B)

Prevalence Index = B/A = 2.88

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

✔ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✔ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL Sampling Point: DP-5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 2	10YR 4/2	90	10YR 4/6	10	C	PL	Clay Loam	
2 - 5	2.5Y 6/2	95	10YR 6/8	5	C	M	Clay Loam	
5 - 18	2.5Y 6/2	80	10YR 6/8	20	C	M	Clay Loam	
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-20

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-6

Investigator(s): KZ, MM, LS Section, Township, Range:

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 2%

Subregion (LRR or MLRA): P 136 Lat: 36.54357852 Long: -79.63201244 Datum: WGS 84

Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	**No** ___	**Is the Sampled Area within a Wetland?**	Yes ✔	No ___
Hydric Soil Present?	Yes ✔	No ___			
Wetland Hydrology Present?	Yes ✔	No ___			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ✔ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ✔ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes ✔	No _____	Depth (inches): 0

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-6

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus bicolor	15	✔	FACW
2. Carpinus caroliniana	6	✔	FAC
3.			
4.			
5.			
6.			
7.			
	21 = Total Cover		
50% of total cover: 10.50	20% of total cover: 4.20		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Liquidambar styraciflua	10	✔	FAC
2. Quercus alba	10	✔	FACU
3. Acer rubrum	8	✔	FAC
4.			
5.			
6.			
7.			
8.			
9.			
	28 = Total Cover		
50% of total cover: 14.00	20% of total cover: 5.60		
Herb Stratum (Plot size: 5 ft r)			
1. Juncus effusus	20	✔	FACW
2. Dichanthelium scoparium	15	✔	FACW
3. Carex lurida	10	✔	OBL
4. Rubus pensilvanicus	8		FAC
5. Lonicera japonica	5		FACU
6. Microstegium vimineum	5		FAC
7. Smilax rotundifolia	5		FAC
8. Scirpus cyperinus	3		FACW
9.			
10.			
11.			
	71 = Total Cover		
50% of total cover: 35.50	20% of total cover: 14.20		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 87.50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	53	x 2 =	106
FAC species	42	x 3 =	126
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	120 (A)		302 (B)

Prevalence Index = B/A = 2.51

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ✔ 2 - Dominance Test is >50%
- ✔ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✔ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL Sampling Point: DP-6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 1	10YR 3/3	100					Silt Loam	
1 - 4	2.5Y 6/3	90	7.5YR 5/6	10	C	M	Clay Loam	
4 - 10	2.5Y 7/2	85	10YR 5/8	10	C	M	Clay Loam	
4 - 10			2.5Y 7/1	5	D	M	Clay Loam	Secondary redox color
10 - 18	2.5Y 7/2	60	7.5YR 5/8	30	C	M	Clay	
10 - 18			2.5Y 8/2	10	D	M	Clay	Secondary redox color
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-21

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-7

Investigator(s): KZ, MM, LS Section, Township, Range:

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 4-6

Subregion (LRR or MLRA): P 136 Lat: 36.54625421 Long: -79.62860467 Datum: WGS 84

Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ___	**No** ✔	**Is the Sampled Area within a Wetland?**	Yes ___	No ✔
Hydric Soil Present?	Yes ___	No ✔			
Wetland Hydrology Present?	Yes ___	No ✔			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches):_____
Water Table Present?	Yes _____	No ✔	Depth (inches):_____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches):_____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-7

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Herb Stratum (Plot size: 5 ft r)			
1. Holcus lanatus	30	✔	FAC
2. Dactylis glomerata	15	✔	FACU
3. Daucus carota	5		UPL
4. Trifolium pratense	3		FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	53 = Total Cover		
50% of total cover: 26.50	20% of total cover: 10.60		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	30	x 3 =	90
FACU species	18	x 4 =	72
UPL species	5	x 5 =	25
Column Totals:	53 (A)		187 (B)

Prevalence Index = B/A = 3.52

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✔

Remarks: (Include photo numbers here or on a separate sheet.)

No tree, sapling/shrub, or woody vine strata were observed at this data point.

SOIL Sampling Point: DP-7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 5	10YR 5/3	97	10YR 6/8	3	C	M	Loamy Sand	
5 - 18	10YR 5/3	65	10YR 6/8	25	C	M	Loamy Sand	
5 - 18			2.5Y 6/8	10	C	M	Loamy Sand	Secondary redox color
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-21

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-8

Investigator(s): KZ, MM, LS Section, Township, Range:

Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2

Subregion (LRR or MLRA): P 136 Lat: 36.54630532 Long: -79.62855821 Datum: WGS 84

Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No ___	**Is the Sampled Area within a Wetland?**	Yes ✔	No ___
Hydric Soil Present?	Yes ✔	No ___			
Wetland Hydrology Present?	Yes ✔	No ___			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ✔ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches): _____

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-8

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Herb Stratum (Plot size: 5 ft r)			
1. Holcus lanatus	40	✔	FAC
2. Dactylis glomerata	15	✔	FACU
3. Juncus effusus	15	✔	FACW
4. Lonicera japonica	3		FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	73 = Total Cover		
50% of total cover: 36.50	20% of total cover: 14.60		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.66 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	40	x 3 =	120
FACU species	18	x 4 =	72
UPL species	0	x 5 =	0
Column Totals:	73 (A)		222 (B)

Prevalence Index = B/A = 3.04

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ✔ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✔ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

No tree, sapling/shrub, or woody vine strata were observed at this data point.

SOIL Sampling Point: DP-8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 4	10YR 4/2	90	10YR 5/8	10	C	M	Clay	
4 - 12	10YR 5/2	85	10YR 5/8	10	C	M	Clay Loam	
4 - 12			10YR 7/2	5	D	M	Clay Loam	Secondary redox color
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Gravel

Depth (inches): 12

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-9

Investigator(s): KZ, MM, LS Section, Township, Range:

Landform (hillslope, terrace, etc.): Seep Local relief (concave, convex, none): Concave Slope (%): 2

Subregion (LRR or MLRA): P 136 Lat: 36.55122641 Long: -79.61812965 Datum: WGS 84

Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No ___	**Is the Sampled Area within a Wetland?**	Yes ✔	No ___
Hydric Soil Present?	Yes ✔	No ___			
Wetland Hydrology Present?	Yes ✔	No ___			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ✔ Surface Water (A1)
- ✔ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✔ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✔	No _____	Depth (inches): 1
Water Table Present?	Yes ✔	No _____	Depth (inches): 8
Saturation Present? (includes capillary fringe)	Yes ✔	No _____	Depth (inches): 7

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-9

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	35	✔	FAC
2. Betula nigra	20	✔	FACW
3. Liriodendron tulipifera	20	✔	FACU
4. Ulmus americana	8		FACW
5.			
6.			
7.			
	83	= Total Cover	
50% of total cover: 41.50	20% of total cover: 16.60		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Lindera benzoin	40	✔	FAC
2. Carpinus caroliniana	10		FAC
3. Ulmus americana	5		FACW
4.			
5.			
6.			
7.			
8.			
9.			
	55	= Total Cover	
50% of total cover: 27.50	20% of total cover: 11.00		
Herb Stratum (Plot size: 5 ft r)			
1. Lindera benzoin	12	✔	FAC
2. Elaeagnus umbellata	8	✔	UPL
3. Lonicera japonica	5		FACU
4. Rosa multiflora	5		FACU
5. Carex lurida	4		OBL
6. Smilax rotundifolia	3		FAC
7.			
8.			
9.			
10.			
11.			
	37	= Total Cover	
50% of total cover: 18.50	20% of total cover: 7.40		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.66 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	4	x 1 =	4
FACW species	33	x 2 =	66
FAC species	100	x 3 =	300
FACU species	30	x 4 =	120
UPL species	8	x 5 =	40
Column Totals:	175 (A)		530 (B)

Prevalence Index = B/A = 3.02

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✔ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL Sampling Point: DP-9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 6	10YR 4/2	90	10YR 5/6	2	C	M	Sandy Clay Loam	
0 - 6			10YR 6/2	8	D	M	Sandy Clay Loam	Secondary redox color
6 - 18	7.5YR 4/2	100					Sandy Loam	
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-10

Investigator(s): KZ, MM, LS Section, Township, Range:

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 4-6

Subregion (LRR or MLRA): P 136 Lat: 36.5512012 Long: -79.61821319 Datum: WGS 84

Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ___	**No ✔**	**Is the Sampled Area within a Wetland?**	Yes ___	No ✔
Hydric Soil Present?	Yes ___	No ✔			
Wetland Hydrology Present?	Yes ___	No ✔			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches):_____
Water Table Present?	Yes _____	No ✔	Depth (inches):_____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches):_____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-10

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Liriodendron tulipifera	60	✔	FACU
2. Acer rubrum	20		FAC
3. Fagus grandifolia	15		FACU
4. Ulmus americana	10		FACW
5. Betula nigra	5		FACW
6.			
7.			
	110 = Total Cover		
50% of total cover: 55.00	20% of total cover: 22.00		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Acer rubrum	5	✔	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	5 = Total Cover		
50% of total cover: 2.50	20% of total cover: 1.00		
Herb Stratum (Plot size: 5 ft r)			
1. Elaeagnus umbellata	40	✔	UPL
2. Lonicera japonica	5		FACU
3. Smilax rotundifolia	3		FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	48 = Total Cover		
50% of total cover: 24.00	20% of total cover: 9.60		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	28	x 3 =	84
FACU species	80	x 4 =	320
UPL species	40	x 5 =	200
Column Totals:	163 (A)		634 (B)

Prevalence Index = B/A = 3.88

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✔

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL Sampling Point: DP-10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 8	10YR 4/3	100					Loam	
8 - 18	10YR 4/2	100					Clay Loam	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-11

Investigator(s): KZ Section, Township, Range:

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1-2

Subregion (LRR or MLRA): P 136 Lat: 36.55113269 Long: -79.61381645 Datum: WGS 84

Soil Map Unit Name: 3B - Delanco fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No ___	**Is the Sampled Area within a Wetland?**	Yes ✔	No ___
Hydric Soil Present?	Yes ✔	No ___			
Wetland Hydrology Present?	Yes ✔	No ___			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ✔ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ✔ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches): _____

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-11

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Liquidambar styraciflua	70	✔	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	70 = Total Cover		
50% of total cover: 35.00	20% of total cover: 14.00		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Herb Stratum (Plot size: 5 ft r)			
1. Juncus effusus	40	✔	FACW
2. Cyperus esculentus	10		FACW
3. Lonicera japonica	5		FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	55 = Total Cover		
50% of total cover: 27.50	20% of total cover: 11.00		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	50	x 2 =	100
FAC species	70	x 3 =	210
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	125 (A)		330 (B)

Prevalence Index = B/A = 2.64

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

✔ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✔ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

No sapling/shrub or woody vine strata were observed at this data point.

SOIL Sampling Point: DP-11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 8	2.5Y 5/1	80	10YR 5/6	20	C	PL / M	Sandy Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock/Gravel

Depth (inches): 8+

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-12

Investigator(s): KZ Section, Township, Range:

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1-2

Subregion (LRR or MLRA): P 136 Lat: 36.55106596 Long: -79.61376139 Datum: WGS 84

Soil Map Unit Name: 3B - Delanco fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ___	**No ✔**	**Is the Sampled Area within a Wetland?**	Yes ___	No ✔
Hydric Soil Present?	Yes ___	No ✔			
Wetland Hydrology Present?	Yes ___	No ✔			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches):_____
Water Table Present?	Yes _____	No ✔	Depth (inches):_____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches):_____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-12

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Liquidambar styraciflua	40	✔	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	40 = Total Cover		
50% of total cover: 20.00	20% of total cover: 8.00		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Herb Stratum (Plot size: 5 ft r)			
1. Lonicera japonica	15	✔	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	15 = Total Cover		
50% of total cover: 7.50	20% of total cover: 3.00		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	40	x 3 =	120
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	55 (A)		180 (B)

Prevalence Index = B/A = 3.27

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✔

Remarks: (Include photo numbers here or on a separate sheet.)

No sapling/shrub or woody vine strata were observed at this data point.

SOIL Sampling Point: DP-12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 3	2.5Y 5/4	100					Sandy Loam	
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 3+

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-13

Investigator(s): KZ Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): None Slope (%): 2-3

Subregion (LRR or MLRA): P 136 Lat: 36.5508291 Long: -79.61386535 Datum: WGS 84

Soil Map Unit Name: 3B - Delanco fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No ___	**Is the Sampled Area within a Wetland?**	Yes ✔	No ___
Hydric Soil Present?	Yes ✔	No ___			
Wetland Hydrology Present?	Yes ✔	No ___			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ✔ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches): _____

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-13

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Herb Stratum (Plot size: 5 ft r)			
1. Scirpus cyperinus	25	✔	FACW
2. Juncus effusus	20	✔	FACW
3. Andropogon virginicus	10		FACU
4. Lonicera japonica	3		FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	58 = Total Cover		
50% of total cover: 29.00	20% of total cover: 11.60		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	45	x 2 =	90
FAC species	0	x 3 =	0
FACU species	13	x 4 =	52
UPL species	0	x 5 =	0
Column Totals:	58 (A)		142 (B)

Prevalence Index = B/A = 2.44

Hydrophytic Vegetation Indicators:

✔ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

✔ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✔ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

No tree, sapling/shrub or woody vine strata were observed at this data point. Vegetation confined to the delineated PEM wetland.

SOIL Sampling Point: DP-13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 18	2.5Y 5/1	60	10YR 5/6	15	C	PL / M	Sandy Clay Loam	
0 - 18	2.5YR 4/8	25					Sandy Clay Loam	Secondary Matrix Color
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ **No** ____

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-14

Investigator(s): KZ Section, Township, Range:

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1-2

Subregion (LRR or MLRA): P 136 Lat: 36.55078959 Long: -79.61416446 Datum: WGS 84

Soil Map Unit Name: 3B - Delanco fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	**No** ___	**Is the Sampled Area within a Wetland?**	Yes ✔	No ___
Hydric Soil Present?	Yes ✔	No ___			
Wetland Hydrology Present?	Yes ✔	No ___			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this sampling location.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ✔ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ✔ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches): _____

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-14

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Liquidambar styraciflua	60	✔	FAC
2. Platanus occidentalis	10		FACW
3.			
4.			
5.			
6.			
7.			
	70 = Total Cover		
50% of total cover: 35.00	20% of total cover: 14.00		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Liquidambar styraciflua	3		FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	3 = Total Cover		
50% of total cover: 1.50	20% of total cover: 0.60		
Herb Stratum (Plot size: 5 ft r)			
1. Scirpus cyperinus	10	✔	FACW
2. Juncus effusus	5	✔	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	15 = Total Cover		
50% of total cover: 7.50	20% of total cover: 3.00		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	63	x 3 =	189
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	88 (A)		239 (B)

Prevalence Index = B/A = 2.71

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

✔ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✔ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL Sampling Point: DP-14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 18	2.5Y 5/1	80	10YR 5/8	20	C	PL / M	Sandy Loam	
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-15

Investigator(s): KZ Section, Township, Range:

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1-2

Subregion (LRR or MLRA): P 136 Lat: 36.55098351 Long: -79.61435219 Datum: WGS 84

Soil Map Unit Name: 3B - Delanco fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No ___	**Is the Sampled Area within a Wetland?**	Yes ✔	No ___
Hydric Soil Present?	Yes ✔	No ___			
Wetland Hydrology Present?	Yes ✔	No ___			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ✔ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches): _____

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-15

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Herb Stratum (Plot size: 5 ft r)			
1. Solidago rugosa	15	✔	FAC
2. Andropogon gerardii	10	✔	FAC
3. Andropogon virginicus	8	✔	FACU
4. Rubus argutus	3		FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	36 = Total Cover		
50% of total cover: 18.00	20% of total cover: 7.20		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.66 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	25	x 3 =	75
FACU species	11	x 4 =	44
UPL species	0	x 5 =	0
Column Totals:	36 (A)		119 (B)

Prevalence Index = B/A = 3.30

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ✔ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✔ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

No tree, sapling/shrub, or woody vine strata were observed at this data point.

SOIL Sampling Point: DP-15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 5	10YR 4/2	60	10YR 5/1	15	D	M	Silt Loam	
0 - 5			10YR 6/8	25	C	PL / M	Silt Loam	Secondary Redox feature
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 5+

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-16

Investigator(s): KZ Section, Township, Range:

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1-2

Subregion (LRR or MLRA): P 136 Lat: 36.55107299 Long: -79.61461377 Datum: WGS 84

Soil Map Unit Name: 3B - Delanco fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ___	**No ✔**	**Is the Sampled Area within a Wetland?**	Yes ___	No ✔
Hydric Soil Present?	Yes ___	No ✔			
Wetland Hydrology Present?	Yes ___	No ✔			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches):_____

Water Table Present? Yes _____ No ✔ Depth (inches):_____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches):_____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-16

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Liquidambar styraciflua	3	✔	FAC
2. Oxydendrum arboreum	3	✔	UPL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	6 = Total Cover		
50% of total cover: 3.00	20% of total cover: 1.20		
Herb Stratum (Plot size: 5 ft r)			
1. Rubus argutus	25	✔	FACU
2. Andropogon virginicus	15	✔	FACU
3. Dichanthelium clandestinum	5		FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	45 = Total Cover		
50% of total cover: 22.50	20% of total cover: 9.00		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	8	x 3 =	24
FACU species	40	x 4 =	160
UPL species	3	x 5 =	15
Column Totals:	51 (A)		199 (B)

Prevalence Index = B/A = 3.90

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✔

Remarks: (Include photo numbers here or on a separate sheet.)

No tree or woody vine strata were observed at this data point.

SOIL Sampling Point: DP-16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 3	10YR 4/3	100					Silt Loam	
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 3+

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-17

Investigator(s): MM, LS Section, Township, Range:

Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR or MLRA): P 136 Lat: 36.55090997 Long: -79.61527448 Datum: WGS 84

Soil Map Unit Name: 3B - Delanco fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No ___	**Is the Sampled Area within a Wetland?**	Yes ✔	No ___
Hydric Soil Present?	Yes ✔	No ___			
Wetland Hydrology Present?	Yes ✔	No ___			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ✔ Surface Water (A1)
- ✔ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ✔ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✔	No _____	Depth (inches): 2
Water Table Present?	Yes ✔	No _____	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes ✔	No _____	Depth (inches): 0

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-17

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	45	✔	FAC
2. Celtis occidentalis	15	✔	FACU
3. Liquidambar styraciflua	10		FAC
4. Quercus phellos	5		FAC
5.			
6.			
7.			
	75 = Total Cover		
50% of total cover: 37.50	20% of total cover: 15.00		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Viburnum nudum	40	✔	OBL
2. Lindera benzoin	25	✔	FAC
3. Elaeagnus umbellata	8		UPL
4. Acer rubrum	5		FAC
5.			
6.			
7.			
8.			
9.			
	78 = Total Cover		
50% of total cover: 39.00	20% of total cover: 15.60		
Herb Stratum (Plot size: 5 ft r)			
1. Dulichium arundinaceum	5	✔	OBL
2. Ligustrum sinense	5	✔	FACU
3. Smilax rotundifolia	5	✔	FAC
4. Lonicera japonica	3		FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	18 = Total Cover		
50% of total cover: 9.00	20% of total cover: 3.60		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 71.42 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	45	x 1 =	45
FACW species	0	x 2 =	0
FAC species	95	x 3 =	285
FACU species	23	x 4 =	92
UPL species	8	x 5 =	40
Column Totals:	171 (A)		462 (B)

Prevalence Index = B/A = 2.70

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

✔ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✔ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL Sampling Point: DP-17

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 5	10YR 4/2	95	7.5YR 5/6	5	C	PL	Clay Loam	
5 - 18	7.5YR 4/2	95	7.5YR 5/6	5	C	PL	Silty Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-18

Investigator(s): MM, LS Section, Township, Range:

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2-4

Subregion (LRR or MLRA): P 136 Lat: 36.55092058 Long: -79.61520527 Datum: WGS 84

Soil Map Unit Name: 3B - Delanco fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ___	**No ✔**	**Is the Sampled Area within a Wetland?**	Yes ___	No ✔
Hydric Soil Present?	Yes ___	No ✔			
Wetland Hydrology Present?	Yes ___	No ✔			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches):_____
Water Table Present?	Yes _____	No ✔	Depth (inches):_____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches):_____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-18

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus falcata	45	✔	FACU
2. Liriodendron tulipifera	20	✔	FACU
3. Acer rubrum	10		FAC
4. Betula nigra	10		FACW
5.			
6.			
7.			
	85 = Total Cover		
50% of total cover: 42.50	20% of total cover: 17.00		

Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Elaeagnus umbellata	20	✔	UPL
2. Fagus grandifolia	8	✔	FACU
3. Liquidambar styraciflua	8	✔	FAC
4. Acer rubrum	3		FAC
5.			
6.			
7.			
8.			
9.			
	39 = Total Cover		
50% of total cover: 19.50	20% of total cover: 7.80		

Herb Stratum (Plot size: 5 ft r)			
1. Ligustrum sinense	5	✔	FACU
2. Lonicera japonica	5	✔	FACU
3. Smilax rotundifolia	5	✔	FAC
4. Viola sp.	5	✔	
5. Lindera benzoin	3		FAC
6.			
7.			
8.			
9.			
10.			
11.			
	23 = Total Cover		
50% of total cover: 11.50	20% of total cover: 4.60		

Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	29	x 3 =	87
FACU species	83	x 4 =	332
UPL species	20	x 5 =	100
Column Totals:	142 (A)		539 (B)

Prevalence Index = B/A = 3.79

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✔

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL Sampling Point: DP-18

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 2	10YR 4/2	100					Loam	
2 - 8	10YR 4/4	100					Silt Loam	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Gravel

Depth (inches): 8

Hydric Soil Present? **Yes** ___ **No** ✔

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-25

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-19

Investigator(s): MS, AS Section, Township, Range:

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Concave Slope (%): 2

Subregion (LRR or MLRA): P 136 Lat: 36.66324793 Long: -79.5127934 Datum: WGS 84

Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	**No** ___	**Is the Sampled Area within a Wetland?**	Yes ✔	No ___
Hydric Soil Present?	Yes ✔	No ___			
Wetland Hydrology Present?	Yes ✔	No ___			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ✔ Surface Water (A1)
- ✔ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ✔ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ✔ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✔ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✔ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✔	No ____	Depth (inches): 0.5
Water Table Present?	Yes ✔	No ____	Depth (inches): 3
Saturation Present? (includes capillary fringe)	Yes ✔	No ____	Depth (inches): 0

Wetland Hydrology Present? Yes ✔ No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-19

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	90	✔	FAC
2. Prunus serotina	2		FACU
3.			
4.			
5.			
6.			
7.			
	92 = Total Cover		
50% of total cover: 46.00	20% of total cover: 18.40		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Nyssa sylvatica	15	✔	FAC
2. Liquidambar styraciflua	5	✔	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	20 = Total Cover		
50% of total cover: 10.00	20% of total cover: 4.00		
Herb Stratum (Plot size: 5 ft r)			
1. Smilax rotundifolia	6	✔	FAC
2. Carex crinita	4	✔	OBL
3. Carex pedunculata	2		OBL
4. Lonicera japonica	1		FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	13 = Total Cover		
50% of total cover: 6.50	20% of total cover: 2.60		
Woody Vine Stratum (Plot size: 30 ft r)			
1. Vitis sp.	10	✔	
2.			
3.			
4.			
5.			
	10 = Total Cover		
50% of total cover: 5.00	20% of total cover: 2.00		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	6	x 1 =	6
FACW species	0	x 2 =	0
FAC species	116	x 3 =	348
FACU species	3	x 4 =	12
UPL species	0	x 5 =	0
Column Totals:	125 (A)		366 (B)

Prevalence Index = B/A = 2.92

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

✔ 3 - Prevalence Index is ≤3.0[1]

✔ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✔ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: DP-19

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 2	10YR 2/2	100					Loam	
2 - 6	10YR 5/2	85	7.5YR 4/6	10	C	PL / M	Clay Loam	
2 - 6			10YR 7/2	5	D	M	Clay Loam	Secondary Redox feature
6 - 12	10YR 5/2	70	7.5YR 4/6	25	C	PL / M	Silty Clay Loam	Manganese concretions
6 - 12			10YR 7/2	5	D	PL / M	Silty Clay Loam	Secondary Redox feature
12 - 20	10YR 5/2	50	7.5YR 5/6	40	C	PL / M	Silty Clay	Manganese concretions
12 - 20			10YR 7/1	10	D	PL / M	Silty Clay	Secondary Redox feature
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-26

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-20 STP

Investigator(s): KZ, LS Section, Township, Range:

Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Convex Slope (%): 4-6

Subregion (LRR or MLRA): P 136 Lat: 36.66372361 Long: -79.51121296 Datum: WGS 84

Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ___	**No ✔**	**Is the Sampled Area within a Wetland?**	Yes ___	No ✔
Hydric Soil Present?	Yes ___	No ✔			
Wetland Hydrology Present?	Yes ___	No ✔			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches):_____
Water Table Present?	Yes _____	No ✔	Depth (inches):_____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches):_____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-20 STP

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Herb Stratum (Plot size: 5 ft r)			
1. Schedonorus pratensis	80	✔	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	80 = Total Cover		
50% of total cover: 40.00	20% of total cover: 16.00		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	80	x 4 =	320
UPL species	0	x 5 =	0
Column Totals:	80 (A)		320 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✔

Remarks: (Include photo numbers here or on a separate sheet.)

No tree, sapling/shrub, or woody vine strata were observed at this data point.

SOIL Sampling Point: DP-20 STP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 18	5YR 5/8	100					Loam	
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-25

Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-21

Investigator(s): MS, AS Section, Township, Range:

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 4-5

Subregion (LRR or MLRA): P 136 Lat: 36.66337071 Long: -79.51277235 Datum: WGS 84

Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ___	**No ✔**	**Is the Sampled Area within a Wetland?**	Yes ___	No ✔
Hydric Soil Present?	Yes ___	No ✔			
Wetland Hydrology Present?	Yes ___	No ✔			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ✔	Depth (inches): ____
Water Table Present?	Yes ____	No ✔	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ✔	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP-21

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus alba	35	✔	FACU
2. Liriodendron tulipifera	30	✔	FACU
3. Acer rubrum	20		FAC
4. Quercus rubra	10		FACU
5. Pinus virginiana	5		UPL
6. Diospyros virginiana	2		FAC
7. Liquidambar styraciflua	2		FAC
	104	= Total Cover	
50% of total cover: 52.00		20% of total cover: 20.80	
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Liquidambar styraciflua	15	✔	FAC
2. Carya tomentosa	10	✔	UPL
3. Juniperus virginiana	10	✔	FACU
4. Quercus rubra	1		FACU
5.			
6.			
7.			
8.			
9.			
	36	= Total Cover	
50% of total cover: 18.00		20% of total cover: 7.20	
Herb Stratum (Plot size: 5 ft r)			
1. Smilax rotundifolia	30	✔	FAC
2. Lonicera japonica	20	✔	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	50	= Total Cover	
50% of total cover: 25.00		20% of total cover: 10.00	
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
50% of total cover:		20% of total cover:	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 28.57 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	69	x 3 =	207
FACU species	106	x 4 =	424
UPL species	15	x 5 =	75
Column Totals:	190 (A)		706 (B)

Prevalence Index = B/A = 3.71

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✔

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.