

United States Fish and Wildlife Service – Virginia Field Office

From: [Jason Duffey](#)
To: [Case, Rachel L](#); [Cameron, Susan](#)
Cc: [Josh Henry](#); [Jennifer Broush](#); chris@batgate.com
Subject: Transco SSE - May 16, 2025 USFWS Meeting Minutes
Date: Friday, May 23, 2025 1:09:00 PM
Attachments: [image001.png](#)
[Transco SSE May 16, 2025 USFWS Meeting - Notes.pdf](#)

Ms. Case and Ms. Cameron,

Attached for your review are meeting minutes from our May 16, 2025 meeting regarding threatened and endangered bats along the Transco Southeast Supply Enhancement (SSE) Project. Please let us know if you have any comments on the minutes. Following your review, Transco intends to include these meeting minutes in the correspondence log in a future filing of supplemental materials to FERC.

We appreciate the continued coordination between Transco and the U.S. Fish and Wildlife Service. Should you have any questions while reviewing, please do not hesitate to contact Josh Henry of Transco or a member of our team.

Thank you,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



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ENGINEERING, PLANNING, AND ENVIRONMENTAL CONSULTING SINCE 1958

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VA and NC USFWS Meeting Agenda

Transco Southeast Supply Enhancement Project

USFWS Staff:

- | | |
|-----------------|-------------------|
| — Rachel Case | VA USFWS Bat Lead |
| — Susan Cameron | NC USFWS Bat Lead |

Transco Team:

- | | |
|-----------------|---|
| — Josh Henry | Williams -Environmental Project Manager |
| — Jason Duffey | GAI - T&E Coordinator |
| — Chris Sanders | Sanders Environmental - Bat Specialist |

1.0 Forested Habitat

Northern long-eared bats are considered present along a portion of the Project in VA based on a previous record. Tricolored bats are considered present along the entire Project in VA and NC based on previous records and Transco's summer presence/absence surveys.

1.1 Tree Clearing

In the VA portion of the Project and in NC north of MP 1338.5¹, Transco will avoid tree clearing from April 1 to November 15. In NC south of MP 1338.5 Transco will avoid tree clearing from December 15 to February 15 and April 1 to July 15.

1.2 Blasting

Transco expects the effects of noise and vibration from blasting on summer tree-roosting bats to be insignificant and discountable. No blasting restrictions protective of summer tree roosting bats are anticipated.

2.0 Structures

Transco surveyed structures that are within the LOD and could be impacted by the Project for signs of summer bat use. Structure surveys are not complete but have found no evidence of bat use for surveys completed to date.

2.1 Structure Removal

In the VA portion of the Project and in NC north of MP 1338.5, where structures are anticipated to be removed to support Project construction, Transco will attempt to remove those structures from November 16 to March 31. If this is not feasible, Transco may remove a limited

¹ Milepost (MP 1338.5) is the boundary between the Tricolored Bat Hibernating Range and the Tricolored Bat Year-round Active Range (Zone 1).

number of structures from April 1 to November 15 following negative emergence counts conducted the night prior to removal. Structures showing signs of bat use during emergence counts in VA and NC north of MP 1338.5 would be removed from November 16 to March 31.

In NC south of MP 1338.5, where structures are anticipated to be removed to support Project construction, Transco will attempt to remove those structures from November 16 to December 14 or from February 16 to March 31 (avoiding the deep torpor season December 15 – February 15). If this is not feasible, Transco may remove a limited number of structures from April 1 to November 15 following negative emergence counts conducted the night prior to removal. Structures showing signs of bat use during emergence counts in NC south of MP 1338.5 would be removed from November 16 to December 14 or from February 16 to March 31.

2.2 Blasting

Transco would avoid blasting within 150 feet of any structure proposed for removal that showed signs of bat use during emergence counts (if required prior to removal) until the structure can be removed as described above for hibernating and active ranges in VA and NC. No blasting restrictions protective of structures outside of the LOD are anticipated.

3.0 Culverts

Transco surveyed culverts within the LOD for summer bat use that met minimum USFWS size requirements. Transco surveyed culverts for winter bat use that met minimum USFWS size requirements within a 300-foot-wide corridor centered on the pipeline centerlines. This included areas within and adjacent to Project LOD that fall within 150 feet of potential blasting. Transco encountered five culverts during surveys that were inaccessible and could not be surveyed due to limited visibility. Culvert surveys are not complete but have found no evidence of bat use for surveys completed to date.

3.1 Culvert Removal

Transco may impact culverts within the LOD meeting minimum USFWS size requirements that have been surveyed for bats and showed no signs of summer or winter bat use. No restrictions on culvert removal protective of summer or winter bat use are anticipated.

Transco encountered five culverts during surveys that were inaccessible and could not be surveyed due to limited visibility. These five culverts will not be impacted by the Project.

3.2 Blasting

No blasting restrictions protective of culverts in the LOD that have been surveyed and showed no signs of summer bat use are anticipated. No blasting restrictions protective of culverts in the LOD or within 150 feet of Project centerlines that have been surveyed and showed no signs of winter bat use are anticipated.

Transco encountered five culverts during surveys that were inaccessible and could not be surveyed due to limited visibility. Transco will avoid blasting within 150 feet of these inaccessible or unsurveyed culverts meeting minimum USFWS size requirements during the winter hibernation and torpor season. In the VA portion of the Project and in NC north of MP 1338.5 the hibernating season is November 16 to March 31 and in NC south of MP 1338.5 the torpor season is December 15 to February 15.

4.0 Cave, Mine, and Rock Winter Habitat

Transco's report *Bat Hibernacula and Winter Culvert Surveys for the Southeast Supply Enhancement Project* details desktop and field investigations of various types of potential cave, mine, and rock winter habitat in addition to the culverts described above. No known, occupied, or suitable cave, mine, or rock winter habitat was found.

4.1 Construction

No construction restrictions, including tree clearing or ground disturbance, protective of cave, mine, or rock winter bat habitat are anticipated.

4.2 Blasting

No blasting restrictions protective of cave, mine, or rock winter bat habitat are anticipated.

From: [Jason Duffey](#)
To: [Case, Rachel L](#); "[Cameron, Susan](#)"
Cc: [troy_andersen@fws.gov](#); [Stanhope, Jennifer W](#); "[Tompkins, Bryan](#)"; [Rick.reynolds@dwr.virginia.gov](#); [Munzer, Olivia](#); [Josh Henry](#); [Jennifer Broush](#); [chris@batgate.com](#)
Subject: Transco SSE - Updated Bat Hibernacula and Acoustic Survey Reports
Date: Monday, May 5, 2025 11:58:00 AM
Attachments: [image001.png](#)
[image002.png](#)

Ms. Case and Ms. Cameron,

Transcontinental Gas Pipe Line Company, LLC (Transco) is pleased to provide you updated versions of the [Bat Hibernacula and Winter Culvert Surveys Report](#) and the [Bat Acoustic Sampling Report](#).

The updated [Bat Hibernacula and Winter Culvert Surveys Report](#) includes the results of winter culvert surveys conducted in February 2025. The updated [Bat Acoustic Sampling Report](#) contains additional descriptions of bat call files recorded in North Carolina that were initially identified by the acoustic analysis software as being consistent with gray bats.

These updated reports are available for download from your respective VA and NC USFWS folders here:

 [VA Bat Reports](#)

 [NC Bat Reports](#)

Transco is requesting review and concurrence with the results of the reports. Transco appreciates the continued coordination with the USFWS VA and NC Field Offices, and state agencies regarding listed and rare species. If you have any questions or require any additional information, please do not hesitate to contact Josh Henry of Transco or a member of our team.

Thank you,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



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From: [Jason Duffey](#)
To: [Stanhope, Jennifer W](#); ["Tompkins, Bryan"](#)
Cc: [Jennifer Broush](#); [Josh Henry](#)
Subject: Transco SSE - April 21, 2025 USFWS Meeting Minutes
Date: Monday, May 5, 2025 4:48:26 PM
Attachments: [image001.png](#)
[Transco SSE April 21 2025 USFWS Meeting - Notes.pdf](#)

Ms. Stanhope and Mr. Tompkins,

Attached for your review are meeting minutes from our April 21, 2024 meeting regarding threatened and endangered species along the Transco Southeast Supply Enhancement (SSE) Project. Please let us know if you have any comments to the minutes. Following your review, Transco intends to include the meeting minutes in the correspondence log in a future filing of supplemental materials to FERC.

We appreciate the continued coordination between Transco and the U.S. Fish and Wildlife Service. Should you have any questions while reviewing, please do not hesitate to contact Josh Henry of Transco or a member of our team.

Thank you,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



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April 21, 2025

VA and NC USFWS Meeting Agenda

Transco Southeast Supply Enhancement Project

USFWS Staff:

— Jennifer Stanhope	VA Field Office Lead, VA Mussels Lead
— Emily Argo	VA Roanoke Logperch Lead
— Troy Andersen	VA Field Supervisor
— Rachael Case	VA Bat Lead
— Bryan Tompkins	NC Asheville Field Office Lead
— Susan Cameron	NC Bat Lead

Transco Team:

— Josh Henry	Williams -Environmental Project Manager
— Joe Dean	Williams - Environmental Manager
— Jason Duffey	GAI - T&E Coordinator
— Chris Sanders	Sanders Environmental - Bat Specialist
— Jeremy Alberts	ESI, Inc. – Roanoke Logperch and Bald Eagle
— Casey Swecker	EDGE Engineering and Environmental - Mussels and Plants

1. Project Update

- Schedule (CP25-10) remains the same
 - NOS 1/22/25 (EA in November 2025, Order and Construction in 2026)
 - Total Project tree clearing of approximately 290 acres (includes 155 ac. in VA and 135 ac. in NC)
 - Planned HDD crossings remain the same

2. Bats

- Outstanding surveys to be conducted in 2025
 - Summer Acoustics in NC
 - Confirm with NC USFWS that one reroute outside of tricolored bat positive detection buffers in NC where Transco will assume presence
 - Both NC and VA confirmed that assuming presence in this area and applying the same Avoidance and Minimization Measures (AMMs) that are being applied to the rest of the Project would be sufficient.
 - Culverts as potential hibernacula
 - Culverts within 150 feet of Project Centerline that could be disturbed by blasting were surveyed in February 2025 as potential hibernacula
 - Transco will be submitting an updated report summarizing the surveys
 - Transco will continue to coordinate with USFWS on any potential AMMs
 - Culverts as potential summer roosts
 - Recently identified culverts in the LOD that were not surveyed in the summer of 2024 will be surveyed in 2025
 - Only surveying culverts in LOD as summer roosts that could be removed or directly disturbed by construction
 - Transco will follow 2024 study plan
 - Transco will be submitting an updated report following surveys

April 21, 2025

- USFWS agreed with approach
 - Structures as potential summer roosts
 - Six (6) outstanding in VA and any new structures in the LOD that were not surveyed in the summer of 2024. Transco is reviewing LOD to verify all structures surveyed.
 - Only surveying structures in LOD as summer roosts that could be removed or directly disturbed by construction
 - Transco will follow 2024 study plan
 - Transco will be submitting an updated report following surveys
 - USFWS agreed with approach
- 3. Roanoke Logperch
 - Outstanding surveys to be conducted in 2025
 - None
 - USFWS requested additional details on HDD entry and exit locations in proximity to potential RLP resources (Dan River, Cascade Creek, Sandy River). USFWS agreed that avoidance of direct impacts and significant set backs from resources shows avoidance and minimization.
 - TOYRs
 - USFWS agreed that TOYRs are unlikely to be recommended in instances where avoidance of resources through HDD is proposed.
- 4. Mussels
 - Outstanding surveys to be conducted in 2025
 - No surveys for Federal Mussels outstanding
 - TOYRs
 - Transco does not expect TOYRs for Mussels based on negative survey findings in VA and avoidance via HDD in NC
 - USFWS agreed that because surveys were negative in areas of impact in VA and avoidance via HDD is proposed in NC, TOYRs would be unlikely to be recommended.
- 5. Monarch Butterfly
 - Timing of vegetation mowing prior to construction (Prior to April 1) as part of Operational right-of-way maintenance
 - USFWS agreed operational mowing between August 1 and April 1 minimizes potential impact to Monarch Butterfly in the project area.

From: [Case, Rachel L](#)
To: [Jason Duffey](#)
Cc: [Josh Henry](#); kevinc@whmgroupp.com; chris@batgate.com; [Jennifer Broush](#); [Stanhope, Jennifer W](#); [Reynolds, Richard \(DWR\)](#); [Andersen, Troy M](#)
Subject: Re: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992
Date: Thursday, April 3, 2025 11:39:37 AM
Attachments: [image002.png](#)
[image003.png](#)

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Jason,

We have reviewed the 5 bat survey reports for the Southeast Supply Enhancement project listed below. The following comments are provided under provisions of the Endangered Species Act (16 USC 1536), as amended. The proposed action will occur in Virginia and North Carolina. Four out of the 5 bat surveys were conducted in both states, while the mist-net survey was only conducted in Virginia. The comments provided below pertain only to the portions of the survey conducted in Virginia.

- 1) "Report on Bat Acoustic Sampling on the Southeast Supply Enhancement Project Phase 2 Presence/Absence Acoustic Bat Survey" (acoustic survey), dated December 17, 2024 (updated January 31, 2025);
- 2) "Mist Net Survey Report, Bat Sampling Southeast Supply Enhancement Project" (mist-net survey), dated October 14, 2024;
- 3) "Southeast Supply Enhancement – Hibernacula Phase 1 Report" (hibernaculum survey), dated December 19, 2024;
- 4) "Structure Assessments and Bat Emergence Counts for the Southeast Supply Enhancement Project" (structure survey), dated October 14, 2024 (updated December 16, 2024, and January 31, 2025) and;
- 5) "Bat Culvert Surveys for the Southeast Supply Enhancement Project" (culvert survey), October 22, 2024 (updated December 17, 2024).

Acoustic and mist-net survey

Both the acoustic and mist-net survey were conducted by a qualified surveyor in accordance with the Service's Range-wide Indiana Bat and Northern Long-eared Bat Survey Guidelines (survey guidelines).

In Virginia, acoustic data were collected from June 5 through July 14, 2024. The northern long-eared bat (NLEB) was detected by the software program used to analyze the data; however, after a qualified individual manually reviewed the data, it was determined that

no calls were consistent with the NLEB. Although the survey did not determine the presence of the NLEB, the surveyed area falls within an inner tier of a known occurrence for the species. According to the survey guidelines, the NLEB is assumed to be present within this inner tier. The surveyor was informed of this occurrence by the Service during early coordination. Additionally, the software program detected the tricolored bat (TCB), and manual review of the data further confirmed the species' presence within the project area.

Mist net surveys were conducted from June 5 through July 2, 2024. No NLEBs were captured; however, one pregnant TCB was captured. A transmitter was not attached to the TCB to avoid postpartum complications.

Based on the results of the acoustic and mist-net surveys, our office finds it acceptable to conclude the presence of the TCB in the project area. Additionally, outside of the known occurrence listed above (e.g., the NLEB inner tier), our office finds it acceptable to conclude the probable absence of the NLEB in the project area. The results of these surveys are valid for a minimum of 5 years.

Hibernaculum survey

A phase 1 desktop analysis and initial field reconnaissance was conducted by a qualified surveyor in accordance with the survey guidelines in 2024. No potential hibernacula were identified during this assessment. Based on the results of this assessment, our office finds it acceptable to conclude probable absence of NLEB or TCB hibernaculum in the project area. The results of this assessment are valid for a minimum of 5 years.

Culvert survey

Culvert assessments were conducted by a qualified surveyor in accordance with the survey guidelines in June, July, and October of 2024. In Virginia, 7 culverts were identified within the project area as having potential habitat for bats. Of those culverts, 1 culvert (EL-Bat Segment 08) was surveyed during the active season; the remaining six culverts will be surveyed in 2025. No bats or signs of bats were observed at culvert EL-Bat Segment 08. Based on the results of this survey, our office finds it acceptable to conclude the probable absence of the NLEB and TCB at culvert EL-Bat Segment 08. This survey is valid for a minimum of 2 years.

Structure survey

Structure assessments were conducted by a qualified surveyor on August 11 and August 14, 2024, along the Virginia portion of Eden Loop and on October 1, 2024, at structures

associated with Compressor Station 165. Twenty-seven structures were determined to provide potential habitat for bats within the project area in Virginia. Surveys were completed for 21 structures; six will be surveyed in 2025. Of the 21 structures surveyed in 2024, no bats or signs of bats were observed; therefore, our office finds it acceptable to conclude the probable absence of the NLEB and TCB at these structures. These surveys are valid for a minimum of 2 years.

Best,

Rachel Case
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
<https://www.fws.gov/office/virginia-ecological-services>

From: Jason Duffey <J.Duffey@gaiconsultants.com>
Sent: Monday, February 24, 2025 2:15 PM
To: Case, Rachel L <rachel_case@fws.gov>; Rick.reynolds@dwr.virginia.gov <rick.reynolds@dwr.virginia.gov>
Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroup.com <kevinc@whmgroup.com>; chris@batgate.com <chris@batgate.com>; Jennifer Broush <j.broush@gaiconsultants.com>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Luu, Jackie A <jackie_luu@fws.gov>
Subject: RE: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

Hi Rachael,

Transco is pleased to provide responses to your comments on the bat survey reports. In addition, we are providing information requested by the USFWS during our recent January 27, 2025 discussion on the survey results. Where noted, updated reports and other files are available for download from our secure folder here:

 [VA Bat Reports](#)

Our responses are below:

Culvert Survey

Comment 1: The report indicates that “the project has identified culverts located within the limits of disturbance, that may be removed or demolished as part of proposed Project construction activities” (pg. 4). “The use of these controlled blasting techniques limits the impacts to nearby areas, or areas outside of the limits of disturbance, which would include

minimizing impacts to culverts outside of the limit of disturbance” (pg. 5).

The first statement indicates that only culverts within the limits of disturbance were surveyed. The second statement indicates that impacts will extend outside the limits of disturbance, but will be minimal (e.g., “which would include minimizing impacts to culverts outside of the limits of disturbance”). The action area is defined by ESA regulation as all areas to be affected directly or indirectly by the action and not merely the immediate area involved in the action (50 CFR §402.02). If culverts outside of the limits of disturbance will be affected, even if the applicant has determined the effects will be minimal, those culverts should be included in the assessment.

Transco response: As discussed , the use of controlled blasting techniques could result in minimal detectable noise and vibration outside of the LOD before attenuating to ambient or undetectable levels. However, Transco does not anticipate blasting to have impacts beyond 150 feet from the Project centerline. Therefore, Transco is expanding the culvert assessment beyond the LOD, to 150 feet from the Project centerline, to identify portals potentially suitable for use by hibernating and summer-roosting bats. These portals are being surveyed in accordance with the survey plan submitted and approved on February 10, 2025.

Comment 2: Of the culverts surveyed, 7 are in VA. Of those 7, only 1 culvert was accessible and surveyed during the survey season. The other 6 were either inaccessible or surveyed outside the survey season. Therefore, VA cannot fully analyze the potential impacts of the project to listed or proposed bat species in VA until all assessments are complete.

Transco response: The remaining culverts will be surveyed for summer roosting bats during the appropriate survey window in 2025. Transco will provide an updated Culvert Survey Report to the USFWS when surveys are complete.

Comment 3: Culvert surveys resulting in probable absence are valid for 2 years. If the project “commences in the third quarter of 2026”, culvert assessments done in 2024 that were not repeated in 2025 may no longer be valid.

Transco response: In coordination with the USFWS, Transco will conduct follow-up surveys on suitable culverts to verify culverts within the LOD have valid surveys at the time of construction.

Hibernacula survey

USFWS: No comments.

Structure survey

Comment 1: Please indicate which state the structure is in on Table 3-1 and submit the revised document.

Transco response: The Structures Survey Report is updated to include states for each structure and is available for download at the link above.

Acoustic survey

Question 1: The report uses the term “quality check” throughout the document. Can you please provide the definition of a “quality check?” I have not seen this term used before.

Transco response: As discussed on January 27, 2025, the manual quality check (QC) is an initial review of call files for a species that Kaleidoscope determines to be present. Once the QC confirmed that Kaleidoscope correctly identified the species, no additional review (i.e., qualitative analysis) for that site was conducted. Quality Check is not used to invalidate an automated KPro presence determination, only to manually verify those positives or lead to a potential qualitative analysis.

In response to a request from the NC Field Office, the report has been updated to include additional language to clarify that biologists conducted manual vetting when the MLE was > 0.05 for any site/nights and when there are 10 or more calls identified as tricolored bat. The updated report is available for download at the link above.

Question 2: Can you provide a shapefile containing all detector sites where TCB was determined present following quantitative analysis?

Transco response: The shapefiles containing Project detector sites where TCB was determined present available for download at the link above.

Other

Comment: A mist-net survey was also conducted in Virginia. Has this report been submitted to our office for review?

Transco response: Transco submitted the mist net survey report on October 29, 2024, and forwarded via email on January 3, 2025. The report is available at the link above (as an attachment to the October 29 submittal package and as a standalone report).

In addition to these responses, as discussed on January 27, 2025, Transco is providing you with the following, available for download at the link above:

- Shapefiles of proposed tree clearing along the Project
- A table showing proposed time of year restrictions (TOYRs) to be applied along the Project to avoid effects to bats
- Bat detector log files and KPro raw outputs for acoustic survey sites in VA

We appreciate the continued coordination between Transco, the USFWS VA and NC Field Offices, and state agencies regarding listed and rare species. If you have any questions or require any additional information, please do not hesitate to contact Josh Henry of Transco or me.

Thank you,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



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From: Jason Duffey

Sent: Tuesday, January 7, 2025 5:05 PM

To: 'Case, Rachel L' <rachel_case@fws.gov>; rick.reynolds@dwr.virginia.gov

Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroupp.com; chris@batgate.com; Jennifer Broush <j.broush@gaiconsultants.com>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Luu, Jackie A <jackie_luu@fws.gov>

Subject: RE: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

Hi Rachael,

I just wanted to follow up with you and let you know you didn't actually overlook the October 29 email I mentioned, also attached. I didn't copy you on it!

At that point we had not yet identified you as the biologist to submit our reports to for review.

Regardless, the report is available at the links in the attached email and below.

Thanks,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



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From: Case, Rachel L <rachel_case@fws.gov>

Sent: Friday, January 3, 2025 3:32 PM

To: Jason Duffey <J.Duffey@gaiconsultants.com>; rick.reynolds@dwr.virginia.gov

Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroup.com; chris@batgate.com; Jennifer Broush <j.broush@gaiconsultants.com>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Luu, Jackie A <jackie_luu@fws.gov>

Subject: Re: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

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Thanks, Jason! I must have overlooked it. I will review that one ASAP.

Rachel Case (she/her)

Fish and Wildlife Biologist

U.S. Fish and Wildlife Service

Virginia Field Office

6669 Short Lane

Gloucester, VA 23061

804-323-4801

<https://www.fws.gov/office/virginia-ecological-services>

From: Jason Duffey <J.Duffey@gaiconsultants.com>

Sent: Friday, January 3, 2025 2:58 PM

To: Case, Rachel L <rachel_case@fws.gov>; rick.reynolds@dwr.virginia.gov
<rick.reynolds@dwr.virginia.gov>

Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroup.com <kevinc@whmgroup.com>;
chris@batgate.com <chris@batgate.com>; Jennifer Broush <j.broush@gaiconsultants.com>;
Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Luu, Jackie A <jackie_luu@fws.gov>

Subject: RE: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

Hi Rachael,

Thank you for your review and comments on the reports. We will provide updates and

responses soon. In the meantime, regarding the final comment below, we submitted the Mist Net Survey Report via the same link below on October 29, 2024. The Mist Net Survey Report is still available at the link below under the original October 29, 2024 cover letter along with the original Hibernacula, Structures, and Culvert reports. That document is titled "241029_Transco_SSE_VA Bat Survey Reports."

Please let me know if you have any questions and if you prefer, we can separate out the Mist Net Report from the original October 29, 2024 transmittal.

Thank you,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

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From: Case, Rachel L <rachel_case@fws.gov>

Sent: Friday, January 3, 2025 2:21 PM

To: Jason Duffey <J.Duffey@gaiconsultants.com>; rick.reynolds@dwr.virginia.gov

Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroup.com; chris@batgate.com; Jennifer Broush <j.broush@gaiconsultants.com>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Luu, Jackie A <jackie_luu@fws.gov>

Subject: Re: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

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Hi Jason,

Our office has reviewed the culvert, hibernacula, structure and acoustic survey reports provided at the link below. We have the following comments/questions.

culvert survey

comment 1:

The report indicates that "the project has identified culverts located within the limits of disturbance, that may be removed or demolished as part of proposed Project

construction activities” (pg. 4). “The use of these controlled blasting techniques limits the impacts to nearby areas, or areas outside of the limits of disturbance, which would include minimizing impacts to culverts outside of the limit of disturbance” (pg. 5).

The first statement indicates that only culverts within the limits of disturbance were surveyed. The second statement indicates that impacts will extend outside the limits of disturbance, but will be minimal (e.g., “which would include minimizing impacts to culverts outside of the limits of disturbance”). The action area is defined by ESA regulation as all areas to be affected directly or indirectly by the action and not merely the immediate area involved in the action (50 CFR §402.02). If culverts outside of the limits of disturbance will be affected, even if the applicant has determined the effects will be minimal, those culverts should be included in the assessment.

comment 2:

Of the culverts surveyed, 7 are in VA. Of those 7, only 1 culvert was accessible and surveyed during the survey season. The other 6 were either inaccessible or surveyed outside the survey season. Therefore, VA cannot fully analyze the potential impacts of the project to listed or proposed bat species in VA until all assessments are complete.

comment 3:

Culvert surveys resulting in probable absence are valid for 2 years. If the project “commences in the third quarter of 2026”, culvert assessments done in 2024 that were not repeated in 2025 may no longer be valid.

hibernacula survey

No comments.

structure survey

comment 1:

Please indicate which state the structure is in on Table 3-1 and submit the revised document.

acoustic survey

question 1:

The report uses the term “quality check” throughout the document. Can you please provide the definition of a “quality check?” I have not seen this term used before.

question 2:

Can you provide a shapefile containing all detector sites where TCB was determined present following quantitative analysis?

other

A mist-net survey was also conducted in Virginia. Has this report been submitted to our office for review?

Thanks,

Rachel

Rachel Case (she/her)
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
804-323-4801
<https://www.fws.gov/office/virginia-ecological-services>

From: Jason Duffey <J.Duffey@gaiconsultants.com>

Sent: Thursday, December 19, 2024 6:46 PM

To: Virginia Field Office, FW5 <virginiafieldoffice@fws.gov>; rick.reynolds@dwr.virginia.gov <rick.reynolds@dwr.virginia.gov>; Case, Rachel L <rachel_case@fws.gov>; Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>

Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroupp.com <kevinc@whmgroupp.com>; chris@batgate.com <chris@batgate.com>; Jennifer Broush <j.broush@gaiconsultants.com>

Subject: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

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Ms. Case and Mr. Reynolds,

RE: Bat Acoustic Survey Report

Transcontinental Gas Pipe Line Company, LLC. (Transco), an indirect, wholly owned subsidiary of The Williams Companies, Inc. (Williams), is seeking authorization from the Federal Energy Regulatory Commission under Sections 7(b) and 7(c) of the Natural Gas Act for appropriate abandonment authority and a certificate of public convenience and necessity (Certificate) to construct, own, operate, and maintain the proposed Southeast Supply Enhancement Project (Project) facilities.

Transco is pleased to provide the linked Bat Acoustics Survey Report for your review and comment. Transco previously submitted Bat Mist Net, Structures, Culverts, and Hibernacula Survey Reports to you via the link below on October 29, 2024. The following secure link allows those copied on this email to download the cover letter and reports:

 [VA Bat Reports](#)

If someone else in your organization requires access to download the reports, please notify me and I can grant access.

Transco appreciates your attention to the Project and looks forward to your guidance and concurrence on the attached reports. Should you have questions related to this report, please let us know.

Thank you,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



GAI Consultants

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From: [Stanhope, Jennifer W](#)
To: [Jason Duffey](#)
Cc: [Josh Henry](#); [Jeremy Alberts](#); [Watson, Brian \(DWR\)](#); [Argo, Emily E](#); [Jennifer Broush](#); [Casey Swecker](#); [Akers, Shauna](#); kevinc@whmggroup.com; [Andersen, Troy M](#)
Subject: RE: [EXTERNAL] Transco SSE - VA Freshwater Mussel Survey and RLP Habitat Assessments - 1 of 2
Date: Monday, March 31, 2025 8:41:25 AM
Attachments: [image001.png](#)
[image002.png](#)

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Jason,

We have reviewed the 2 survey reports for the Southeast Supply Enhancement project listed below. The following comments are provided under provisions of the Endangered Species Act (16 USC 1536), as amended.

1. "Virginia freshwater mussel survey report, Transcontinental Gas Pipe Line Company, LLC, Southeast Supply Enhancement Project, Pittsylvania County, Virginia," updated February 28, 2025 and received on March 2, 2025;
2. "Habitat Assessments for Roanoke Logperch (*Percina rex*)," amended February 17, 2025 and received on March 2, 2025.

Freshwater Mussels

Abbreviated and full mussel surveys were conducted from August 18, 2024 to September 14, 2024 by surveyors permitted by Virginia Department of Wildlife Resources and approved for this project. They found suitable habitat for freshwater mussels in multiple streams (see Table 2 in survey report when results indicated presence of live eastern elliptio [*Elliptio complanata*]), but no federally listed endangered James spiny mussel (*Parvaspina collina*), federally listed threatened Atlantic pigtoe (*Fusconaia masoni*), or federally proposed threatened green floater (*Lasmigona subviridis*) were identified during the field surveys. Based on that survey report, it is the U.S. Fish and Wildlife Service's opinion that the James spiny mussel, Atlantic pigtoe, and green floater do not currently occur at the stream reaches surveyed. This survey is valid for 2 years.

Roanoke Logperch

The proposed action will occur in Virginia and North Carolina and the following comments are only applicable to the Virginia portion of the project. Based on the results

of the habitat assessment in the Sandy River, it is the U.S. Fish and Wildlife Service's opinion that there is potential for the species to be present in suitable habitat. Due to the lack of modeled predicted suitable habitat for Roanoke logperch at the other crossings included in the habitat assessment, the Service believes species presence is unlikely.

Please let me know if you have any questions.

Thank you,
Jen

Jennifer Stanhope
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service - Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
Office: 804-905-9781 (*note: new number*)
Jennifer_stanhope@fws.gov
<https://www.fws.gov/office/virginia-ecological-services>

From: Jason Duffey <J.Duffey@gaiconsultants.com>
Sent: Sunday, March 2, 2025 8:55 PM
To: Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Jennifer Broush <j.broush@gaiconsultants.com>; Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Argo, Emily E <emily_argo@fws.gov>
Cc: Josh Henry <Josh.Henry@williams.com>; Jeremy Alberts <JAlberts@envsi.com>; Casey Swecker <cdswecker@edge-es.com>; Akers, Shauna <shauna.akers@williams.com>; kevinc@whmgroup.com
Subject: RE: [EXTERNAL] Transco SSE - VA Freshwater Mussel Survey and RLP Habitat Assessments - 1 of 2

Hello Ms. Stanhope,

On behalf of Jennifer Broush, Josh Henry, and the rest of the Transco team, I am providing you with updated Roanoke Logperch and Virginia Freshwater Mussel reports that address your questions in your email below. Both updated reports include the dates and names of the permitted biologists that conducted surveys along each reach. The Virginia Freshwater Mussel Report includes additional language on whether the permitted surveyors considered each of the streams where no mussels were observed to have suitable mussel habitat.

The reports are available for download from the folder here:

 [VA Aquatics Reports](#)

We also included in the folder the Project Proposed HDD Inadvertent Returns Contingency

Plans as requested by the VA Field Office in recent discussions.

We greatly appreciate the continued coordination with the VA Field Office. If you have any questions or require additional information, please do not hesitate to contact Josh Henry of Transco or members of our team.

Thank you!

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



GAI Consultants

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From: Stanhope, Jennifer W <jennifer_stanhope@fws.gov>

Sent: Monday, February 3, 2025 4:31 PM

To: Jennifer Broush <j.broush@gaiconsultants.com>; Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Argo, Emily E <emily_argo@fws.gov>

Cc: Josh Henry <Josh.Henry@williams.com>; Jeremy Alberts <JAlberts@envsi.com>; Casey Swecker <cdswecker@edge-es.com>; Akers, Shauna <shauna.akers@williams.com>; Jason Duffey <J.Duffey@gaiconsultants.com>

Subject: RE: [EXTERNAL] Transco SSE - VA Freshwater Mussel Survey and RLP Habitat Assessments - 1 of 2

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Jennifer B.,

Thank you for sending the survey reports for freshwater mussels and RLP habitat in VA.

My questions/comments below pertain to the mussel survey report dated December 17, 2024.

1. When were each of the surveys conducted? Please provide the dates for each stream.
2. Who were the VDWR permitted biologists leading the surveys at each of the

streams?

3. For each of the streams where no mussels were observed, please indicate if the qualified, permitted surveyor considered the stream to have suitable mussel habitat? Or do we assume because the stream was surveyed, the surveyors would characterize the habitat as suitable for mussels?

Thank you,
Jen

Jennifer Stanhope
Acting Assistant Field Office Supervisor - Endangered Species
U.S. Fish and Wildlife Service - Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
Office: 804-905-9781 (*note: new number*)
Jennifer_stanhope@fws.gov
<https://www.fws.gov/office/virginia-ecological-services>

From: Jennifer Broush <j.broush@gaiconsultants.com>
Sent: Wednesday, December 18, 2024 2:43 PM
To: Luu, Jackie A <jackie_luu@fws.gov>; Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Argo, Emily E <emily_argo@fws.gov>
Cc: Josh Henry <Josh.Henry@williams.com>; Jeremy Alberts <JAlberts@envsi.com>; Casey Swecker <cdswecker@edge-es.com>; Akers, Shauna <shauna.akers@williams.com>; Jason Duffey <J.Duffey@gaiconsultants.com>
Subject: [EXTERNAL] Transco SSE - VA Freshwater Mussel Survey and RLP Habitat Assessments - 1 of 2

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Ms. Luu and Mr. Watson (**Email 1 of 2**),

Transcontinental Gas Pipe Line Company, LLC (Transco) is pleased to submit the Virginia (VA) Freshwater Mussel Survey Report and Roanoke Logperch Habitat Assessments which were conducted in support of the proposed Southeast Supply Enhancement (Project) in Pittsylvania County, VA. We look forward to your review and comment regarding these reports and are available to discuss at your convenience. We are submitting via two emails due to the size of

the files.

We appreciate the continued coordination between Transco, U.S. Fish and Wildlife Service VA Field office, and VA Department of Wildlife Resources regarding sensitive species in VA.

Should you have any questions while reviewing, please do not hesitate to contact Josh Henry (Transco) or me. If the size of the documents are too large to be accepted, we will provide a link to download.

Regards,
Jennifer

Jennifer Broush, MBA

Senior Associate / Environmental Director

GAI Consultants, 385 E. Waterfront Drive, Homestead, PA 15120-5005

D 412.399.5317 **M** 724.516.1155 **E** j.broush@gaiconsultants.com

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From: [Stanhope, Jennifer W](#)
To: [Jason Duffey](#); [Cooper, Jeffrey \(DWR\)](#)
Cc: [Jennifer Broush](#); [Josh Henry](#); [Jeremy Alberts](#); [Andersen, Troy M](#)
Subject: RE: [EXTERNAL] Transco SSE - VA Bald Eagle Survey Report
Date: Friday, March 28, 2025 3:01:13 PM
Attachments: [image001.png](#)
[image002.png](#)

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Jason,

We have reviewed the survey report entitled “Surveys for Bald Eagle (*Haliaeetus leucocephalus*) on the Southeast Supply Enhancement Project in Pittsylvania County, Virginia,” dated February 28, 2025 and received on March 7, 2025. The following comments are provided under provisions of the Bald and Golden Eagle Protection Act (16 USC 668-668d), as amended.

Aerial surveys for bald eagle nests were conducted on January 13, 2025 per the study plan, updated and received on November 4, 2024. No bald eagle or eagle nests were identified during the surveys. We concur with the results of the survey report.

Thank you,
Jen

Jennifer Stanhope
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service - Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
Office: 804-905-9781 (note: new number)
Jennifer_stanhope@fws.gov
<https://www.fws.gov/office/virginia-ecological-services>

From: Jason Duffey <J.Duffey@gaiconsultants.com>
Sent: Friday, March 7, 2025 12:59 PM
To: Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Cooper, Jeffrey (DWR) <Jeff.Cooper@dwr.virginia.gov>
Cc: Jennifer Broush <j.broush@gaiconsultants.com>; Josh Henry <Josh.Henry@williams.com>; Jeremy Alberts <JAlberts@envsi.com>; Andersen, Troy M <troy_andersen@fws.gov>
Subject: [EXTERNAL] Transco SSE - VA Bald Eagle Survey Report

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Ms. Stanhope and Mr. Cooper,

Transcontinental Gas Pipe Line Company, LLC (Transco) is pleased to submit the Virginia (VA) Bald Eagle Survey Report. The bald eagle survey was conducted in support of the proposed Southeast Supply Enhancement (Project) in Pittsylvania County, VA. We look forward to your review and comment regarding the report and are available to discuss at your convenience. We are submitting via a OneDrive download link for security and due to the size of the report here:

 [VA Bald Eagle Report](#)

We appreciate the continued coordination between Transco, U.S. Fish and Wildlife Service VA Field office, and VA Department of Wildlife Resources regarding sensitive species in VA. Should you have any questions while reviewing, please do not hesitate to contact Josh Henry of Transco or a member of our team.

Thanks!

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



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From: [Jason Duffey](#)
To: [Case, Rachel L](#); rick.reynolds@dwr.virginia.gov
Cc: [Josh Henry](#); kevinc@whmggroup.com; chris@batgate.com; [Jennifer Broush](#); [Stanhope, Jennifer W](#)
Subject: RE: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992
Date: Thursday, March 20, 2025 4:18:50 PM
Attachments: [image001.png](#)
[image002.png](#)

Hi Rachael,

Thank you for your review and comments on the reports. Our answers are provided below in bold text. We appreciate the continued coordination with USFWS VA Field Office. If you have any questions or require additional information, please do not hesitate to contact Josh Henry of Transco or a member of our team.

USFW Comment: For Virginia, can you provide the dates that mist net surveys were conducted and the date(s) the hibernacula assessment was conducted?

Transco response: The mist net surveys were conducted June 5, 2024 – July 2, 2024, and were only conducted in VA. Project field teams (bats, wetlands, cultural resources, etc.) noted and identified rocky habitat/potential caves/mines over the duration of field activities for the Project in 2024. No features suitable for hibernating bats were found during field surveys, therefore, no winter inspections were conducted. In February 2025, biologists conducted winter inspections of culverts (36 inches in diameter or greater and 23 feet long or greater) within approximately 150 feet of the Project centerline. The results of that survey is being compiled and an updated hibernacula report will be provided to USFWS in the near future.

USFW Comment: I also don't think a date range is provided in the structure assessment. It's a lot of information to look over so I apologize if I am missing this.

Transco response: Structure assessments were conducted August 11, and August 14 – 15, 2024 along the VA portion of the Eden Loop, and on October 1, 2024 at structures associated with Compressor Station165 in VA.

USFW Comment: Furthermore, can you confirm that the structures listed in table Table 3-1 under CS145, CS155, CS165, and Eden Loop in the report entitled "Structure Assessments and Bat Emergence Counts for the Southeast Supply Enhancement Project" are the structures in Virginia?

Transco response: In the Structure Assessments and Bat Emergence Counts

for the Southeast Supply Enhancement Project version 3-5 (submitted February 24, 2025 at the link in my previous email), Table 3-1 was updated with headers that include state designations. Structures in VA include 5 structures associated with Compressor Station 165 (CS165) as described above, and 22 structures along the VA portion of the Eden Loop. Note CS165 and the VA portion of the Eden Loop are the only Project components in VA. The NC portion of the Eden Loop, the Salem Loop, CS145, CS150, and CS155 are in NC.

USFW Comment: I need to know exactly how many structures are in Virginia and of those structures how many have completed surveys VS how many need to be revisited (e.g., visual or emergence surveys will be completed in 2025). It's a little hard to tell from the maps and I don't have it in me to plug in all the coordinates.

Transco response: There are a total of 27 structures in VA, of which 21 structure surveys are complete, and 6 structures will be revisited in VA in 2025. Those 6 structures include the following: Structures CS165-09, CS165-11, EL - 1391.90 Barn, EL - 1391.92 Barn, EL - 1391.95 Barn, and EL - 1391.96 Barn. In the summer of 2025, emergence counts will be conducted at Structures CS165-09 and CS165-11 because initial assessments were inconclusive. Initial assessments, and emergence counts if applicable, will be conducted at 4 Eden Loop structures (Structures EL - 1391.90 Barn, EL - 1391.92 Barn, EL - 1391.95 Barn, EL - 1391.96 Barn) pending landowner permission.

Regards,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



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From: Case, Rachel L <rachel_case@fws.gov>

Sent: Thursday, March 13, 2025 4:47 PM

To: Jason Duffey <J.Duffey@gaiconsultants.com>; rick.reynolds@dwr.virginia.gov

Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroup.com; chris@batgate.com; Jennifer Broush <j.broush@gaiconsultants.com>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>

Subject: Re: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

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Hi Jason,

For Virginia, can you provide the dates that mist net surveys were conducted and the date(s) the hibernacula assessment was conducted? I also don't think a date range is provided in the structure assessment. Its a lot of information to look over so I apologize if I am missing this. Furthermore, can you confirm that the structures listed in table Table 3-1 under CS145, CS155, CS165, and Eden Loop in the report entitled "Structure Assessments and Bat Emergence Counts for the Southeast Supply Enhancement Project" are the structures in Virginia? I need to know exactly how many structures are in Virginia and of those structures how many have completed surveys VS how many need to be revisited (e.g., visual or emergence surveys will be completed in 2025). Its a little hard to tell from the maps and I don't have it in me to plug in all the coordinates.

Thanks,

Rachel

Rachel Case
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
<https://www.fws.gov/office/virginia-ecological-services>

From: Jason Duffey <J.Duffey@gaiconsultants.com>

Sent: Wednesday, March 12, 2025 1:49 PM

To: Case, Rachel L <rachel_case@fws.gov>; rick.reynolds@dwr.virginia.gov
<rick.reynolds@dwr.virginia.gov>

Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroup.com <kevinc@whmgroup.com>;
chris@batgate.com <chris@batgate.com>; Jennifer Broush <j.broush@gaiconsultants.com>;
Stanhope, Jennifer W <jennifer_stanhope@fws.gov>

Subject: RE: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

Hi Rachael,

The current estimate of Project tree clearing in VA is approximately 155 acres.

All sites (EL01 -EL41; EL43; EL51 - EL54; EL AR-02, EL AR-03, EL AR-06, EL AR-07; and CS165 01 and 02) in VA were surveyed June 5 to June 20, 2024 except EL42 which was surveyed July 11 to 14, 2024.

Please let us know if you have any questions or require any additional information.

Thank you,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



GAI Consultants

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From: Case, Rachel L <rachel_case@fws.gov>

Sent: Tuesday, March 11, 2025 4:27 PM

To: Jason Duffey <J.Duffey@gaiconsultants.com>; rick.reynolds@dwr.virginia.gov

Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroupp.com; chris@batgate.com; Jennifer Broush <j.broush@gaiconsultants.com>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>

Subject: Re: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

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Hi Jason,

Thank you for responding to my comments and for sending the shapefiles. Can you please confirm the total acres of tree removal in Virginia (my apologies if you already provided the total number)?

Additionally, I am drafting our response for the acoustic survey report and need to clarify the date range during which acoustic surveys were conducted in Virginia. When

comparing Table 3 in the report with the KMZ file provided with the survey plan, it appears that sites EL1 through 43 are located in Virginia, indicating that acoustic surveys were conducted in Virginia from June 5 to June 20. Is that correct?

Best,

Rachel

Rachel Case

Fish and Wildlife Biologist

U.S. Fish and Wildlife Service

Virginia Field Office

6669 Short Lane

Gloucester, VA 23061

<https://www.fws.gov/office/virginia-ecological-services>

From: Jason Duffey <J.Duffey@gaiconsultants.com>

Sent: Monday, February 24, 2025 2:15 PM

To: Case, Rachel L <rachel_case@fws.gov>; Rick.reynolds@dwr.virginia.gov
<rick.reynolds@dwr.virginia.gov>

Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroupp.com <kevinc@whmgroupp.com>;
chris@batgate.com <chris@batgate.com>; Jennifer Broush <j.broush@gaiconsultants.com>;
Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Luu, Jackie A <jackie_luu@fws.gov>

Subject: RE: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

Hi Rachael,

Transco is pleased to provide responses to your comments on the bat survey reports. In addition, we are providing information requested by the USFWS during our recent January 27, 2025 discussion on the survey results. Where noted, updated reports and other files are available for download from our secure folder here:

 [VA Bat Reports](#)

Our responses are below:

Culvert Survey

Comment 1: The report indicates that “the project has identified culverts located within the limits of disturbance, that may be removed or demolished as part of proposed Project construction activities” (pg. 4). “The use of these controlled blasting techniques limits the impacts to nearby areas, or areas outside of the limits of disturbance, which would include minimizing impacts to culverts outside of the limit of disturbance” (pg. 5).

The first statement indicates that only culverts within the limits of disturbance were surveyed.

The second statement indicates that impacts will extend outside the limits of disturbance, but will be minimal (e.g., “which would include minimizing impacts to culverts outside of the limits of disturbance”). The action area is defined by ESA regulation as all areas to be affected directly or indirectly by the action and not merely the immediate area involved in the action (50 CFR §402.02). If culverts outside of the limits of disturbance will be affected, even if the applicant has determined the effects will be minimal, those culverts should be included in the assessment.

Transco response: As discussed , the use of controlled blasting techniques could result in minimal detectable noise and vibration outside of the LOD before attenuating to ambient or undetectable levels. However, Transco does not anticipate blasting to have impacts beyond 150 feet from the Project centerline. Therefore, Transco is expanding the culvert assessment beyond the LOD, to 150 feet from the Project centerline, to identify portals potentially suitable for use by hibernating and summer-roosting bats. These portals are being surveyed in accordance with the survey plan submitted and approved on February 10, 2025.

Comment 2: Of the culverts surveyed, 7 are in VA. Of those 7, only 1 culvert was accessible and surveyed during the survey season. The other 6 were either inaccessible or surveyed outside the survey season. Therefore, VA cannot fully analyze the potential impacts of the project to listed or proposed bat species in VA until all assessments are complete.

Transco response: The remaining culverts will be surveyed for summer roosting bats during the appropriate survey window in 2025. Transco will provide an updated Culvert Survey Report to the USFWS when surveys are complete.

Comment 3: Culvert surveys resulting in probable absence are valid for 2 years. If the project “commences in the third quarter of 2026”, culvert assessments done in 2024 that were not repeated in 2025 may no longer be valid.

Transco response: In coordination with the USFWS, Transco will conduct follow-up surveys on suitable culverts to verify culverts within the LOD have valid surveys at the time of construction.

Hibernacula survey

USFWS: No comments.

Structure survey

Comment 1: Please indicate which state the structure is in on Table 3-1 and submit the revised document.

Transco response: The Structures Survey Report is updated to include states for each structure and is available for download at the link above.

Acoustic survey

Question 1: The report uses the term “quality check” throughout the document. Can you please provide the definition of a “quality check?” I have not seen this term used before.

Transco response: As discussed on January 27, 2025, the manual quality check (QC) is an initial review of call files for a species that Kaleidoscope determines to be present.

Once the QC confirmed that Kaleidoscope correctly identified the species, no additional review (i.e., qualitative analysis) for that site was conducted. Quality Check is not used to invalidate an automated KPro presence determination, only to manually verify those positives or lead to a potential qualitative analysis.

In response to a request from the NC Field Office, the report has been updated to include additional language to clarify that biologists conducted manual vetting when the MLE was > 0.05 for any site/nights and when there are 10 or more calls identified as tricolored bat. The updated report is available for download at the link above.

Question 2: Can you provide a shapefile containing all detector sites where TCB was determined present following quantitative analysis?

Transco response: The shapefiles containing Project detector sites where TCB was determined present available for download at the link above.

Other

Comment: A mist-net survey was also conducted in Virginia. Has this report been submitted to our office for review?

Transco response: Transco submitted the mist net survey report on October 29, 2024, and forwarded via email on January 3, 2025. The report is available at the link above (as an attachment to the October 29 submittal package and as a standalone report).

In addition to these responses, as discussed on January 27, 2025, Transco is providing you with the following, available for download at the link above:

- Shapefiles of proposed tree clearing along the Project

- A table showing proposed time of year restrictions (TOYRs) to be applied along the Project to avoid effects to bats
- Bat detector log files and KPro raw outputs for acoustic survey sites in VA

We appreciate the continued coordination between Transco, the USFWS VA and NC Field Offices, and state agencies regarding listed and rare species. If you have any questions or require any additional information, please do not hesitate to contact Josh Henry of Transco or me.

Thank you,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



GAI Consultants

ENGINEERING, PLANNING, AND ENVIRONMENTAL CONSULTING SINCE 1958

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From: Jason Duffey

Sent: Tuesday, January 7, 2025 5:05 PM

To: 'Case, Rachel L' <rachel_case@fws.gov>; rick.reynolds@dwr.virginia.gov

Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroup.com; chris@batgate.com; Jennifer Broush <j.broush@gaiconsultants.com>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Luu, Jackie A <jackie_luu@fws.gov>

Subject: RE: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

Hi Rachael,

I just wanted to follow up with you and let you know you didn't actually overlook the October 29 email I mentioned, also attached. I didn't copy you on it!

At that point we had not yet identified you as the biologist to submit our reports to for review.

Regardless, the report is available at the links in the attached email and below.

Thanks,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042
M 937.554.8488



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From: Case, Rachel L <rachel_case@fws.gov>

Sent: Friday, January 3, 2025 3:32 PM

To: Jason Duffey <J.Duffey@gaiconsultants.com>; rick.reynolds@dwr.virginia.gov

Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroupp.com; chris@batgate.com; Jennifer Broush <j.broush@gaiconsultants.com>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Luu, Jackie A <jackie_luu@fws.gov>

Subject: Re: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

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Thanks, Jason! I must have overlooked it. I will review that one ASAP.

Rachel Case (she/her)
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
804-323-4801
<https://www.fws.gov/office/virginia-ecological-services>

From: Jason Duffey <J.Duffey@gaiconsultants.com>

Sent: Friday, January 3, 2025 2:58 PM

To: Case, Rachel L <rachel_case@fws.gov>; rick.reynolds@dwr.virginia.gov
<rick.reynolds@dwr.virginia.gov>

Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroupp.com <kevinc@whmgroupp.com>;
chris@batgate.com <chris@batgate.com>; Jennifer Broush <j.broush@gaiconsultants.com>;
Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Luu, Jackie A <jackie_luu@fws.gov>

Subject: RE: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-

0047474 and 2024-0137992

Hi Rachael,

Thank you for your review and comments on the reports. We will provide updates and responses soon. In the meantime, regarding the final comment below, we submitted the Mist Net Survey Report via the same link below on October 29, 2024. The Mist Net Survey Report is still available at the link below under the original October 29, 2024 cover letter along with the original Hibernacula, Structures, and Culvert reports. That document is titled "241029_Transco_SSE_VA Bat Survey Reports."

Please let me know if you have any questions and if you prefer, we can separate out the Mist Net Report from the original October 29, 2024 transmittal.

Thank you,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



GAI Consultants

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From: Case, Rachel L <rachel_case@fws.gov>

Sent: Friday, January 3, 2025 2:21 PM

To: Jason Duffey <J.Duffey@gaiconsultants.com>; rick.reynolds@dwr.virginia.gov

Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroupp.com; chris@batgate.com; Jennifer Broush <j.broush@gaiconsultants.com>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Luu, Jackie A <jackie_luu@fws.gov>

Subject: Re: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

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Hi Jason,

Our office has reviewed the culvert, hibernacula, structure and acoustic survey reports provided at the link below. We have the following comments/questions.

culvert survey

comment 1:

The report indicates that “the project has identified culverts located within the limits of disturbance, that may be removed or demolished as part of proposed Project construction activities” (pg. 4). “The use of these controlled blasting techniques limits the impacts to nearby areas, or areas outside of the limits of disturbance, which would include minimizing impacts to culverts outside of the limit of disturbance” (pg. 5).

The first statement indicates that only culverts within the limits of disturbance were surveyed. The second statement indicates that impacts will extend outside the limits of disturbance, but will be minimal (e.g., “which would include minimizing impacts to culverts outside of the limits of disturbance”). The action area is defined by ESA regulation as all areas to be affected directly or indirectly by the action and not merely the immediate area involved in the action (50 CFR §402.02). If culverts outside of the limits of disturbance will be affected, even if the applicant has determined the effects will be minimal, those culverts should be included in the assessment.

comment 2:

Of the culverts surveyed, 7 are in VA. Of those 7, only 1 culvert was accessible and surveyed during the survey season. The other 6 were either inaccessible or surveyed outside the survey season. Therefore, VA cannot fully analyze the potential impacts of the project to listed or proposed bat species in VA until all assessments are complete.

comment 3:

Culvert surveys resulting in probable absence are valid for 2 years. If the project “commences in the third quarter of 2026”, culvert assessments done in 2024 that were not repeated in 2025 may no longer be valid.

hibernacula survey

No comments.

structure survey

comment 1:

Please indicate which state the structure is in on Table 3-1 and submit the revised document.

acoustic survey

question 1:

The report uses the term “quality check” throughout the document. Can you please

provide the definition of a “quality check?” I have not seen this term used before.

question 2:

Can you provide a shapefile containing all detector sites where TCB was determined present following quantitative analysis?

other

A mist-net survey was also conducted in Virginia. Has this report been submitted to our office for review?

Thanks,

Rachel

Rachel Case (she/her)
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
804-323-4801
<https://www.fws.gov/office/virginia-ecological-services>

From: Jason Duffey <J.Duffey@gaiconsultants.com>

Sent: Thursday, December 19, 2024 6:46 PM

To: Virginia Field Office, FW5 <virginiafieldoffice@fws.gov>; rick.reynolds@dwr.virginia.gov <rick.reynolds@dwr.virginia.gov>; Case, Rachel L <rachel_case@fws.gov>; Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>

Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroup.com <kevinc@whmgroup.com>; chris@batgate.com <chris@batgate.com>; Jennifer Broush <j.broush@gaiconsultants.com>

Subject: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Ms. Case and Mr. Reynolds,

RE: Bat Acoustic Survey Report

Transcontinental Gas Pipe Line Company, LLC. (Transco), an indirect, wholly owned subsidiary of The Williams Companies, Inc. (Williams), is seeking authorization from the Federal Energy Regulatory Commission under Sections 7(b) and 7(c) of the Natural Gas Act for appropriate abandonment authority and a certificate of public convenience and necessity (Certificate) to construct, own, operate, and maintain the proposed Southeast Supply Enhancement Project (Project) facilities.

Transco is pleased to provide the linked Bat Acoustics Survey Report for your review and comment. Transco previously submitted Bat Mist Net, Structures, Culverts, and Hibernacula Survey Reports to you via the link below on October 29, 2024. The following secure link allows those copied on this email to download the cover letter and reports:

 [VA Bat Reports](#)

If someone else in your organization requires access to download the reports, please notify me and I can grant access.

Transco appreciates your attention to the Project and looks forward to your guidance and concurrence on the attached reports. Should you have questions related to this report, please let us know.

Thank you,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
Phone: (804) 693-6694



In Reply Refer To:

02/18/2025 20:44:37 UTC

Project Code: 2024-0137992

Project Name: Southeast Supply Enhancement Project - Compressor Station 165

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Project Code in the header of this

letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

PROJECT SUMMARY

Project Code: 2024-0137992
Project Name: Southeast Supply Enhancement Project - Compressor Station 165
Project Type: Pipeline - Onshore - Maintenance / Modification - Above Ground
Project Description: Transcontinental Gas Pipe Line Company, LLC (Transco), an indirect, wholly owned subsidiary of The Williams Companies, Inc. (Williams), is seeking authorization from the Federal Energy Regulatory Commission (FERC or Commission) under Sections 7(b) and 7(c) of the Natural Gas Act for appropriate abandonment authority and a Certificate of Public Convenience and Necessity (Certificate) to construct, own, operate, and maintain the proposed Project facilities.

The Project is an expansion of Transco's existing natural gas transmission system that will enable Transco to provide 1,596,900 dekatherms per day (Dth/d) of incremental firm transportation capacity to remove pipeline capacity constraints in Zones 4 and 5 and meet growing natural gas-fired power generation, commercial, residential, and industrial demand in the southeast United States. Transco is proposing to collocate the proposed Project within or adjacent to the existing Transco Mainline System to the extent practicable. The Project will consist of the following components:

Pipeline Facilities

Approximately 31.2 miles of 42-inch-diameter pipeline in Pittsylvania County, Virginia (VA) and Rockingham County, North Carolina (NC), designated as the Eden Loop;
Regulator installation in Rockingham County, NC near milepost (MP) 1382.53, designated as the Eden Regulator Station;

Approximately 294 feet of 30-inch-diameter pipeline and ancillary valves in Rockingham County, NC, designated as the Dan River Inlet Piping;
and,

Approximately 24.1 miles of 42-inch-diameter pipeline in Guilford, Forsyth, and Davidson Counties, NC, designated as the Salem Loop.

Compression Facilities

The addition of two [33,000 horsepower (HP) each] electric motor-driven (EMD) compressor units at Transco's existing Compressor Station 165 located in Pittsylvania County, VA.

The addition of one [23,465 International Standardization Organization (ISO) HP] Solar Titan 130 Turbine and two (31,871 ISO HP each) Solar

Titan 250 Turbine driven compressor units at Transco's existing Compressor Station 155 located in Davidson County, NC.

The addition of one (15,900 ISO HP) Solar Mars 100 Turbine driven compressor unit at Transco's existing Compressor Station 150 in Iredell County, NC, and,

The addition of three (33,000 HP each) EMD compressor units at Transco's existing Compressor Station 145 in Cleveland County, NC, to provide the incremental HP required by the Project and accommodate the abandonment (in-place) of three (12,500 HP each) existing EMD Compressor Units.

Facility Modifications

Modifications to valve controls at existing mainline valve (MLV) setting MLV-145B21 in Lincoln County, NC;

Modifications to valve controls at existing MLV setting MLV-145B20 in Gaston County, NC;

Piping modifications at Transco's existing Compressor Station 135 in Anderson County, South Carolina (SC) to make the station bi-directional;

Piping modifications at Transco's existing Compressor Station 125 in Walton County, Georgia (GA) to make the station bi-directional;

Regulator installation and piping modifications at Transco's existing Compressor Station 120 in Henry County, GA to make the station bi-directional; and

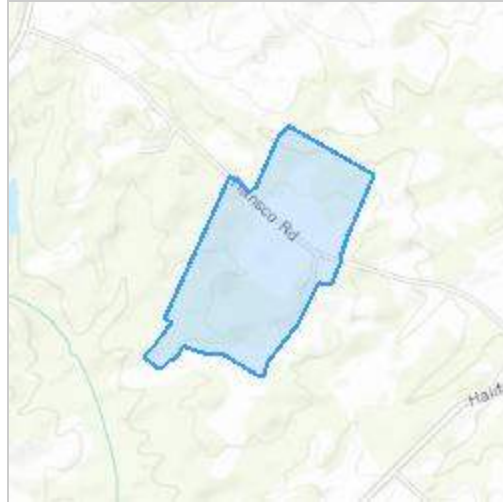
Piping modifications at Transco's existing Compressor Station 105 in Coosa County, Alabama (AL) to make the station bi-directional.

The use of existing, improved, and new access roads, and contractor yards will also be required for the Project. Additional ancillary facilities and piping, such as MLVs, cathodic protection, communication facilities, and internal inspection devices (e.g., pig launchers and receivers) will be necessary to support the Project.

Subject to FERC's certification of the Project and receipt of other necessary permits and authorizations, Transco anticipates that construction of the Project would commence in the third quarter of 2026 to meet a proposed in-service date of November 1, 2027.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@36.832100800000006,-79.33741974085916,14z>



Counties: Pittsylvania County, Virginia

ENDANGERED SPECIES ACT SPECIES

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

-
1. The [Bald and Golden Eagle Protection Act](#) of 1940.
 2. The [Migratory Birds Treaty Act](#) of 1918.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

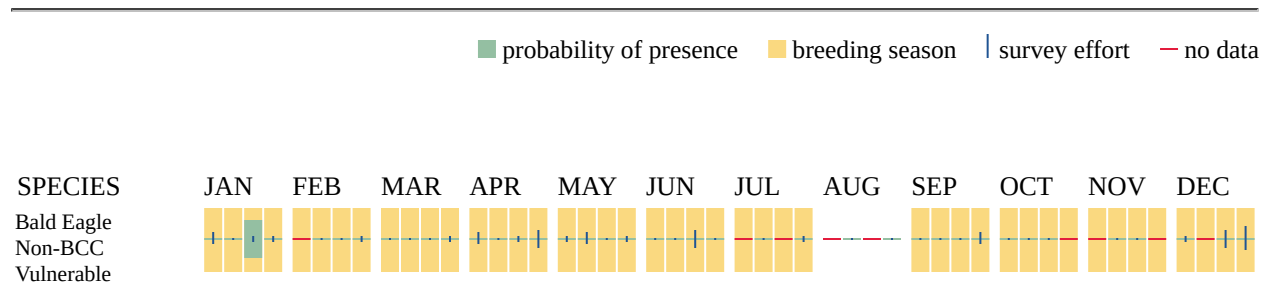
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.

3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Chuck-will's-widow <i>Antrostomus carolinensis</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9604	Breeds May 10 to Jul 10
Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10678	Breeds May 1 to Aug 20
Grasshopper Sparrow <i>Ammodramus savannarum perpallidus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8329	Breeds Jun 1 to Aug 20
Kentucky Warbler <i>Geothlypis formosa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9443	Breeds Apr 20 to Aug 20
Prairie Warbler <i>Setophaga discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9513	Breeds May 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10

NAME	BREEDING SEASON
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

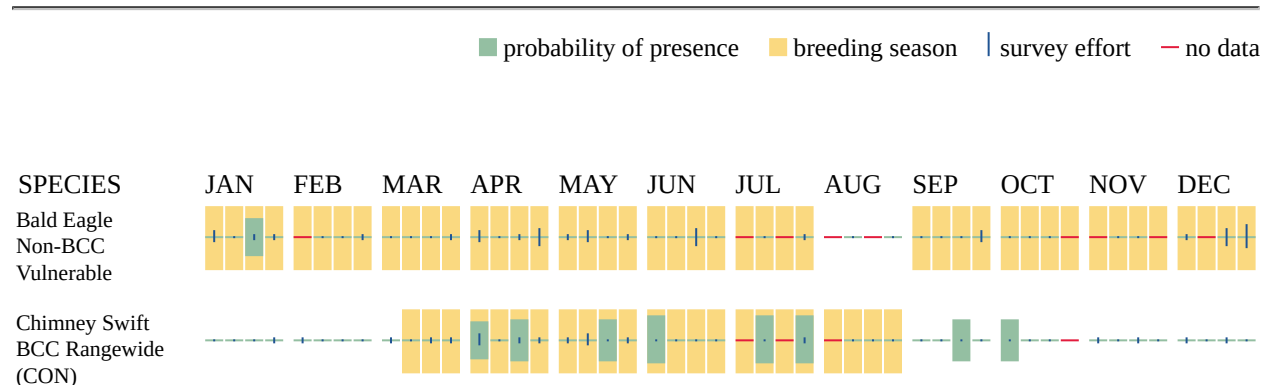
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

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- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

IPAC USER CONTACT INFORMATION

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LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Energy Regulatory Commission



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

Phone: (804) 693-6694



In Reply Refer To:

02/18/2025 21:04:42 UTC

Project Code: 2024-0047474

Project Name: Southeast Supply Enhancement Project - Eden Loop Pipeline (Virginia)

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Project Code in the header of this

letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

PROJECT SUMMARY

Project Code: 2024-0047474
Project Name: Southeast Supply Enhancement Project - Eden Loop Pipeline (Virginia)
Project Type: Pipeline - Onshore - New Constr - Below Ground
Project Description: Transcontinental Gas Pipe Line Company, LLC (Transco), an indirect, wholly owned subsidiary of The Williams Companies, Inc. (Williams), is seeking authorization from the Federal Energy Regulatory Commission (FERC or Commission) under Sections 7(b) and 7(c) of the Natural Gas Act for appropriate abandonment authority and a Certificate of Public Convenience and Necessity (Certificate) to construct, own, operate, and maintain the proposed Project facilities.

The Project is an expansion of Transco's existing natural gas transmission system that will enable Transco to provide 1,596,900 dekatherms per day (Dth/d) of incremental firm transportation capacity to remove pipeline capacity constraints in Zones 4 and 5 and meet growing natural gas-fired power generation, commercial, residential, and industrial demand in the southeast United States. Transco is proposing to collocate the proposed Project within or adjacent to the existing Transco Mainline System to the extent practicable. The Project will consist of the following components:

Pipeline Facilities

Approximately 31.2 miles of 42-inch-diameter pipeline in Pittsylvania County, Virginia (VA) and Rockingham County, North Carolina (NC), designated as the Eden Loop;
Regulator installation in Rockingham County, NC near milepost (MP) 1382.53, designated as the Eden Regulator Station;

Approximately 294 feet of 30-inch-diameter pipeline and ancillary valves in Rockingham County, NC, designated as the Dan River Inlet Piping;
and,

Approximately 24.1 miles of 42-inch-diameter pipeline in Guilford, Forsyth, and Davidson Counties, NC, designated as the Salem Loop.

Compression Facilities

The addition of two [33,000 horsepower (HP) each] electric motor-driven (EMD) compressor units at Transco's existing Compressor Station 165 located in Pittsylvania County, VA.

The addition of one [23,465 International Standardization Organization (ISO) HP] Solar Titan 130 Turbine and two (31,871 ISO HP each) Solar

Titan 250 Turbine driven compressor units at Transco's existing Compressor Station 155 located in Davidson County, NC.

The addition of one (15,900 ISO HP) Solar Mars 100 Turbine driven compressor unit at Transco's existing Compressor Station 150 in Iredell County, NC, and,

The addition of three (33,000 HP each) EMD compressor units at Transco's existing Compressor Station 145 in Cleveland County, NC, to provide the incremental HP required by the Project and accommodate the abandonment (in-place) of three (12,500 HP each) existing EMD Compressor Units.

Facility Modifications

Modifications to valve controls at existing mainline valve (MLV) setting MLV-145B21 in Lincoln County, NC;

Modifications to valve controls at existing MLV setting MLV-145B20 in Gaston County, NC;

Piping modifications at Transco's existing Compressor Station 135 in Anderson County, South Carolina (SC) to make the station bi-directional;

Piping modifications at Transco's existing Compressor Station 125 in Walton County, Georgia (GA) to make the station bi-directional;

Regulator installation and piping modifications at Transco's existing Compressor Station 120 in Henry County, GA to make the station bi-directional; and

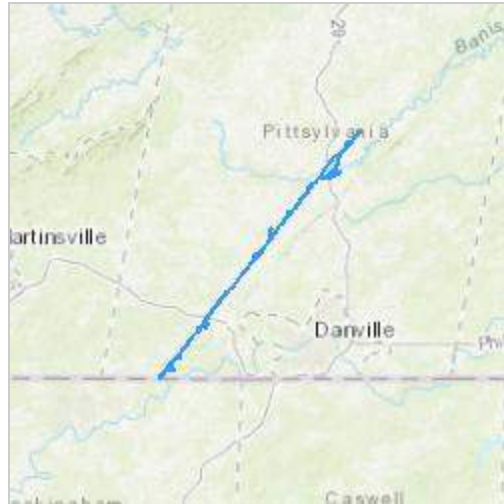
Piping modifications at Transco's existing Compressor Station 105 in Coosa County, Alabama (AL) to make the station bi-directional.

The use of existing, improved, and new access roads, and contractor yards will also be required for the Project. Additional ancillary facilities and piping, such as MLVs, cathodic protection, communication facilities, and internal inspection devices (e.g., pig launchers and receivers) will be necessary to support the Project.

Subject to FERC's certification of the Project and receipt of other necessary permits and authorizations, Transco anticipates that construction of the Project would commence in the third quarter of 2026 to meet a proposed in-service date of November 1, 2027.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@36.68445395,-79.4912075936799,14z>



Counties: Pittsylvania County, Virginia

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

FISHES

NAME	STATUS
Roanoke Logperch <i>Percina rex</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1134	Endangered

CLAMS

NAME	STATUS
Green Floater <i>Lasmigona subviridis</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7541	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

-
1. The [Bald and Golden Eagle Protection Act](#) of 1940.
 2. The [Migratory Birds Treaty Act](#) of 1918.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/ activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information](#)

[on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

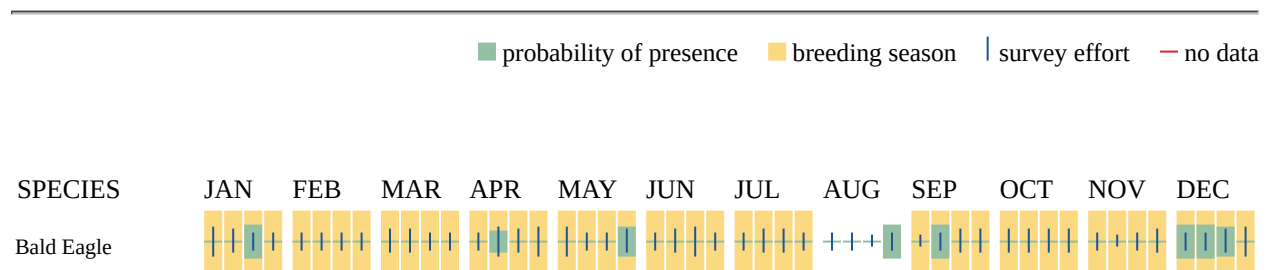
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Non-BCC
Vulnerable

Additional information can be found using the following links:

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1. The [Migratory Birds Treaty Act](#) of 1918.
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For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

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Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25

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Chuck-will's-widow <i>Antrostomus carolinensis</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9604	Breeds May 10 to Jul 10
Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10678	Breeds May 1 to Aug 20
Grasshopper Sparrow <i>Ammodramus savannarum perpallidus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8329	Breeds Jun 1 to Aug 20
Kentucky Warbler <i>Geothlypis formosa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9443	Breeds Apr 20 to Aug 20
Prairie Warbler <i>Setophaga discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9513	Breeds May 1 to Jul 31
Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9439	Breeds Apr 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
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[Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

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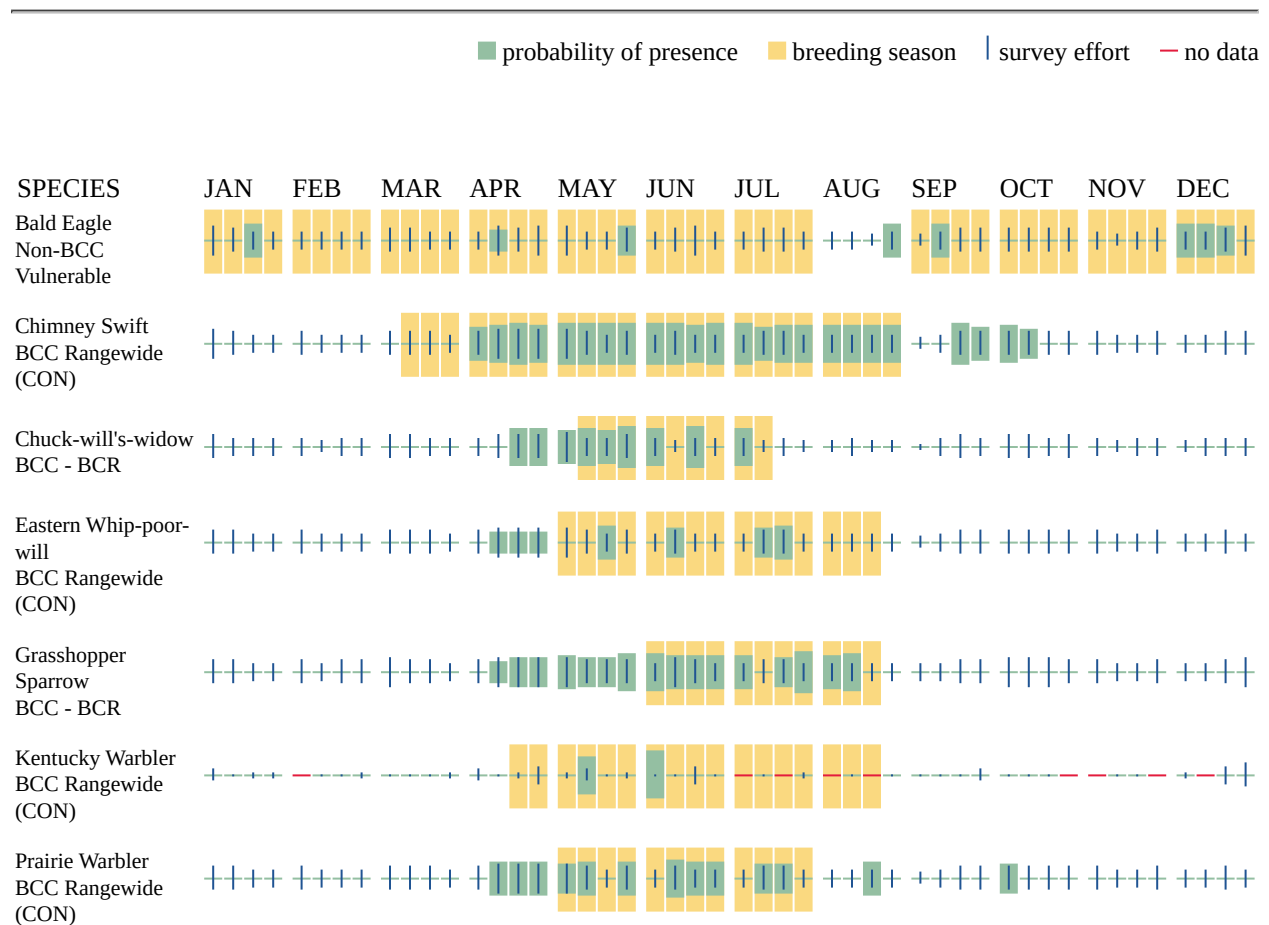
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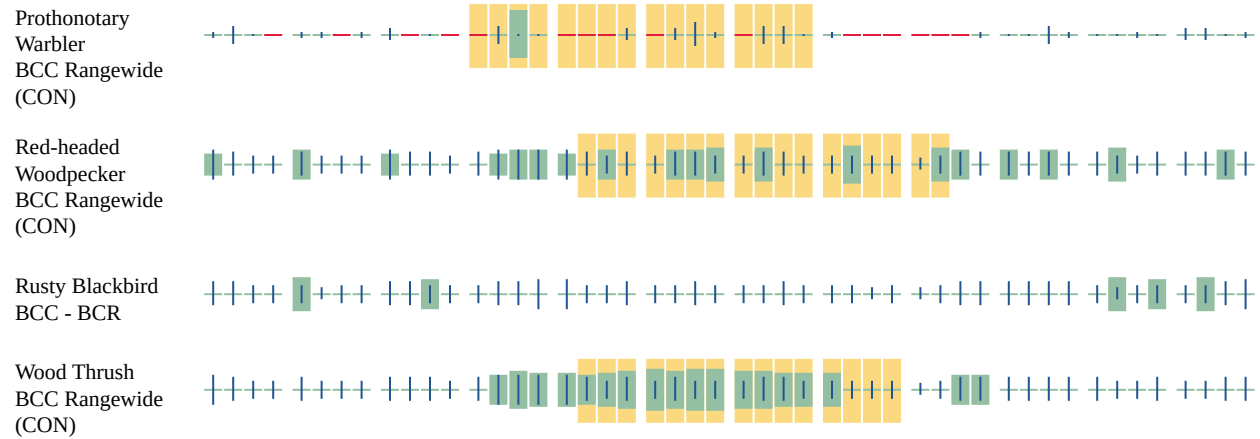
Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

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Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
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- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

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LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Energy Regulatory Commission

From: [Jason Duffey](#)
To: [Stanhope, Jennifer W](#); ["Cooper, Jeffrey \(DWR\)"](#)
Cc: [Jennifer Broush](#); [Josh Henry](#); [Jeremy Alberts](#); ["troy_andersen@fws.gov"](#)
Subject: Transco SSE - VA Bald Eagle Survey Report
Date: Friday, March 7, 2025 12:56:00 PM
Attachments: [image001.png](#)
[image002.png](#)

Ms. Stanhope and Mr. Cooper,

Transcontinental Gas Pipe Line Company, LLC (Transco) is pleased to submit the Virginia (VA) Bald Eagle Survey Report. The bald eagle survey was conducted in support of the proposed Southeast Supply Enhancement (Project) in Pittsylvania County, VA. We look forward to your review and comment regarding the report and are available to discuss at your convenience. We are submitting via a OneDrive download link for security and due to the size of the report here:

 [VA Bald Eagle Report](#)

We appreciate the continued coordination between Transco, U.S. Fish and Wildlife Service VA Field office, and VA Department of Wildlife Resources regarding sensitive species in VA. Should you have any questions while reviewing, please do not hesitate to contact Josh Henry of Transco or a member of our team.

Thanks!

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



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From: [Jason Duffey](#)
To: ["Stanhope, Jennifer W"; Jennifer Broush; "Watson, Brian \(DWR\)"; "Argo, Emily E"](#)
Cc: ["Josh Henry"; "Jeremy Alberts"; Casey Swecker; Akers, Shauna; "kevinc@whmggroup.com"](#)
Subject: RE: [EXTERNAL] Transco SSE - VA Freshwater Mussel Survey and RLP Habitat Assessments - 1 of 2
Date: Sunday, March 2, 2025 8:53:00 PM
Attachments: [image001.png](#)
[image002.png](#)

Hello Ms. Stanhope,

On behalf of Jennifer Broush, Josh Henry, and the rest of the Transco team, I am providing you with updated Roanoke Logperch and Virginia Freshwater Mussel reports that address your questions in your email below. Both updated reports include the dates and names of the permitted biologists that conducted surveys along each reach. The Virginia Freshwater Mussel Report includes additional language on whether the permitted surveyors considered each of the streams where no mussels were observed to have suitable mussel habitat.

The reports are available for download from the folder here:

 [VA Aquatics Reports](#)

We also included in the folder the Project Proposed HDD Inadvertent Returns Contingency Plans as requested by the VA Field Office in recent discussions.

We greatly appreciate the continued coordination with the VA Field Office. If you have any questions or require additional information, please do not hesitate to contact Josh Henry of Transco or members of our team.

Thank you!

Jason Duffey
Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042
M 937.554.8488



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From: Stanhope, Jennifer W <jennifer_stanhope@fws.gov>
Sent: Monday, February 3, 2025 4:31 PM
To: Jennifer Broush <j.broush@gaiconsultants.com>; Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Argo, Emily E <emily_argo@fws.gov>
Cc: Josh Henry <Josh.Henry@williams.com>; Jeremy Alberts <JAlberts@envsi.com>; Casey Swecker

<cdswecker@edge-es.com>; Akers, Shauna <shauna.akers@williams.com>; Jason Duffey <J.Duffey@gaiconsultants.com>

Subject: RE: [EXTERNAL] Transco SSE - VA Freshwater Mussel Survey and RLP Habitat Assessments - 1 of 2

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Jennifer B.,

Thank you for sending the survey reports for freshwater mussels and RLP habitat in VA.

My questions/comments below pertain to the mussel survey report dated December 17, 2024.

1. When were each of the surveys conducted? Please provide the dates for each stream.
2. Who were the VDWR permitted biologists leading the surveys at each of the streams?
3. For each of the streams where no mussels were observed, please indicate if the qualified, permitted surveyor considered the stream to have suitable mussel habitat? Or do we assume because the stream was surveyed, the surveyors would characterize the habitat as suitable for mussels?

Thank you,
Jen

Jennifer Stanhope
Acting Assistant Field Office Supervisor - Endangered Species
U.S. Fish and Wildlife Service - Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
Office: 804-905-9781 (*note: new number*)
Jennifer_stanhope@fws.gov
<https://www.fws.gov/office/virginia-ecological-services>

From: Jennifer Broush <j.broush@gaiconsultants.com>

Sent: Wednesday, December 18, 2024 2:43 PM

To: Luu, Jackie A <jackie_luu@fws.gov>; Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Argo, Emily E <emily_argo@fws.gov>

Cc: Josh Henry <Josh.Henry@williams.com>; Jeremy Alberts <JAlberts@envsi.com>; Casey Swecker

<cdswecker@edge-es.com>; Akers, Shauna <shauna.akers@williams.com>; Jason Duffey
<J.Duffey@gaiconsultants.com>

Subject: [EXTERNAL] Transco SSE - VA Freshwater Mussel Survey and RLP Habitat Assessments - 1 of 2

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Ms. Luu and Mr. Watson (**Email 1 of 2**),

Transcontinental Gas Pipe Line Company, LLC (Transco) is pleased to submit the Virginia (VA) Freshwater Mussel Survey Report and Roanoke Logperch Habitat Assessments which were conducted in support of the proposed Southeast Supply Enhancement (Project) in Pittsylvania County, VA. We look forward to your review and comment regarding these reports and are available to discuss at your convenience. We are submitting via two emails due to the size of the files.

We appreciate the continued coordination between Transco, U.S. Fish and Wildlife Service VA Field office, and VA Department of Wildlife Resources regarding sensitive species in VA. Should you have any questions while reviewing, please do not hesitate to contact Josh Henry (Transco) or me. If the size of the documents are too large to be accepted, we will provide a link to download.

Regards,
Jennifer

Jennifer Broush, MBA

Senior Associate / Environmental Director

GAI Consultants, 385 E. Waterfront Drive, Homestead, PA 15120-5005

D 412.399.5317 **M** 724.516.1155 **E** j.broush@gaiconsultants.com

[Facebook](#) | [YouTube](#) | [LinkedIn](#) | [Instagram](#) | [Glassdoor](#) | [News & Insights](#)

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From: [Jason Duffey](#)
To: [Case, Rachel L](#); Rick.reynolds@dwr.virginia.gov
Cc: [Josh Henry](#); kevinc@whmggroup.com; chris@batgate.com; [Jennifer Broush](#); [Stanhope, Jennifer W](#); [Luu, Jackie A](#)
Subject: RE: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992
Date: Monday, February 24, 2025 2:15:44 PM
Attachments: [image002.png](#)
[image003.png](#)

Hi Rachael,

Transco is pleased to provide responses to your comments on the bat survey reports. In addition, we are providing information requested by the USFWS during our recent January 27, 2025 discussion on the survey results. Where noted, updated reports and other files are available for download from our secure folder here:

 [VA Bat Reports](#)

Our responses are below:

Culvert Survey

Comment 1: The report indicates that “the project has identified culverts located within the limits of disturbance, that may be removed or demolished as part of proposed Project construction activities” (pg. 4). “The use of these controlled blasting techniques limits the impacts to nearby areas, or areas outside of the limits of disturbance, which would include minimizing impacts to culverts outside of the limit of disturbance” (pg. 5).

The first statement indicates that only culverts within the limits of disturbance were surveyed. The second statement indicates that impacts will extend outside the limits of disturbance, but will be minimal (e.g., “which would include minimizing impacts to culverts outside of the limits of disturbance”). The action area is defined by ESA regulation as all areas to be affected directly or indirectly by the action and not merely the immediate area involved in the action (50 CFR §402.02). If culverts outside of the limits of disturbance will be affected, even if the applicant has determined the effects will be minimal, those culverts should be included in the assessment.

Transco response: As discussed , the use of controlled blasting techniques could result in minimal detectable noise and vibration outside of the LOD before attenuating to ambient or undetectable levels. However, Transco does not anticipate blasting to have impacts beyond 150 feet from the Project centerline. Therefore, Transco is expanding the culvert assessment beyond the LOD, to 150 feet from the Project centerline, to identify portals potentially suitable for use by hibernating and summer-roosting bats. These portals are being surveyed in accordance with the survey plan submitted and approved on February 10, 2025.

Comment 2: Of the culverts surveyed, 7 are in VA. Of those 7, only 1 culvert was accessible and surveyed during the survey season. The other 6 were either inaccessible or surveyed outside the

survey season. Therefore, VA cannot fully analyze the potential impacts of the project to listed or proposed bat species in VA until all assessments are complete.

Transco response: The remaining culverts will be surveyed for summer roosting bats during the appropriate survey window in 2025. Transco will provide an updated Culvert Survey Report to the USFWS when surveys are complete.

Comment 3: Culvert surveys resulting in probable absence are valid for 2 years. If the project “commences in the third quarter of 2026”, culvert assessments done in 2024 that were not repeated in 2025 may no longer be valid.

Transco response: In coordination with the USFWS, Transco will conduct follow-up surveys on suitable culverts to verify culverts within the LOD have valid surveys at the time of construction.

Hibernacula survey

USFWS: No comments.

Structure survey

Comment 1: Please indicate which state the structure is in on Table 3-1 and submit the revised document.

Transco response: The Structures Survey Report is updated to include states for each structure and is available for download at the link above.

Acoustic survey

Question 1: The report uses the term “quality check” throughout the document. Can you please provide the definition of a “quality check?” I have not seen this term used before.

Transco response: As discussed on January 27, 2025, the manual quality check (QC) is an initial review of call files for a species that Kaleidoscope determines to be present. Once the QC confirmed that Kaleidoscope correctly identified the species, no additional review (i.e., qualitative analysis) for that site was conducted. Quality Check is not used to invalidate an automated KPro presence determination, only to manually verify those positives or lead to a potential qualitative analysis.

In response to a request from the NC Field Office, the report has been updated to include additional language to clarify that biologists conducted manual vetting when the MLE was > 0.05 for any site/nights and when there are 10 or more calls identified as tricolored

bat. The updated report is available for download at the link above.

Question 2: Can you provide a shapefile containing all detector sites where TCB was determined present following quantitative analysis?

Transco response: The shapefiles containing Project detector sites where TCB was determined present available for download at the link above.

Other

Comment: A mist-net survey was also conducted in Virginia. Has this report been submitted to our office for review?

Transco response: Transco submitted the mist net survey report on October 29, 2024, and forwarded via email on January 3, 2025. The report is available at the link above (as an attachment to the October 29 submittal package and as a standalone report).

In addition to these responses, as discussed on January 27, 2025, Transco is providing you with the following, available for download at the link above:

- Shapefiles of proposed tree clearing along the Project
- A table showing proposed time of year restrictions (TOYRs) to be applied along the Project to avoid effects to bats
- Bat detector log files and KPro raw outputs for acoustic survey sites in VA

We appreciate the continued coordination between Transco, the USFWS VA and NC Field Offices, and state agencies regarding listed and rare species. If you have any questions or require any additional information, please do not hesitate to contact Josh Henry of Transco or me.

Thank you,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



GAI Consultants

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From: Jason Duffey

Sent: Tuesday, January 7, 2025 5:05 PM

To: 'Case, Rachel L' <rachel_case@fws.gov>; rick.reynolds@dwr.virginia.gov

Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroup.com; chris@batgate.com; Jennifer Broush <j.broush@gaiconsultants.com>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Luu, Jackie A <jackie_luu@fws.gov>

Subject: RE: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

Hi Rachael,

I just wanted to follow up with you and let you know you didn't actually overlook the October 29 email I mentioned, also attached. I didn't copy you on it!

At that point we had not yet identified you as the biologist to submit our reports to for review.

Regardless, the report is available at the links in the attached email and below.

Thanks,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



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From: Case, Rachel L <rachel_case@fws.gov>

Sent: Friday, January 3, 2025 3:32 PM

To: Jason Duffey <J.Duffey@gaiconsultants.com>; rick.reynolds@dwr.virginia.gov

Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroup.com; chris@batgate.com; Jennifer Broush <j.broush@gaiconsultants.com>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Luu, Jackie A <jackie_luu@fws.gov>

Subject: Re: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

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Thanks, Jason! I must have overlooked it. I will review that one ASAP.

Rachel Case (she/her)
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
804-323-4801
<https://www.fws.gov/office/virginia-ecological-services>

From: Jason Duffey <J.Duffey@gaiconsultants.com>
Sent: Friday, January 3, 2025 2:58 PM
To: Case, Rachel L <rachel_case@fws.gov>; rick.reynolds@dwr.virginia.gov
<rick.reynolds@dwr.virginia.gov>
Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroup.com <kevinc@whmgroup.com>;
chris@batgate.com <chris@batgate.com>; Jennifer Broush <j.broush@gaiconsultants.com>;
Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Luu, Jackie A <jackie_luu@fws.gov>
Subject: RE: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

Hi Rachael,

Thank you for your review and comments on the reports. We will provide updates and responses soon. In the meantime, regarding the final comment below, we submitted the Mist Net Survey Report via the same link below on October 29, 2024. The Mist Net Survey Report is still available at the link below under the original October 29, 2024 cover letter along with the original Hibernacula, Structures, and Culvert reports. That document is titled "241029_Transco_SSE_VA Bat Survey Reports."

Please let me know if you have any questions and if you prefer, we can separate out the Mist Net Report from the original October 29, 2024 transmittal.

Thank you,

Jason Duffey
Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042
M 937.554.8488



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From: Case, Rachel L <rachel_case@fws.gov>

Sent: Friday, January 3, 2025 2:21 PM

To: Jason Duffey <J.Duffey@gaiconsultants.com>; rick.reynolds@dwr.virginia.gov

Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroupp.com; chris@batgate.com; Jennifer Broush <j.broush@gaiconsultants.com>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Luu, Jackie A <jackie_luu@fws.gov>

Subject: Re: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

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Hi Jason,

Our office has reviewed the culvert, hibernacula, structure and acoustic survey reports provided at the link below. We have the following comments/questions.

culvert survey

comment 1:

The report indicates that “the project has identified culverts located within the limits of disturbance, that may be removed or demolished as part of proposed Project construction activities” (pg. 4). “The use of these controlled blasting techniques limits the impacts to nearby areas, or areas outside of the limits of disturbance, which would include minimizing impacts to culverts outside of the limit of disturbance” (pg. 5).

The first statement indicates that only culverts within the limits of disturbance were surveyed. The second statement indicates that impacts will extend outside the limits of disturbance, but will be minimal (e.g., “which would include minimizing impacts to culverts outside of the limits of disturbance”). The action area is defined by ESA regulation as all areas to be affected directly or indirectly by the action and not merely the immediate area involved in the action (50 CFR §402.02). If culverts outside of the limits of disturbance will be affected, even if the applicant has determined the effects will be minimal, those culverts should be included in the assessment.

comment 2:

Of the culverts surveyed, 7 are in VA. Of those 7, only 1 culvert was accessible and surveyed during the survey season. The other 6 were either inaccessible or surveyed outside the survey season. Therefore, VA cannot fully analyze the potential impacts of the project to listed or proposed bat species in VA until all assessments are complete.

comment 3:

Culvert surveys resulting in probable absence are valid for 2 years. If the project “commences in the third quarter of 2026”, culvert assessments done in 2024 that were not repeated in 2025 may no longer be valid.

hibernacula survey

No comments.

structure survey

comment 1:

Please indicate which state the structure is in on Table 3-1 and submit the revised document.

acoustic survey

question 1:

The report uses the term “quality check” throughout the document. Can you please provide the definition of a “quality check?” I have not seen this term used before.

question 2:

Can you provide a shapefile containing all detector sites where TCB was determined present following quantitative analysis?

other

A mist-net survey was also conducted in Virginia. Has this report been submitted to our office for review?

Thanks,

Rachel

Rachel Case (she/her)
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
804-323-4801

<https://www.fws.gov/office/virginia-ecological-services>

From: Jason Duffey <J.Duffey@gaiconsultants.com>
Sent: Thursday, December 19, 2024 6:46 PM
To: Virginia Field Office, FW5 <virginiafieldoffice@fws.gov>; rick.reynolds@dwr.virginia.gov <rick.reynolds@dwr.virginia.gov>; Case, Rachel L <rachel_case@fws.gov>; Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>
Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroup.com <kevinc@whmgroup.com>; chris@batgate.com <chris@batgate.com>; Jennifer Broush <j.broush@gaiconsultants.com>
Subject: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

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Ms. Case and Mr. Reynolds,

RE: Bat Acoustic Survey Report

Transcontinental Gas Pipe Line Company, LLC. (Transco), an indirect, wholly owned subsidiary of The Williams Companies, Inc. (Williams), is seeking authorization from the Federal Energy Regulatory Commission under Sections 7(b) and 7(c) of the Natural Gas Act for appropriate abandonment authority and a certificate of public convenience and necessity (Certificate) to construct, own, operate, and maintain the proposed Southeast Supply Enhancement Project (Project) facilities.

Transco is pleased to provide the linked Bat Acoustics Survey Report for your review and comment. Transco previously submitted Bat Mist Net, Structures, Culverts, and Hibernacula Survey Reports to you via the link below on October 29, 2024. The following secure link allows those copied on this email to download the cover letter and reports:

 [VA Bat Reports](#)

If someone else in your organization requires access to download the reports, please notify me and I can grant access.

Transco appreciates your attention to the Project and looks forward to your guidance and concurrence on the attached reports. Should you have questions related to this report, please let us know.

Thank you,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



GAI Consultants

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From: chris@batgate.com
To: "Case, Rachel L"; "Cameron, Susan"
Cc: "Katherine Etchison"; "Munzer, Olivia"; "Reynolds, Richard"; "Tompkins, Bryan"; Jason Duffey; Jennifer Broush
Subject: RE: [EXTERNAL] SSE Bat Culvert Hiber Survey Plan
Date: Monday, February 10, 2025 11:59:11 AM

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Excellent, thanks to all for the feedback, we will proceed.

Chris

Chris Sanders



Sanders Environmental Inc.
322 Borealis Way
Bellefonte PA 16823
814-659-8257 (cell)

From: Case, Rachel L <rachel_case@fws.gov>
Sent: Monday, February 10, 2025 11:57 AM
To: Cameron, Susan <susan_cameron@fws.gov>; chris@batgate.com
Cc: Katherine Etchison <katherine.etchison@ncwildlife.org>; Munzer, Olivia <olivia.munzer@ncwildlife.org>; Reynolds, Richard <rick.reynolds@dwr.virginia.gov>; Tompkins, Bryan <bryan_tompkins@fws.gov>; 'Jason Duffey' <J.Duffey@gaiconsultants.com>; 'Broush, Jennifer (EXT)' <j.broush@gaiconsultants.com>
Subject: Re: [EXTERNAL] SSE Bat Culvert Hiber Survey Plan

Hi Chris,

Thanks for sending this over. I agree with comments 1 and 2 provided by Susan below. The Virginia Field Office has no additional comments. Looking forward to seeing the results.

Best,
Rachel

Rachel Case (she/her)
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane

Gloucester, VA 23061
804-323-4801
<https://www.fws.gov/office/virginia-ecological-services>

From: Cameron, Susan <susan_cameron@fws.gov>
Sent: Monday, February 10, 2025 9:05 AM
To: chris@batgate.com <chris@batgate.com>
Cc: Case, Rachel L <rachel_case@fws.gov>; Katherine Etchison <katherine.etchison@ncwildlife.org>; Munzer, Olivia <olivia.munzer@ncwildlife.org>; Reynolds, Richard <rick.reynolds@dwr.virginia.gov>; Tompkins, Bryan <bryan_tompkins@fws.gov>; 'Jason Duffey' <J.Duffey@gaiconsultants.com>; 'Broush, Jennifer (EXT)' <j.broush@gaiconsultants.com>
Subject: Re: [EXTERNAL] SSE Baat Culvert Hiber Survey Plan

Hi Chris,

Thanks for doing this so quickly and I think it looks good. I just have a couple of comments:

1. In the interest of time, you could focus on larger and/or more complex culverts (minimum of $\geq 50'$ in length rather than 23') for the winter survey. These will be more likely to have stable temperatures and to be used by bats in winter.
2. Thank you for wearing masks in the culvers. As a reminder, please also follow WNS decon protocols.
3. If you need more time in NC, I think it's ok to go to Feb. 28th.

Best,
Sue

Sue Cameron
U. S. Fish and Wildlife Service
Asheville Field Office
160 Zillicoa Street
Asheville, NC 28801
828-450-7469
susan_cameron@fws.gov

NOTE: This email correspondence and any attachments to and from this sender is subject to the Freedom of Information Act (FOIA) and may be disclosed to third parties. ?

From: chris@batgate.com <chris@batgate.com>
Sent: Sunday, February 9, 2025 11:49 PM

To: Case, Rachel L <rachel_case@fws.gov>; Cameron, Susan <susan_cameron@fws.gov>
Cc: 'Josh Henry' <Josh.Henry@williams.com>; 'Jason Duffey' <J.Duffey@gaiconsultants.com>;
'Jennifer Broush' <j.broush@gaiconsultants.com>; 'Munzer, Olivia' <olivia.munzer@ncwildlife.org>;
'Etchison, Katherine' <katherine.etchison@ncwildlife.org>; rick.reynolds@dwr.virginia.gov
<rick.reynolds@dwr.virginia.gov>
Subject: [EXTERNAL] SSE Baat Culvert Hiber Survey Plan

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Study plan for Southeast Supply Enhancement culvert hibernacula survey is attached. Please review and concur/comment, we are hoping to mobilize very rapidly, and appreciate the offers of a quick turnaround.

Thanks,
Chris

Chris Sanders



Sanders Environmental Inc.
322 Borealis Way
Bellefonte PA 16823
814-659-8257 (cell)

From: chris@batgate.com
To: ["Case, Rachel L"; "Cameron, Susan"](#)
Cc: [Josh Henry](#); [Jason Duffey](#); [Jennifer Broush](#); ["Munzer, Olivia"](#); ["Etchison, Katherine"](#); rick.reynolds@dwr.virginia.gov
Subject: SSE Baat Culvert Hiber Survey Plan
Date: Sunday, February 9, 2025 11:50:01 PM
Attachments: [Southeast Supply Enhancement Bat Culvert Hiber Survey Plan v1-5.pdf](#)

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Study plan for Southeast Supply Enhancement culvert hibernacula survey is attached. Please review and concur/comment, we are hoping to mobilize very rapidly, and appreciate the offers of a quick turnaround.

Thanks,
Chris

Chris Sanders



Sanders Environmental Inc.
322 Borealis Way
Bellefonte PA 16823
814-659-8257 (cell)

From: [Case, Rachel L](#)
To: [Josh Henry](#)
Cc: [Jason Duffey](#); [Cameron, Susan](#)
Subject: Re: [EXTERNAL] Bats & Culverts
Date: Friday, February 7, 2025 10:51:41 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)

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Hi Josh,

Thanks for reaching out. This is a more recent concern for Virginia (particularly in the hibernating range) as we learn more about how bats use culverts and bridges. Our office would suggest that a culvert survey be conducted during the winter months, especially if work on those culverts will occur during the winter months. Forgive me for not recommending this earlier.

As for questions 2 and 3:

Question 2: I spoke with Susan in North Carolina (cc'd) shortly after receiving your message. Our guidance will be similar to that of the North Carolina Field Office regarding these assessments. Susan told me that she asked for you to send a brief email outlining what you two discussed and that your email could serve as the study plan. If you could cc me on that email, this would be sufficient for our office, too.

Question 3: Our office would recommend that winter culvert assessments be completed by the end of February. If this is not feasible, please let me know.

I appreciate you circling back on this matter.

Thanks,

Rachel

Rachel Case (she/her)
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
804-323-4801
<https://www.fws.gov/office/virginia-ecological-services>

From: Henry, Joshua <Josh.Henry@williams.com>
Sent: Thursday, February 6, 2025 4:52 PM
To: Case, Rachel L <rachel_case@fws.gov>
Cc: Jason Duffey <J.Duffey@gaiconsultants.com>
Subject: [EXTERNAL] Bats & Culverts

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Rachel,

I was reaching out in regards to the potential need to survey culverts in relation to the SSE Project for bat hibernacula during the hibernation period in Virginia. This concept was lightly touched upon in the meeting last week and we anticipated receiving guidance from the USFWS. Transco did not anticipate the use of culverts as hibernacula in the hibernating range. As a margin of safety and out of an abundance of caution I was seeking to verify if Transco needed to quickly mobilize a team to conduct visual surveys in accordance with the 2024 USFWS Bat Survey guidelines (similar to what we did for surveying culverts for roosting bats in the spring). I am not exactly certain of the end date for surveys in the hibernation range if this the path USFWS suggests. However, if this is a concern of the USFWS I would like to mobilize crews immediately. Transco does not want to miss the window for conducting these surveys this winter season, as it could result in schedule impacts.

In summary we have the below questions:

1. Is the use of culverts as hibernacula a concern of the USFWS in Virginia for the SSE Project?
2. Do you need a survey plan to be approved for this or are we covered utilizing the same methods and survey plan that were relied upon for the spring culvert roost surveys?
3. Do you have guidance as to the final date this type of survey can be conducted, if proposed?

Thank you,



Josh Henry | Williams | Environmental Specialist
Phone: 412-713-0485 | 2000 Commerce Drive, Park Place 2, Pittsburgh, PA, 15275



If you have received this message in error, please reply to advise the sender of the error and then immediately

From: [Stanhope, Jennifer W](#)
To: [Jennifer Broush](#); [Watson, Brian \(DWR\)](#); [Argo, Emily E](#)
Cc: [Josh Henry](#); [Jeremy Alberts](#); [Casey Swecker](#); [Akers, Shauna](#); [Jason Duffey](#)
Subject: RE: [EXTERNAL] Transco SSE - VA Freshwater Mussel Survey and RLP Habitat Assessments - 1 of 2
Date: Monday, February 3, 2025 4:31:14 PM

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Jennifer B.,

Thank you for sending the survey reports for freshwater mussels and RLP habitat in VA.

My questions/comments below pertain to the mussel survey report dated December 17, 2024.

1. When were each of the surveys conducted? Please provide the dates for each stream.
2. Who were the VDWR permitted biologists leading the surveys at each of the streams?
3. For each of the streams where no mussels were observed, please indicate if the qualified, permitted surveyor considered the stream to have suitable mussel habitat? Or do we assume because the stream was surveyed, the surveyors would characterize the habitat as suitable for mussels?

Thank you,
Jen

Jennifer Stanhope
Acting Assistant Field Office Supervisor - Endangered Species
U.S. Fish and Wildlife Service - Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
Office: 804-905-9781 (*note: new number*)
Jennifer_stanhope@fws.gov
<https://www.fws.gov/office/virginia-ecological-services>

From: Jennifer Broush <j.broush@gaiconsultants.com>

Sent: Wednesday, December 18, 2024 2:43 PM

To: Luu, Jackie A <jackie_luu@fws.gov>; Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Argo, Emily E <emily_argo@fws.gov>

Cc: Josh Henry <Josh.Henry@williams.com>; Jeremy Alberts <JAlberts@envsi.com>; Casey Swecker <cdswecker@edge-es.com>; Akers, Shauna <shauna.akers@williams.com>; Jason Duffey <J.Duffey@gaiconsultants.com>

Subject: [EXTERNAL] Transco SSE - VA Freshwater Mussel Survey and RLP Habitat Assessments - 1 of 2

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Ms. Luu and Mr. Watson (**Email 1 of 2**),

Transcontinental Gas Pipe Line Company, LLC (Transco) is pleased to submit the Virginia (VA) Freshwater Mussel Survey Report and Roanoke Logperch Habitat Assessments which were conducted in support of the proposed Southeast Supply Enhancement (Project) in Pittsylvania County, VA. We look forward to your review and comment regarding these reports and are available to discuss at your convenience. We are submitting via two emails due to the size of the files.

We appreciate the continued coordination between Transco, U.S. Fish and Wildlife Service VA Field office, and VA Department of Wildlife Resources regarding sensitive species in VA. Should you have any questions while reviewing, please do not hesitate to contact Josh Henry (Transco) or me. If the size of the documents are too large to be accepted, we will provide a link to download.

Regards,
Jennifer

Jennifer Broush, MBA

Senior Associate / Environmental Director

GAI Consultants, 385 E. Waterfront Drive, Homestead, PA 15120-5005

D 412.399.5317 **M** 724.516.1155 **E** j.broush@gaiconsultants.com

[Facebook](#) | [YouTube](#) | [LinkedIn](#) | [Instagram](#) | [Glassdoor](#) | [News & Insights](#)

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From: [Case, Rachel L](#)
To: [Jason Duffey](#); rick.reynolds@dwr.virginia.gov
Cc: [Josh Henry](#); kevinc@whmggroup.com; chris@batgate.com; [Jennifer Broush](#); [Stanhope, Jennifer W](#); [Luu, Jackie A](#)
Subject: Re: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992
Date: Friday, January 3, 2025 2:21:30 PM
Attachments: [image002.png](#)
[image003.png](#)

You don't often get email from rachel_case@fws.gov. [Learn why this is important](#)

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Hi Jason,

Our office has reviewed the culvert, hibernacula, structure and acoustic survey reports provided at the link below. We have the following comments/questions.

culvert survey

comment 1:

The report indicates that “the project has identified culverts located within the limits of disturbance, that may be removed or demolished as part of proposed Project construction activities” (pg. 4). “The use of these controlled blasting techniques limits the impacts to nearby areas, or areas outside of the limits of disturbance, which would include minimizing impacts to culverts outside of the limit of disturbance” (pg. 5).

The first statement indicates that only culverts within the limits of disturbance were surveyed. The second statement indicates that impacts will extend outside the limits of disturbance, but will be minimal (e.g., “which would include minimizing impacts to culverts outside of the limits of disturbance”). The action area is defined by ESA regulation as all areas to be affected directly or indirectly by the action and not merely the immediate area involved in the action (50 CFR §402.02). If culverts outside of the limits of disturbance will be affected, even if the applicant has determined the effects will be minimal, those culverts should be included in the assessment.

comment 2:

Of the culverts surveyed, 7 are in VA. Of those 7, only 1 culvert was accessible and surveyed during the survey season. The other 6 were either inaccessible or surveyed outside the survey season. Therefore, VA cannot fully analyze the potential impacts of the project to listed or proposed bat species in VA until all assessments are complete.

comment 3:

Culvert surveys resulting in probable absence are valid for 2 years. If the project “commences in the third quarter of 2026”, culvert assessments done in 2024 that were not repeated in 2025 may no longer be valid.

hibernacula survey

No comments.

structure survey

comment 1:

Please indicate which state the structure is in on Table 3-1 and submit the revised document.

acoustic survey

question 1:

The report uses the term “quality check” throughout the document. Can you please provide the definition of a “quality check?” I have not seen this term used before.

question 2:

Can you provide a shapefile containing all detector sites where TCB was determined present following quantitative analysis?

other

A mist-net survey was also conducted in Virginia. Has this report been submitted to our office for review?

Thanks,

Rachel

Rachel Case (she/her)

Fish and Wildlife Biologist

U.S. Fish and Wildlife Service

Virginia Field Office

6669 Short Lane

Gloucester, VA 23061

804-323-4801

<https://www.fws.gov/office/virginia-ecological-services>

From: Jason Duffey <J.Duffey@gaiconsultants.com>

Sent: Thursday, December 19, 2024 6:46 PM

To: Virginia Field Office, FW5 <virginiafieldoffice@fws.gov>; rick.reynolds@dwr.virginia.gov <rick.reynolds@dwr.virginia.gov>; Case, Rachel L <rachel_case@fws.gov>; Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>

Cc: Josh Henry <Josh.Henry@williams.com>; kevinc@whmgroup.com <kevinc@whmgroup.com>; chris@batgate.com <chris@batgate.com>; Jennifer Broush <j.broush@gaiconsultants.com>

Subject: [EXTERNAL] Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992

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links, opening attachments, or responding.

Ms. Case and Mr. Reynolds,

RE: Bat Acoustic Survey Report

Transcontinental Gas Pipe Line Company, LLC. (Transco), an indirect, wholly owned subsidiary of The Williams Companies, Inc. (Williams), is seeking authorization from the Federal Energy Regulatory Commission under Sections 7(b) and 7(c) of the Natural Gas Act for appropriate abandonment authority and a certificate of public convenience and necessity (Certificate) to construct, own, operate, and maintain the proposed Southeast Supply Enhancement Project (Project) facilities.

Transco is pleased to provide the linked Bat Acoustics Survey Report for your review and comment. Transco previously submitted Bat Mist Net, Structures, Culverts, and Hibernacula Survey Reports to you via the link below on October 29, 2024. The following secure link allows those copied on this email to download the cover letter and reports:

 [VA Bat Reports](#)

If someone else in your organization requires access to download the reports, please notify me and I can grant access.

Transco appreciates your attention to the Project and looks forward to your guidance and concurrence on the attached reports. Should you have questions related to this report, please let us know.

Thank you,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



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From: [Galloway, Shaun L](#)
To: [Jeremy Alberts](#)
Cc: [Jennifer Broush](#); [Ladin, Zachary S](#); [Cooper, Jeffrey \(DWR\)](#)
Subject: Re: [EXTERNAL] Contact Info
Date: Tuesday, December 31, 2024 11:31:54 AM
Attachments: [Pesi 2302 Transco SESE Bald Eagle Study Plan Eden Loop Virginia 4 November 2024.pdf](#)

You don't often get email from shaughn_galloway@fws.gov. [Learn why this is important](#)

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Good morning Jeremy,

This survey plan looks fine to me for avoiding the disturbance of potentially breeding BAEA as a result of conducting aerial nest surveys. You can also use the [Northeast Bald Eagle Screening Form](#) to self certify that you are avoiding disturbance if you would like additional documentation. I do not need a copy of the filled out form just retain a copy for your records. Please let me know if you have any additional questions.

Happy new year!

Shaughn Galloway
Northeast Regional Eagle Coordinator
Region 5 - Migratory Birds Program
U.S. Fish and Wildlife Service
300 Westgate Center Drive
Hadley, MA 01035
Email: shaughn_galloway@fws.gov
Phone: (413) 253-8577
Web: <https://fws.gov/ePermits>

From: Jeremy Alberts <JAlberts@envsi.com>
Sent: Friday, December 20, 2024 11:33 AM
To: Galloway, Shaun L <shaughn_galloway@fws.gov>
Cc: (j.broush@gaiconsultants.com) <j.broush@gaiconsultants.com>
Subject: RE: [EXTERNAL] Contact Info

Shaughn,

I hope the end of year isn't too crazy on your end! We re-submitted the updated eagle study plan with revisions based on your feedback back on November 4. We are currently looking to fly the survey beginning January 10, 2025, but have not received concurrence or input on the updated plan at this time. The revised document is attached for your reference. Given the time crunch around

the holidays, I wanted to make sure this updated plan addresses your concerns.

Thanks, and happy holidays!

Jeremy

Jeremy M. Alberts, Ph.D.
Environmental Solutions & Innovations, Inc.
Scott Depot, West Virginia
(304) 308-0160

From: Galloway, Shaughn L <shaughn_galloway@fws.gov>
Sent: Wednesday, October 30, 2024 10:45 AM
To: Jeremy Alberts <JAlberts@envsi.com>
Subject: Re: [EXTERNAL] Contact Info

CAUTION: This email originated from outside of our organization. DO NOT click links or open attachments unless you recognize the sender and know the content is safe!

Hi Jeremy,

I appreciate your time in talking about the potential aerial surveys occurring in Virginia and North Carolina. I reached out to the Regional Eagle Coordinator in Region 4 and they were fine with me reviewing this application so no need to include them in this process. Please let me know if you need anything else.

Thanks!

Shaughn Galloway
Northeast Regional Eagle Coordinator
Region 5 - Migratory Birds Program
U.S. Fish and Wildlife Service
300 Westgate Center Drive
Hadley, MA 01035
Email: shaughn_galloway@fws.gov
Phone: (413) 253-8577
Web: <https://fws.gov/ePermits>

From: Jeremy Alberts <JAlberts@envsi.com>
Sent: Tuesday, October 29, 2024 1:32 PM

To: Galloway, Shaughn L <shaughn_galloway@fws.gov>

Subject: [EXTERNAL] Contact Info

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Shaughn, thank you for the callback, my info is below!

Jeremy



Jeremy M. Alberts, Ph.D.

Chief Operating Officer

Environmental Solutions & Innovations, Inc.
8 Betty Lane | Scott Depot, WV 25560 | USA

office: 513.451.1777 **fax:** 513.451.3321

cell: 304.308.0160

JAlberts@envsi.com | www.envsi.com

From: [Jason Duffey](#)
To: [Cameron, Susan](#)
Cc: [Jennifer Broush](#); kevinc@whmggroup.com; chris@batgate.com; [Josh Henry](#); [Tompkins, Bryan](#); [Katherine Etchison](#); [Munzer, Olivia](#); [Irizarry, Amariys \(Ami\)](#); [Virginia Field Office, FW5](#); rick.reynolds@dwr.virginia.gov; [Case, Rachel L](#)
Subject: RE: [EXTERNAL] Transco SSE - NC Bat Survey Reports USFWS Project Codes: 2024-0136694, 2024-0047469, 2024-0047464, 2024-0047462, 2024-0137949, 2024-0137941, and 2024-0047458
Date: Thursday, December 19, 2024 7:19:05 PM
Attachments: [image001.png](#)
[image002.png](#)

Sue,

Thank you for reviewing the bat reports and providing feedback. The Bat Culvert Report, Structures Report, and Hibernacula Report were updated to incorporate additional information. Those updated reports are available for you to download from our Project's shared One Drive site noted below. Additionally, please see the following responses to your comments.

North Carolina agency folks copied on this email should be able to access the reports here:

 [NC Bat Reports](#)

Virginia agency folks copied on this email should be able to access the reports here:

 [VA Bat Reports](#)

If someone else in your organization requires access to download the reports, please notify me and I can grant access.

USFWS Comment 1: Since you are still working on the acoustic analysis, I wanted to provide a reminder that during review of the study plan, USFWS and partners had recommended included gray bats on the acoustic software list for Rockingham, Cleveland, and Iredell counties in NC.

Transco Response: The gray bat was included in the acoustic analysis software when analyzing acoustic data collected in Rockingham, Cleveland and Iredell counties. The bat acoustic survey report is being submitted to you concurrently under a different cover and will also be available at the link above.

USFWS Comment 2: Based on Figure 2, it looks like there are a large number of mines near King's Mountain. Are these all mines or is this a mistake?

Transco Response: There are a large number of mines near King's Mountain. Many appear to be surface mines or flooded and reclaimed; however, subsurface mines may exist. Sanders conducted additional desktop reviews of the available data included a detailed figure showing mines in the Kings Mountain area in the updated Hibernacula Report. Due to the pre-existing nature of the facilities in this area and that the modifications are proposed primarily within the existing fence line with only minor additional permanent workspace, Transco does not expect the Project to affect potential bat hibernacula including those potentially occupying subsurface mines.

USFWS Comment 3: Can you add project component names to the maps so we can easily cross reference the list of mines with the maps?

Transco Response: The Hibernacula Report figures have been updated to include labels for Project components.

USFWS Comment 4: We have lots of caves in NC that are used by bats and are not in karst. These are largely fissure caves and boulder caves. Did you look for these types of features or talk to local grottos?

Transco Response: Environmental survey crews collected information noting rocky habitats/rock shelter/boulder type habitats found during field reviews within the environmental survey corridor. One was identified and described in the Hibernacula Report as unsuitable for use by bats. Transco does not expect the Project to affect these types of fissure or rocky habitat features.

Following receipt of this comment. Sanders contacted the local branch of the National Speleological Society (NSS) in Raleigh, NC to inquire if that organization tracks rock shelter type caves. The updated Hibernacula Report was revised to include this information.

USFWS Comment 5: The report states, "For the culverts visited outside of the survey season, and potential suitability was confirmed, bat presence/absence will not be determined until the culvert is assessed within the appropriate survey season in 2025." How are you defining 'potential suitability' or is the intention to revisit all culverts of appropriate length/width?

Transco Response: The Culvert Report has been updated to clarify.

USWS Comment 6: It is my understanding that suitable culverts (per the survey guidance) that will be directly impacted (e.g., replaced) we're surveyed. Can you remind me if there is any blasting or other activities that would indirectly impact culvert roosts? I just want to make sure we've covered all of the culvert surveys that are needed.

Transco Response: Suitable culverts (per the USFWS Guidelines) located within the Project limits of disturbance (LOD) were surveyed (with 10 proposed for survey in 2025). Culverts within the LOD could potentially be directly or indirectly affected by the Project.

The Hibernacula Report has been updated to indicate that Transco will use seismically controlled blasting techniques in compliance with federal and state regulation. See the Hibernacula Report for more information. Transco does not expect the Project to directly or indirectly affect unknown or unsurveyed culverts outside of the Project LOD.

USFWS Comment 7: The summary of results at the start of the report indicates that all structures were surveyed during the summer survey season and that no surveys are planned for 2025. However, based on information later in the report, it sounds like there are still four structures that need to be surveyed (to get to the total of 58 structures) as well as a couple of emergence surveys. Can you please clarify?

Transco Response: Sanders updated the Structures Report to clarify that the remaining four structures that were not surveyed in 2024 are anticipated to be assessed for bat use in

2025.

USFWS Comment 8: It is difficult to tell from the report which culverts and structures were in the year round vs. hibernation range and whether they were surveyed during the appropriate windows. I think all of the more southern sites are in the year-round range, but that some of the northern sites are in the hibernation range. Is it possible to clarify in the results perhaps by either adding which range a culvert/structure is in to the data sheet or adding a field to the tables?

Transco Response: Sanders updated both reports to include hibernating and active range labels in the results summary tables.

Transco appreciates your attention to the Project and looks forward to your guidance and concurrence on the attached reports. Should you have questions related to this report, please let us know.

Thanks!

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



GAI Consultants

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From: Jason Duffey

Sent: Friday, November 22, 2024 2:28 PM

To: 'Cameron, Susan' <susan_cameron@fws.gov>

Cc: Jennifer Broush <j.broush@gaiconsultants.com>; kevinc@whmgroup.com; chris@batgate.com; Josh Henry <Josh.Henry@williams.com>; Tompkins, Bryan <bryan_tompkins@fws.gov>; Katherine Etchison <katherine.etchison@ncwildlife.org>; Munzer, Olivia <olivia.munzer@ncwildlife.org>; Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>

Subject: RE: [EXTERNAL] Transco SSE - NC Bat Survey Reports USFWS Project Codes: 2024-0136694, 2024-0047469, 2024-0047464, 2024-0047462, 2024-0137949, 2024-0137941, and 2024-0047458

Thank you, Sue! We will address the comments and get back to you.

Thanks,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042
M 937.554.8488



GAI Consultants

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From: Cameron, Susan <susan_cameron@fws.gov>

Sent: Friday, November 22, 2024 1:26 PM

To: Jason Duffey <J.Duffey@gaiconsultants.com>

Cc: Jennifer Broush <j.broush@gaiconsultants.com>; kevinc@whmgroup.com; chris@batgate.com; Josh Henry <Josh.Henry@williams.com>; Tompkins, Bryan <bryan_tompkins@fws.gov>; Katherine Etchison <katherine.etchison@ncwildlife.org>; Munzer, Olivia <olivia.munzer@ncwildlife.org>; Irizarry, Amariyls (Ami) <amarilys_irizarry@fws.gov>

Subject: Re: [EXTERNAL] Transco SSE - NC Bat Survey Reports USFWS Project Codes: 2024-0136694, 2024-0047469, 2024-0047464, 2024-0047462, 2024-0137949, 2024-0137941, and 2024-0047458

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Hi Jason,

Thanks again for sharing the report and sorry for the delay in review. I have the following questions and comments.

- Since you are still working on the acoustic analysis, I wanted to provide a reminder that during review of the study plan, USFWS and partners had recommended included gray bats on the acoustic software list for Rockingham, Cleveland and Iredell counties in NC.
- Based on Figure 2, it looks like there are a large number of mines near King's Mountain. Are these all mines or is this a mistake?
- Can you add project component names to the maps so we can easily cross reference the list of mines with the maps?
- We have lots of caves in NC that are used by bats and are not in karst. These are largely fissure caves and boulder caves. Did you look for these types of features or talk to local grottos?
- The report states, "For the culverts visited outside of the survey season, and potential

suitability was confirmed, but presence/absence will not be determined until the culvert is assessed within the appropriate survey season in 2025." How are you defining 'potential suitability' or is the intention to revisit all culverts of appropriate length/width?

- It is my understanding that suitable culverts (per the survey guidance) that will be directly impacted (e.g., replaced) we're surveyed. Can you remind me if there is any blasting or other activities that would indirectly impact culvert roosts? I just want to make sure we've covered all of the culvert surveys that are needed.
- The summary of results at the start of the report indicates that all structures were surveyed during the summer survey season and that no surveys are planned for 2025. However, based on information later in the report, it sounds like there are still four structures that need to be surveyed (to get to the total of 58 structures) as well as a couple of emergence surveys. Can you please clarify?
- It is difficult to tell from the report which culverts and structures were in the year round vs. hibernation range and whether they were surveyed during the appropriate windows. I think all of the more southern sites are in the year-round range, but that some of the northern sites are in the hibernation range. Is it possible to clarify in the results perhaps by either adding which range a culvert/structure is in to the data sheet or adding a field to the tables?

Best,
Sue

Sue Cameron
U. S. Fish and Wildlife Service
Asheville Field Office
160 Zillicoa Street
Asheville, NC 28801
828-450-7469
susan_cameron@fws.gov

NOTE: This email correspondence and any attachments to and from this sender is subject to the Freedom of Information Act (FOIA) and may be disclosed to third parties. ?

From: Munzer, Olivia <olivia.munzer@ncwildlife.org>
Sent: Tuesday, November 12, 2024 5:11 AM
To: Cameron, Susan <susan_cameron@fws.gov>; Jason Duffey <J.Duffey@gaiconsultants.com>
Cc: Jennifer Broush <j.broush@gaiconsultants.com>; kevinc@whmgroup.com

<kevinc@whmgroup.com>; chris@batgate.com <chris@batgate.com>; Josh Henry
<Josh.Henry@williams.com>; Tompkins, Bryan <bryan_tompkins@fws.gov>; Etchison, Katherine
<katherine.etchison@ncwildlife.org>

Subject: Re: [EXTERNAL] Transco SSE - NC Bat Survey Reports USFWS Project Codes: 2024-0136694, 2024-0047469, 2024-0047464, 2024-0047462, 2024-0137949, 2024-0137941, and 2024-0047458

Good morning,

My apologies. I had a family emergency come up. I will review the report this week.

Olivia Munzer

NC Wildlife Resources Commission

336-269-0074

From: Cameron, Susan <susan_cameron@fws.gov>

Sent: Monday, November 4, 2024 9:03 AM

To: Jason Duffey <J.Duffey@gaiconsultants.com>; Munzer, Olivia <olivia.munzer@ncwildlife.org>

Cc: Jennifer Broush <j.broush@gaiconsultants.com>; kevinc@whmgroup.com

<kevinc@whmgroup.com>; chris@batgate.com <chris@batgate.com>; Josh Henry

<Josh.Henry@williams.com>; Tompkins, Bryan <bryan_tompkins@fws.gov>; Etchison, Katherine

<katherine.etchison@ncwildlife.org>

Subject: Re: [EXTERNAL] Transco SSE - NC Bat Survey Reports USFWS Project Codes: 2024-0136694, 2024-0047469, 2024-0047464, 2024-0047462, 2024-0137949, 2024-0137941, and 2024-0047458

CAUTION: External email. Do not click links or open attachments unless verified. Report suspicious emails with the Report Message button located on your Outlook menu bar on the Home tab.

Thank you Jason. I was able to access the report and will review it this week.

Best,

Sue

Sue Cameron

U. S. Fish and Wildlife Service

Asheville Field Office

160 Zillico Street

Asheville, NC 28801

828-450-7469

susan_cameron@fws.gov

NOTE: This email correspondence and any attachments to and from this sender is subject to the Freedom of Information Act (FOIA) and may be disclosed to third parties. ?

From: Jason Duffey <J.Duffey@gaiconsultants.com>
Sent: Tuesday, October 29, 2024 3:18 PM
To: Cameron, Susan <susan_cameron@fws.gov>; 'Munzer, Olivia' <olivia.munzer@ncwildlife.org>
Cc: Jennifer Broush <j.broush@gaiconsultants.com>; kevinc@whmgroupp.com <kevinc@whmgroupp.com>; chris@batgate.com <chris@batgate.com>; Josh Henry <Josh.Henry@williams.com>; Tompkins, Bryan <bryan_tompkins@fws.gov>; 'Etchison, Katherine' <katherine.etchison@ncwildlife.org>
Subject: [EXTERNAL] Transco SSE - NC Bat Survey Reports USFWS Project Codes: 2024-0136694, 2024-0047469, 2024-0047464, 2024-0047462, 2024-0137949, 2024-0137941, and 2024-0047458

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Ms. Cameron and Ms. Munzer,

Transcontinental Gas Pipe Line Company, LLC. (Transco), an indirect, wholly owned subsidiary of The Williams Companies, Inc. (Williams), is seeking authorization from the Federal Energy Regulatory Commission under Sections 7(b) and 7(c) of the Natural Gas Act for appropriate abandonment authority and a certificate of public convenience and necessity (Certificate) to construct, own, operate, and maintain the proposed Southeast Supply Enhancement Project (Project) facilities.

Transco is pleased to provide the linked Bat Survey Reports for your review and comment. Transco conducted various bat surveys along the portions of the Project in NC in 2024, based on the most recent USFWS guidelines. The following secure link allows those copied on this email to download the cover letter and reports:

 [NC Bat Reports](#)

If someone else in your organization requires access to download the reports, please notify me and I can grant access.

Transco appreciates your attention to the Project and looks forward to your guidance and concurrence on the attached reports. Should you have questions related to this report, please let us know.

Thank you,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



GAI Consultants

ENGINEERING, PLANNING, AND ENVIRONMENTAL CONSULTING SINCE 1958

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From: [Jason Duffey](#)
To: [Virginia Field Office, FW5](#); rick.reynolds@dwr.virginia.gov; [Case, Rachel L](#); [Irizarry, Amariyls \(Ami\)](#)
Cc: [Josh Henry](#); kevinc@whmgroupp.com; chris@batgate.com; [Jennifer Broush](#)
Subject: Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992
Date: Thursday, December 19, 2024 6:47:03 PM
Attachments: [image002.png](#)
[image003.png](#)

Ms. Case and Mr. Reynolds,

RE: Bat Acoustic Survey Report

Transcontinental Gas Pipe Line Company, LLC. (Transco), an indirect, wholly owned subsidiary of The Williams Companies, Inc. (Williams), is seeking authorization from the Federal Energy Regulatory Commission under Sections 7(b) and 7(c) of the Natural Gas Act for appropriate abandonment authority and a certificate of public convenience and necessity (Certificate) to construct, own, operate, and maintain the proposed Southeast Supply Enhancement Project (Project) facilities.

Transco is pleased to provide the linked Bat Acoustics Survey Report for your review and comment. Transco previously submitted Bat Mist Net, Structures, Culverts, and Hibernacula Survey Reports to you via the link below on October 29, 2024. The following secure link allows those copied on this email to download the cover letter and reports:

 [VA Bat Reports](#)

If someone else in your organization requires access to download the reports, please notify me and I can grant access.

Transco appreciates your attention to the Project and looks forward to your guidance and concurrence on the attached reports. Should you have questions related to this report, please let us know.

Thank you,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



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From: [Jennifer Broush](#)
To: [Luu, Jackie A](#); [Watson, Brian \(DWR\)](#); [Jennifer Stanhope](#); ["Emily E"](#)
Cc: [Henry, Joshua](#); [Jeremy Alberts](#); [Casey Swecker](#); [shauna.akers@williams.com](#); [Jason Duffey](#)
Subject: Transco SSE - VA Freshwater Mussel Survey and RLP Habitat Assessments - 1 of 2
Date: Wednesday, December 18, 2024 2:43:00 PM
Attachments: [241218 Transco SSE VA RLP and Mussels Reports_OUT.pdf](#)
[AttA Transco SSE Virginia Mussel Survey Report.pdf](#)

Ms. Luu and Mr. Watson (**Email 1 of 2**),

Transcontinental Gas Pipe Line Company, LLC (Transco) is pleased to submit the Virginia (VA) Freshwater Mussel Survey Report and Roanoke Logperch Habitat Assessments which were conducted in support of the proposed Southeast Supply Enhancement (Project) in Pittsylvania County, VA. We look forward to your review and comment regarding these reports and are available to discuss at your convenience. We are submitting via two emails due to the size of the files.

We appreciate the continued coordination between Transco, U.S. Fish and Wildlife Service VA Field office, and VA Department of Wildlife Resources regarding sensitive species in VA. Should you have any questions while reviewing, please do not hesitate to contact Josh Henry (Transco) or me. If the size of the documents are too large to be accepted, we will provide a link to download.

Regards,
Jennifer

Jennifer Broush, MBA

Senior Associate / Environmental Director

GAI Consultants, 385 E. Waterfront Drive, Homestead, PA 15120-5005

D 412.399.5317 **M** 724.516.1155 **E** j.broush@gaiconsultants.com

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Transcontinental Gas Pipe Line Company, LLC
2800 Post Oak Boulevard (77056)
P.O. Box 1396
Houston, Texas 77251-1396
713-215-2000

December 18, 2024

Ms. Jackie Luu
United States Fish and Wildlife Service
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061

Mr. Brian Watson
Virginia Department of Wildlife Resources
Region 2 Office
1132 Thomas Jefferson Road
Forest, VA 24551

Re: Threatened and Endangered Species Project Review: Aquatic Species Survey Reports and Habitat Assessments
USFWS Project Codes: 2024-0047474 and 2024-0137992
Transcontinental Gas Pipe Line Company, LLC
Southeast Supply Enhancement Project – Eden Loop Pipeline and Compressor Station 165
Pittsylvania County, VA

Dear Ms. Luu and Mr. Watson:

Transcontinental Gas Pipe Line Company, LLC (Transco), an indirect, wholly owned subsidiary of The Williams Companies, Inc. (Williams), is submitting the Virginia Freshwater Mussel Survey Report and Habitat Assessments for Roanoke Logperch conducted in support of the proposed Southeast Supply Enhancement (Project) in Pittsylvania County, Virginia (VA).

Project Description

Transco is seeking authorization from the Federal Energy Regulatory Commission (FERC or Commission) under Sections 7(b) and 7(c) of the Natural Gas Act for appropriate abandonment authority and a Certificate of Public Convenience and Necessity (Certificate) to construct, own, operate, and maintain the proposed Project facilities.

The Project is an expansion of Transco's existing natural gas transmission system that will enable Transco to provide 1,596,900 dekatherms per day (Dth/d) of incremental firm transportation capacity to remove pipeline capacity constraints in Zones 4 and 5 and meet growing natural gas-fired power generation, commercial, residential, and industrial demand in the southeast United States. Transco is proposing to collocate the proposed Project within or adjacent to the existing Transco Mainline System to the extent practicable. This collocation design will help reduce the overall operational footprint of the Project, minimizing new disturbances to the extent practicable. The Project will consist of the following components (bolded components are located in VA):

Pipeline Facilities

- **Approximately 26.4 miles of 42-inch-diameter pipeline in Pittsylvania County, VA and approximately 4.4 miles of 42-inch-diameter pipeline in Rockingham County, North Carolina (NC), designated as the Eden Loop;**
 - Regulator installation in Rockingham County, NC near milepost (MP) 1382.53, designated as the Eden Regulator Station;
 - Approximately 294 feet of 30-inch-diameter pipeline and ancillary valves in Rockingham County, NC, designated as the Dan River Inlet Piping; and,
- Approximately 24.1 miles of 42-inch-diameter pipeline in Guilford, Forsyth, and Davidson Counties, NC, designated as the Salem Loop.

Compression Facilities

- **The addition of two [33,000 horsepower (HP) each] electric motor-driven (EMD) compressor units at Transco's existing Compressor Station 165 located in Pittsylvania County,**



Transcontinental Gas Pipe Line Company, LLC
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Houston, Texas 77251-1396
713-215-2000

VA. Compressor Station 165 will be limited to a total incremental output of 45,000 HP, thereby increasing the total certificated station output to 96,930 HP;

- The addition of one [23,465 International Standardization Organization (ISO) HP] Solar Titan 130 Turbine and two (31,871 ISO HP each) Solar Titan 250 Turbine driven compressor units at Transco's existing Compressor Station 155 located in Davidson County, NC. Compressor Station 155 will have a total incremental output of 87,207 HP, thereby increasing the total certificated station output to 110,709 HP;
- The addition of one (15,900 ISO HP) Solar Mars 100 Turbine driven compressor unit at Transco's existing Compressor Station 150 in Iredell County, NC. Compressor Station 150 will have a total incremental output of 15,900 HP, thereby increasing the total certificated station output to 77,830 HP; and
- The addition of three (33,000 HP each) EMD compressor units at Transco's existing Compressor Station 145 in Cleveland County, NC, to provide the incremental HP required by the Project and accommodate the abandonment (in-place) of three (12,500 HP each) existing EMD Compressor Units. Compressor Station 145 will have a total incremental output of 61,500 HP, thereby increasing the total certificated station output to 99,000 HP.

Facility Modifications

- Modifications to valve controls at existing mainline valve (MLV) setting MLV-145B21 in Lincoln County, NC;
- Modifications to valve controls at existing MLV setting MLV-145B20 in Gaston County, NC;
- Piping modifications at Transco's existing Compressor Station 135 in Anderson County, South Carolina (SC) to make the station bi-directional;
- Piping modifications at Transco's existing Compressor Station 125 in Walton County, Georgia (GA) to make the station bi-directional;
- Regulator installation and piping modifications at Transco's existing Compressor Station 120 in Henry County, GA to make the station bi-directional; and
- Piping modifications at Transco's existing Compressor Station 105 in Coosa County, Alabama (AL) to make the station bi-directional.

The use of existing, improved, and new access roads, and contractor yards will also be required for the Project. Additional ancillary facilities and piping, such as MLVs, cathodic protection, communication facilities, and internal inspection devices (e.g., pig launchers and receivers) will be necessary to support the Project.

Subject to FERC's certification of the Project and receipt of other necessary permits and authorizations, Transco anticipates that construction of the Project would commence in the third quarter of 2026 to meet a proposed in-service date of November 1, 2027.

Listed Aquatic Species

Based on a Project review conducted through the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) system, the Project is in the range of the following listed aquatic species in VA:

- Green Floater (*Lasmigona subviridis*) – Fed: Proposed Threatened; VA: Threatened
- Roanoke logperch (*Percina rex*) – Fed: Endangered; VA: Endangered

Based on desktop review the green floater is known to occur in the lower Banister River, downstream of Lake Banister, approximately 50 stream miles from the Project and is the only record of this species in the Banister River. The green floater and Roanoke logperch are known to occur in the Dan River and Cascade Creek. The Project crosses these streams in NC.



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Summary of Consultation with the USFWS VA Field Office and VA DWR regarding aquatic surveys

- March 20, 2024 – Transco provided a letter to the USFWS VA Field Office initiating consultation on threatened and endangered species, the Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act.
- April 5, 2024 – Transco provided a letter to the VA Department of Wildlife Resources (DWR) requesting a threatened and endangered species Project review.
- May 7, 2024 – The VA DWR responded to Transco’s letter providing recommendations and information regarding threatened and endangered species.
- July and August 2024 – Transco submitted the results of a mussel habitat assessment and a freshwater mussel survey study plan to the USFWS VA Field Office and the VA DWR. The USFWS VA Field Office and the VA DWR approved the freshwater mussel survey study plan.
- August and September 2024 – Transco submitted a preliminary Roanoke logperch habitat assessment in support of a survey plan to USFWS VA Field Office and VA DWR. VA DWR concurred with the methodology and findings related to the Roanoke logperch plans. USFWS VA Field Office recommended Transco not conduct surveys for Roanoke logperch and requested additional information be provided to evaluate potential impacts to the Roanoke logperch.

Summary of Results of the VA Freshwater Mussel Survey and Habitat Assessments for Roanoke Logperch

Freshwater Mussel Survey

In VA, Transco conducted in field mussel habitat assessments at 17 stream crossings and completed subsequent mussel occupancy surveys at 15 Project stream crossings during the 2024 VA mussel survey season during normal to low flow (i.e., suitable for mussel surveys) stream conditions. None of the surveyed reaches supported green floater populations or habitat to suggest rare, threatened, or endangered mussel species were present within the vicinity of the Project. No incidental observations of Roanoke logperch occurred while conducting the mussel habitat or occupancy surveys. The freshwater mussel survey report is included herein as Attachment A.

Roanoke Logperch Habitat Assessments

Transco identified six streams traversed by or near the Project as having potential to support Roanoke logperch in VA. Four of the streams are crossed by the Project while two streams are adjacent to Project workspace. These streams were assessed to determine if they could support Roanoke logperch in the vicinity of proposed Project crossings. Within the study areas, none of the streams provide habitat of the quality and quantity that would readily indicate the likely permanent presence of Roanoke logperch. No Roanoke logperch were observed during any of the field habitat assessments. The Roanoke logperch habitat assessment report is included herein as Attachment B.

Avoidance and Minimization Measures

Transco proposes to cross the Banister River, UNT1 Banister River, and Sandy River (and the Dan River and Cascade Creek in NC) via horizontal directional drill (HDD). If an HDD is unsuccessful, Transco will implement its contingency plan included within the HDD Monitoring, Inadvertent Return Response, and Contingency Plan. Transco is proposing to cross Sandy Creek using dry open-cut installation methods. There are no known occurrences of Roanoke logperch in Sandy Creek, and the Project crosses the stream approximately 13.1 miles upstream of its confluence with the Dan River. The remaining two streams assessed for Roanoke logperch habitat are adjacent to Project workspace and will not be crossed.

Transco will implement erosion and sediment control measures and best management practices as described in the Transco Plan and Procedures as well as in accordance with state and federal requirements.



Transcontinental Gas Pipe Line Company, LLC
2800 Post Oak Boulevard (77056)
P.O. Box 1396
Houston, Texas 77251-1396
713-215-2000

Transco is seeking review and concurrence on the mussel survey results and the findings within Roanoke logperch habitat assessments and the proposed avoidance and minimization measures to be employed for the Project.

Transco is committed to continue to coordinate with USFWS VA Field Office and VA DWR on the avoidance and minimization of effects to listed aquatic species. Should Project alignments change warranting additional survey or habitat assessments, Transco would complete that work, as applicable, and would provide an addendum to the agencies.

If you have questions regarding this correspondence and information request, or if you require additional information, please contact me at 412-713-0485 or email Josh.Henry@williams.com. Alternatively, you may contact Jennifer Broush of GAI Consultants, Inc., at 724-516-1155 or via e-mail at j.broush@gaiconsultants.com. We appreciate your assistance and thank you for your attention to this request.

Respectfully submitted,

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC

A handwritten signature in blue ink, appearing to read "Joshua J. Henry". The signature is fluid and cursive, written on a light blue background.

Josh Henry
Environmental Specialist

Attachments:

Attachment A (Virginia Freshwater Mussel Survey Report)
Attachment B (Habitat Assessments for Roanoke Logperch)

cc: Jennifer Broush, GAI Consultants, Inc.

From: [Jennifer Broush](#)
To: [Luu, Jackie A](#); [Watson, Brian \(DWR\)](#); [Jennifer Stanhope](#); [Emily E](#)
Cc: [Henry, Joshua](#); [Jeremy Alberts](#); [Casey Swecker](#); [shauna.akers@williams.com](#); [Jason Duffey](#)
Subject: Transco SSE - VA Freshwater Mussel Survey and RLP Habitat Assessments - 2 of 2
Date: Wednesday, December 18, 2024 2:47:00 PM
Attachments: [AttB Transco SSE Virginia Roanoke Logperch Habitat Assessment.pdf](#)

Ms. Luu and Mr. Watson (**Email 2 of 2**),

Transcontinental Gas Pipe Line Company, LLC (Transco) is pleased to submit the Virginia (VA) Freshwater Mussel Survey Report and Roanoke Logperch Habitat Assessments which were conducted in support of the proposed Southeast Supply Enhancement (Project) in Pittsylvania County, VA. We look forward to your review and comment regarding these reports and are available to discuss at your convenience. We are submitting via **two emails** due to the size of the files.

We appreciate the continued coordination between Transco, U.S. Fish and Wildlife Service VA Field office, and VA Department of Wildlife Resources regarding sensitive species in VA. Should you have any questions while reviewing, please do not hesitate to contact Josh Henry (Transco) or me. If the size of the documents are too large to be accepted, we will provide a link to download.

Regards,
Jennifer

Jennifer Broush, MBA

Senior Associate / Environmental Director

GAI Consultants, 385 E. Waterfront Drive, Homestead, PA 15120-5005

D 412.399.5317 **M** 724.516.1155 **E** j.broush@gaiconsultants.com

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From: [Stanhope, Jennifer W](#)
To: [Shaun Kline](#); [Maison, Kimberly A](#)
Cc: [Luu, Jackie A](#); [Andersen, Troy M](#); [Jeremy Alberts](#); [Jennifer Broush](#); [Josh Henry](#); [Jason Duffey](#)
Subject: RE: [EXTERNAL] Re: Southeast Supply Enhancement Project Bald Eagle Survey Study Plan (Virginia)
Date: Wednesday, December 11, 2024 9:59:04 AM
Attachments: [image002.png](#)

You don't often get email from jennifer_stanhope@fws.gov. [Learn why this is important](#)

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Hi Shaun,

Our apologies for the delayed response. I've shared the revised document with Shaughn Galloway to review and ensure his comments are addressed. He is out of the office now and will let you know when we hear back.

Thanks,
Jen

Jennifer Stanhope (she/her)
Acting Assistant Field Office Supervisor - Endangered Species
U.S. Fish and Wildlife Service - Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
Office: 804-905-9781 (*note: new number*)
Jennifer_stanhope@fws.gov
<https://www.fws.gov/office/virginia-ecological-services>

From: Shaun Kline <skline@envsi.com>
Sent: Wednesday, December 11, 2024 9:49 AM
To: Maison, Kimberly A <kimberly_maison@fws.gov>
Cc: Luu, Jackie A <jackie_luu@fws.gov>; Andersen, Troy M <troy_andersen@fws.gov>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Jeremy Alberts <JAlberts@envsi.com>; Jennifer Broush <j.broush@gaiconsultants.com>; Josh Henry <josh.henry@williams.com>; Jason Duffey <j.duffey@gaiconsultants.com>
Subject: Re: [EXTERNAL] Re: Southeast Supply Enhancement Project Bald Eagle Survey Study Plan (Virginia)

Kim:

We are checking in regarding any feedback on whether the revised draft sent on 4 Nov 2024 satisfied Shaughn's comments and if there are any additional suggestions regarding the study plan.



Shaun Kline, Ph.D., P.E.

Vice President

Environmental Solutions & Innovations, Inc.

1158 Dutilh Road

Mars, Pennsylvania 16046-9448

office: 513.451.1777 | fax: 513.451.3321

cell: 352.514.3340

skline@envsi.com | www.envsi.com



From: Shaun Kline <skline@envsi.com>

Sent: Monday, November 4, 2024 5:12 PM

To: Maison, Kimberly A <kimberly_maison@fws.gov>

Cc: Luu, Jackie A <jackie_luu@fws.gov>; Andersen, Troy M <troy_andersen@fws.gov>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Jeremy Alberts <JAlberts@envsi.com>; Jennifer Broush <j.broush@gaiconsultants.com>; Josh Henry <josh.henry@williams.com>; Jason Duffey <j.duffey@gaiconsultants.com>

Subject: Re: [EXTERNAL] Re: Southeast Supply Enhancement Project Bald Eagle Survey Study Plan (Virginia)

Kim:

Please find the revised study plan attached. Please confirm that the revised plan addresses Shaughn's comments and that there are no additional suggestions.



Shaun Kline, Ph.D., P.E.

Vice President

Environmental Solutions & Innovations, Inc.

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Mars, Pennsylvania 16046-9448

office: 513.451.1777 | fax: 513.451.3321

cell: 352.514.3340

skline@envsi.com | www.envsi.com



From: Maison, Kimberly A <kimberly_maison@fws.gov>
Sent: Wednesday, October 23, 2024 3:30 PM
To: Shaun Kline <skline@envsi.com>
Cc: Luu, Jackie A <jackie_luu@fws.gov>; Andersen, Troy M <troy_andersen@fws.gov>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>
Subject: Fw: [EXTERNAL] Re: Southeast Supply Enhancement Project Bald Eagle Survey Study Plan (Virginia)

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Hi Shaun~ Our office typically does not handle bald eagle survey plans or other topics related to bald eagles since they are no longer a listed species. I was able, however, to reach out to our regional bald eagle coordinator to get his feedback on your survey. I have pasted his comments along with his contact information below. In the future, feel free to consult the [2024 Eagle Rule website](#) as it has a lot of the current information regarding bald eagles. Thanks!

Kim

The general plan sounds reasonable and like it would provide sufficient coverage around the project area. I just had a few suggestions that you might consider incorporating.

- Timing - I think it is important that flights occur later in the courtship period of the breeding season to make sure that individuals that may start nesting later in time are not missed. I noticed the survey plan indicated they are surveying during the start of the breeding season and that there would be multiple visits, but I did not see a schedule or indication that the flights would cover the entire project area each time. There is also additional breeding information in the [National Bald Eagle Mgmt Guidelines](#) to help with survey timing.

- It would be nice if they could include something in the survey plan for if a nest is discovered that limits the potential disturbance to that nest. Individuals may flush depending on the proximity of the aircraft. So if a nest is discovered I would recommend flight heights to be >1000ft away from the nest, or better conducting follow-up surveys from the ground greater than 660ft from the nest. The other thing I would recommend, if the applicant has not already done so, is to consider coordinating with the state natural heritage program to see if they have any known nesting locations around their project area to reduce the aerial survey footprint.
- Number of observers - In my experience there are typically two observers on aerial surveys for eagles where one acts as a primary observer and second observer provide supplemental observation and data recording. There is no formal requirement around this, but I do believe this is more common.

Best,

Shaughn Galloway
Northeast Regional Eagle Coordinator
Region 5 - Migratory Birds Program
U.S. Fish and Wildlife Service
300 Westgate Center Drive
Hadley, MA 01035
Email: shaughn_galloway@fws.gov
Phone: (413) 253-8577
Web: <https://fws.gov/ePermits>

Kim Maison
U.S. Fish and Wildlife Service
North Atlantic-Appalachian Region
Southwest Virginia Field Office
Abingdon, VA
276-266-1349

From: Luu, Jackie A <jackie_luu@fws.gov>
Sent: Wednesday, October 23, 2024 3:09 PM

To: Maison, Kimberly A <kimberly_maison@fws.gov>

Subject: Fw: [EXTERNAL] Re: Southeast Supply Enhancement Project Bald Eagle Survey Study Plan (Virginia)

Just forwarding as a FYI, since I think you had some correspondence with Shaughn Galloway about this study plan.

From: Shaun Kline <skline@envsi.com>

Sent: Wednesday, October 23, 2024 3:02 PM

To: Luu, Jackie A <jackie_luu@fws.gov>; Andersen, Troy M <troy_andersen@fws.gov>;

Rick.Reynolds@DWR.virginia.gov <Rick.Reynolds@DWR.virginia.gov>;

Tamara.Doucette@DWR.virginia.gov <Tamara.Doucette@DWR.virginia.gov>;

Sergio.Harding@DWR.virginia.gov <Sergio.Harding@DWR.virginia.gov>

Cc: Jeremy Alberts <JAlberts@envsi.com>; Jennifer Broush <j.broush@gaiconsultants.com>; Josh Henry <josh.henry@williams.com>; j.duffey@gaiconsultants.com <J.Duffey@gaiconsultants.com>

Subject: [EXTERNAL] Re: Southeast Supply Enhancement Project Bald Eagle Survey Study Plan (Virginia)

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

All:

I am following up on the attached study plan for bald eagle surveys originally submitted on 6 September 2024 (see below). Please provide your comments or concurrence at your earliest convenience.



Shaun Kline, Ph.D., P.E.

Vice President

Environmental Solutions & Innovations, Inc.

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Mars, Pennsylvania 16046-9448

office: 513.451.1777 | fax: 513.451.3321

cell: 352.514.3340

skline@envsi.com | www.envsi.com



From: Shaun Kline

Sent: Friday, September 6, 2024 11:27 AM

To: jackie_luu@fws.gov <jackie_luu@fws.gov>; troy_andersen@fws.gov <troy_andersen@fws.gov>;
Rick.Reynolds@DWR.virginia.gov <Rick.Reynolds@DWR.virginia.gov>;
Tamara.Doucette@DWR.virginia.gov <Tamara.Doucette@DWR.virginia.gov>;
Sergio.Harding@DWR.virginia.gov <Sergio.Harding@DWR.virginia.gov>

Cc: Jeremy Alberts <JAlberts@envsi.com>; Jennifer Broush <j.broush@gaiconsultants.com>; Josh Henry <josh.henry@williams.com>; j.duffey@gaiconsultants.com <j.duffey@gaiconsultants.com>

Subject: Southeast Supply Enhancement Project Bald Eagle Survey Study Plan (Virginia)

All:

On behalf of Transco, please find the proposed study plan for bald eagle surveys for the Southeast Supply Enhancement Project (Project) attached. We are looking for concurrence and authorization to proceed with the proposed methods and surveys in the Project area.



Shaun Kline, Ph.D., P.E.

Vice President

Environmental Solutions & Innovations, Inc.

1158 Dutilh Road

Mars, Pennsylvania 16046-9448

office: 513.451.1777 | fax: 513.451.3321

cell: 352.514.3340

skline@envsi.com | www.envsi.com



From: [Jason Duffey](#)
To: [Irizarry, Amariyls \(Ami\)](#); [Virginia Field Office, FW5](#); rick.reynolds@dwr.virginia.gov
Cc: ["Josh Henry"](#); kevinc@whmggroup.com; chris@batgate.com; [Jennifer Broush](#)
Subject: Transco SSE - VA Bat Survey Reports USFWS Project Codes: 2024-0047474 and 2024-0137992
Date: Tuesday, October 29, 2024 2:51:00 PM
Attachments: [image001.png](#)
[image002.png](#)

Ms. Irizarry and Mr. Reynolds,

Transcontinental Gas Pipe Line Company, LLC. (Transco), an indirect, wholly owned subsidiary of The Williams Companies, Inc. (Williams), is seeking authorization from the Federal Energy Regulatory Commission under Sections 7(b) and 7(c) of the Natural Gas Act for appropriate abandonment authority and a certificate of public convenience and necessity (Certificate) to construct, own, operate, and maintain the proposed Southeast Supply Enhancement Project (Project) facilities.

Transco is pleased to provide the linked Bat Survey Reports for your review and comment. Transco conducted various bat surveys along the portions of the Project in VA in 2024, based on the most recent USFWS guidelines. The following secure link allows those copied on this email to download the cover letter and reports:

 [VA Bat Reports](#)

If someone else in your organization requires access to download the reports, please notify me and I can grant access.

Transco appreciates your attention to the Project and looks forward to your guidance and concurrence on the attached reports. Should you have questions related to this report, please let us know.

Thank you,

Jason Duffey
Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042
M 937.554.8488



GAI CONSULTANTS CONFIDENTIALITY NOTICE: This communication contains confidential information belonging to the sender and may be legally privileged. This communication is solely for the use of its intended recipient. If you are not the intended recipient, inform the sender of the error and remove this email from your system. If this transmission includes any technical information, design data, and/or recommendations, they are provided only as a matter of convenience and may not be used for final design and/or construction.

From: [Henry, Joshua](#)
To: [Jennifer Broush](#)
Subject: Fwd: Transco call - RLP survey and study plan
Date: Tuesday, September 17, 2024 1:54:02 PM

EXERCISE CAUTION: This is an External Email Message!

Think before clicking on links, opening attachments, or responding

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From: Argo, Emily E <emily_argo@fws.gov>
Sent: Tuesday, September 17, 2024 1:29:38 PM
To: Maison, Kimberly A <kimberly_maison@fws.gov>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Luu, Jackie A <jackie_luu@fws.gov>; Irizarry, Amariyls (Ami) <amarilys_irizarry@fws.gov>; Case, Rachel L <rachel_case@fws.gov>; Andersen, Troy M <troy_andersen@fws.gov>; Henry, Joshua <Josh.Henry@williams.com>; Jeremy Alberts <JAlberts@envsi.com>; Tompkins, Bryan <bryan_tompkins@fws.gov>
Cc: Krenz, Rob <Rob.Krenz@Williams.com>
Subject: [EXTERNAL] Re: Transco call - RLP survey and study plan

*****CAUTION! EXTERNAL SENDER*** STOP. ASSESS. VERIFY!! If suspicious, STOP and click the Phish Alert Button**

Jeremy, Rob, and Jennifer,

Thank you very much for joining the call this morning. I've summarized the call and needed revisions to the habitat assessment below.

The Virginia Field Office does not recommend surveys for Roanoke logperch. Information on stream crossing construction approaches, sedimentation analysis, and inadvertent return/geotechnical assessment is needed for the Service to evaluate the project scope, action area, and provided habitat assessment recommendations. This information is also necessary for evaluating impacts to mussels.

Include in the Habitat Assessment:

- The names of who completed the assessment,
- The date(s) each crossing was assessed
- Distances up and downstream of the crossing surveyed - once the Service has information on the crossing type and riparian work planned, the Service will provide assessment distance recommendations.
- Information on how the assessment was conducted and how the different metrics were evaluated.

There will be structures removed in VA . Other bat surveys are report development is ongoing

Please let me know if there are any questions.

Emily

Emily E. Argo (she/her)
Fish and Wildlife Biologist
Virginia Field Office
U.S. Fish and Wildlife Service
6669 Short Lane
Gloucester, VA 23061
(804) 404-8184 **NEW NUMBER**

From: Argo, Emily E

Sent: Tuesday, September 10, 2024 8:30 AM

To: Maison, Kimberly A <kimberly_maison@fws.gov>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Luu, Jackie A <jackie_luu@fws.gov>; Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>; Case, Rachel L <rachel_case@fws.gov>; Andersen, Troy M <troy_andersen@fws.gov>; Henry, Joshua <Josh.Henry@williams.com>; Jeremy Alberts <JAlberts@envsi.com>; Tompkins, Bryan <bryan_tompkins@fws.gov>

Cc: Krenz, Rob <Rob.Krenz@Williams.com>

Subject: Transco call - RLP survey and study plan

When: Tuesday, September 17, 2024 11:00 AM-12:00 PM.

Where: Microsoft Teams Meeting

Call with ESI and Williams to discuss the RLP survey/study plan.

Microsoft Teams [Need help?](#)

[Join the meeting now](#)

Meeting ID: 239 081 530 229

Passcode: i3U6qd

For organizers: [Meeting options](#)

Sarah L. Turton

From: Shaun Kline <skline@envsi.com>
Sent: Friday, September 6, 2024 11:28 AM
To: jackie_luu@fws.gov; troy_andersen@fws.gov; Rick.Reynolds@DWR.virginia.gov; Tamara.Doucette@DWR.virginia.gov; Sergio.Harding@DWR.virginia.gov
Cc: Jeremy Alberts; Jennifer Broush; Josh Henry; Jason Duffey
Subject: Southeast Supply Enhancement Project Bald Eagle Survey Study Plan (Virginia)
Attachments: Pesi 2302_Transco SESE_Bald Eagle Study Plan_Eden Loop Virginia_6 September 2024.pdf

EXERCISE CAUTION: This is an External Email Message!

Think before clicking on links, opening attachments, or responding

All:

On behalf of Transco, please find the proposed study plan for bald eagle surveys for the Southeast Supply Enhancement Project (Project) attached. We are looking for concurrence and authorization to proceed with the proposed methods and surveys in the Project area.



Shaun Kline, Ph.D., P.E.

Vice President

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Mars, Pennsylvania 16046-9448
office: 513.451.1777 | fax: 513.451.3321
cell: 352.514.3340

skline@envsi.com | www.envsi.com





United States Department of the Interior

FISH AND WILDLIFE SERVICE

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

Phone: (804) 693-6694



In Reply Refer To:

08/30/2024 17:18:35 UTC

Project Code: 2024-0137992

Project Name: Southeast Supply Enhancement Project - Compressor Station 165

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: <https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see [Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service \(fws.gov\)](#).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

PROJECT SUMMARY

Project Code: 2024-0137992
Project Name: Southeast Supply Enhancement Project - Compressor Station 165
Project Type: Pipeline - Onshore - Maintenance / Modification - Above Ground
Project Description: Transcontinental Gas Pipe Line Company, LLC (Transco), indirectly owned by The Williams Companies, Inc. (Williams), is seeking authorization from the Federal Energy Regulatory Commission (FERC or Commission) under Sections 7(b) and 7(c) of the Natural Gas Act for a certificate of public convenience and necessity (Certificate) to construct, own, operate, and maintain the proposed Project facilities.

The Project is an expansion of Transco's existing natural gas transmission system that will enable Transco to provide 1,596,900 dekatherms per day (Dth/d) of incremental firm transportation capacity to remove pipeline capacity constraints in Zone 5 and meet growing natural gas-fired power generation, commercial, residential, and industrial demand in the mid-Atlantic and southeast United States. The Project will consist of the following components:

Pipeline Facilities

Approximately 30.8 miles of 42-inch-diameter pipeline in Pittsylvania County, Virginia (VA) and Rockingham County, North Carolina (NC), designated as the Eden Loop;

Regulator installation in Rockingham County, NC near milepost (MP) 1382.53, designated as the Eden Regulator Station;

Approximately 260 feet of 30-inch-diameter pipeline and ancillary valves in Rockingham County, NC, designated as the Dan River Inlet Piping; and,

Approximately 24.1 miles of 42-inch-diameter pipeline in Guilford, Forsyth, and Davidson Counties, NC, designated as the Salem Loop.

Compression Facilities

The addition of two [33,000 horsepower (HP) each] electric motor-driven (EMD) compressor units at Transco's existing Compressor Station 165 located in Pittsylvania County, VA. Compressor Station 165 will be limited to a total incremental output of 45,000 HP;

The addition of one [23,465 International Standardization Organization (ISO) HP] Solar Titan 130 Turbine and two (31,871 ISO HP each) Solar

Titan 250 Turbine compressor units at Transco's existing Compressor Station 155 located in Davidson County, NC;

The addition of one (15,900 ISO HP) Solar Mars 100 Turbine compressor unit at Transco's existing Compressor Station 150 in Iredell County, NC; and

The addition of three (33,000 HP each) EMD compressor units at Transco's existing Compressor Station 145 in Cleveland County, NC, to accommodate the abandonment (in-place) and replacement of three (12,500 HP each) existing EMD Compressor Units; therefore increasing the certificated station compression by 61,500 incremental HP.

Facility Modifications

Modifications to valve controls at existing mainline valve setting MLV-145B21 in Lincoln County, NC;

Modifications to valve controls at existing mainline valve setting MLV-145B20 in Gaston County, NC;

Piping modifications at Transco's existing Compressor Station 135 in Anderson County, South Carolina (SC);

Piping modifications at Transco's existing Compressor Station 125 in Walton County, Georgia (GA);

Regulator installation and piping modifications at Transco's existing Compressor Station 120 in Henry County, GA; and

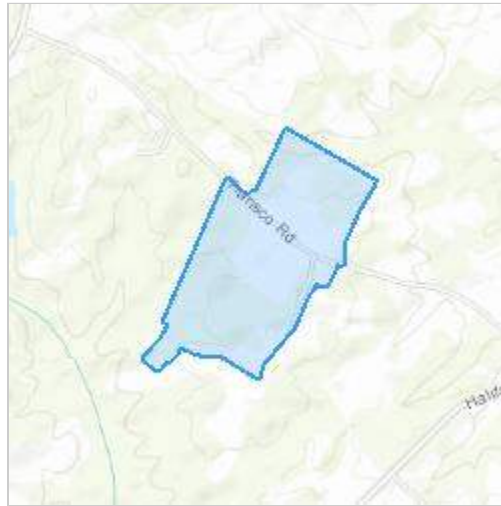
Piping modifications at Transco's existing Compressor Station 105 in Coosa County, Alabama (AL).

The use of existing, improved, and new access roads and contractor yards would also be required for the Project. Additional ancillary facilities and piping, such as mainline valves (MLVs), cathodic protection, communication facilities, and internal inspection devices (e.g., pig) launchers and receivers would be necessary to support the Project.

Subject to FERC's certification of the Project and receipt of other necessary permits and authorizations, Transco anticipates that construction of the Project would commence in the third quarter of 2026 to meet a proposed in-service date of November 1, 2027.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@36.83194615,-79.33735728663092,14z>



Counties: Pittsylvania County, Virginia

ENDANGERED SPECIES ACT SPECIES

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: GAI Consultants, Inc.
Name: Jason Duffey
Address: 11 Spiral Drive
Address Line 2: Suite 8
City: Florence
State: KY
Zip: 41042
Email: j.duffey@gaiconsultants.com
Phone: 8596924152



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

Phone: (804) 693-6694



In Reply Refer To:

08/30/2024 17:29:24 UTC

Project Code: 2024-0047474

Project Name: Southeast Supply Enhancement Project - Eden Loop Pipeline (Virginia)

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

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A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

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This species list is provided by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

PROJECT SUMMARY

Project Code: 2024-0047474
Project Name: Southeast Supply Enhancement Project - Eden Loop Pipeline (Virginia)
Project Type: Pipeline - Onshore - New Constr - Below Ground
Project Description: Transcontinental Gas Pipe Line Company, LLC (Transco), indirectly owned by The Williams Companies, Inc. (Williams), is seeking authorization from the Federal Energy Regulatory Commission (FERC or Commission) under Sections 7(b) and 7(c) of the Natural Gas Act for a certificate of public convenience and necessity (Certificate) to construct, own, operate, and maintain the proposed Project facilities.

The Project is an expansion of Transco's existing natural gas transmission system that will enable Transco to provide 1,596,900 dekatherms per day (Dth/d) of incremental firm transportation capacity to remove pipeline capacity constraints in Zone 5 and meet growing natural gas-fired power generation, commercial, residential, and industrial demand in the mid-Atlantic and southeast United States. The Project will consist of the following components:

Pipeline Facilities

Approximately 30.8 miles of 42-inch-diameter pipeline in Pittsylvania County, Virginia (VA) and Rockingham County, North Carolina (NC), designated as the Eden Loop;

Regulator installation in Rockingham County, NC near milepost (MP) 1382.53, designated as the Eden Regulator Station;

Approximately 260 feet of 30-inch-diameter pipeline and ancillary valves in Rockingham County, NC, designated as the Dan River Inlet Piping; and,

Approximately 24.1 miles of 42-inch-diameter pipeline in Guilford, Forsyth, and Davidson Counties, NC, designated as the Salem Loop.

Compression Facilities

The addition of two [33,000 horsepower (HP) each] electric motor-driven (EMD) compressor units at Transco's existing Compressor Station 165 located in Pittsylvania County, VA. Compressor Station 165 will be limited to a total incremental output of 45,000 HP;

The addition of one [23,465 International Standardization Organization (ISO) HP] Solar Titan 130 Turbine and two (31,871 ISO HP each) Solar

Titan 250 Turbine compressor units at Transco's existing Compressor Station 155 located in Davidson County, NC;

The addition of one (15,900 ISO HP) Solar Mars 100 Turbine compressor unit at Transco's existing Compressor Station 150 in Iredell County, NC; and

The addition of three (33,000 HP each) EMD compressor units at Transco's existing Compressor Station 145 in Cleveland County, NC, to accommodate the abandonment (in-place) and replacement of three (12,500 HP each) existing EMD Compressor Units; therefore increasing the certificated station compression by 61,500 incremental HP.

Facility Modifications

Modifications to valve controls at existing mainline valve setting MLV-145B21 in Lincoln County, NC;

Modifications to valve controls at existing mainline valve setting MLV-145B20 in Gaston County, NC;

Piping modifications at Transco's existing Compressor Station 135 in Anderson County, South Carolina (SC);

Piping modifications at Transco's existing Compressor Station 125 in Walton County, Georgia (GA);

Regulator installation and piping modifications at Transco's existing Compressor Station 120 in Henry County, GA; and

Piping modifications at Transco's existing Compressor Station 105 in Coosa County, Alabama (AL).

The use of existing, improved, and new access roads and contractor yards would also be required for the Project. Additional ancillary facilities and piping, such as mainline valves (MLVs), cathodic protection, communication facilities, and internal inspection devices (e.g., pig) launchers and receivers would be necessary to support the Project.

Subject to FERC's certification of the Project and receipt of other necessary permits and authorizations, Transco anticipates that construction of the Project would commence in the third quarter of 2026 to meet a proposed in-service date of November 1, 2027.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@36.689628850000005,-79.48605546531263,14z>



Counties: Pittsylvania County, Virginia

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

FISHES

NAME	STATUS
Roanoke Logperch <i>Percina rex</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1134	Endangered

CLAMS

NAME	STATUS
Green Floater <i>Lasmigona subviridis</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7541	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: GAI Consultants, Inc.
Name: Jason Duffey
Address: 11 Spiral Drive
Address Line 2: Suite 8
City: Florence
State: KY
Zip: 41042
Email: j.duffey@gaiconsultants.com
Phone: 8596924152

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Energy Regulatory Commission

Sarah L. Turton

To: Jennifer Broush
Subject: RE: [EXTERNAL] Re: Updated(2) Transco SSE - Mussel Survey Plan (VA)

From: Stanhope, Jennifer W <jennifer_stanhope@fws.gov>
Sent: Wednesday, August 28, 2024 7:58 AM
To: Schul, Hannah (DWR) <Hannah.Schul@dwr.virginia.gov>; Jennifer Broush <j.broush@gaiconsultants.com>; Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Luu, Jackie A <jackie_luu@fws.gov>; Andersen, Troy M <troy_andersen@fws.gov>; Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>
Cc: Josh Henry <Josh.Henry@williams.com>; Akers, Shauna <shauna.akers@williams.com>; Casey Swecker <[cgswecker@edge-es.com](mailto:cdswecker@edge-es.com)>; Brann, Lee (DWR) <Lee.Brann@dwr.virginia.gov>; Strawderman, Nicole (DWR) <Nicole.Strawderman@dwr.virginia.gov>; Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>
Subject: RE: [EXTERNAL] Re: Updated(2) Transco SSE - Mussel Survey Plan (VA)

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Think before clicking on links, opening attachments, or responding

Jennifer,

Thank you for the revised mussel survey plan, dated August 13, 2024. We are fine with plan as proposed and have no additional comments or questions.

Thanks,
Jen

Jennifer Stanhope (she/her)
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service - Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
Office: 804-905-9781 (note: new number)
jennifer_stanhope@fws.gov
<https://www.fws.gov/office/virginia-ecological-services>

From: Schul, Hannah (DWR) <Hannah.Schul@dwr.virginia.gov>
Sent: Wednesday, August 14, 2024 11:53 AM
To: Jennifer Broush <j.broush@gaiconsultants.com>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Luu, Jackie A <jackie_luu@fws.gov>; Andersen, Troy M <troy_andersen@fws.gov>; Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>; Irizarry, Amariyls (Ami) <amarilys_irizarry@fws.gov>
Cc: Josh Henry <Josh.Henry@williams.com>; Akers, Shauna <shauna.akers@williams.com>; Casey Swecker <cgswecker@edge-es.com>; Brann, Lee (DWR) <Lee.Brann@dwr.virginia.gov>; Strawderman, Nicole (DWR) <Nicole.Strawderman@dwr.virginia.gov>; Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>
Subject: [EXTERNAL] Re: Updated(2) Transco SSE - Mussel Survey Plan (VA)

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Hi Jennifer,

DWR is supportive of the updated mussel survey plan as proposed. Please let me know if you have any further questions.

Thank you,



CONSERVE. CONNECT. PROTECT.

Hannah Schul

Environmental Services Program Manager
(804) 968-8546

[Virginia Department of Wildlife Resources](#)

7870 Villa Park Drive
P.O. Box 90778
Henrico, VA 23228

<https://dwr.virginia.gov/wies/environmental-services/>

From: Jennifer Broush <j.broush@gaiconsultants.com>

Sent: Tuesday, August 13, 2024 5:45 PM

To: Jennifer Stanhope <jennifer_stanhope@fws.gov>; Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Luu, Jackie A <jackie_luu@fws.gov>; Troy Andersen <troy_andersen@fws.gov>; Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>; Schul, Hannah (DWR) <Hannah.Schul@dwr.virginia.gov>; Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>

Cc: Josh Henry <Josh.Henry@williams.com>; Akers, Shauna <shauna.akers@williams.com>; Casey Swecker <[cgswecker@edge-es.com](mailto:cdswecker@edge-es.com)>

Subject: Updated(2) Transco SSE - Mussel Survey Plan (VA)

Transco is pleased to submit the attached **updated** mussel survey plan for the Southeast Supply Enhancement to USFWS and Virginia DWR for review. The updated plan incorporates all currently identified Project alternatives and comments received to date.

We ask for your review of this information and guidance on the anticipated planned surveys. We are available to answer questions or discuss further as needed.

Thank you,
Jennifer

Jennifer Broush, MBA

Associate / Director, Environmental and Energy Services

GAI Consultants, 385 E. Waterfront Drive, Homestead, PA 15120-5005

From: Stanhope, Jennifer W <jennifer_stanhope@fws.gov>

Sent: Wednesday, August 7, 2024 12:38 PM

To: Jennifer Broush <j.broush@gaiconsultants.com>; Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Luu, Jackie A <jackie_luu@fws.gov>; Andersen, Troy M <troy_andersen@fws.gov>; Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>; Schul, Hannah (DWR) <Hannah.Schul@dwr.virginia.gov>; Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>

Cc: Josh Henry <Josh.Henry@williams.com>; Akers, Shauna <shauna.akers@williams.com>; Casey Swecker <[cgswecker@edge-es.com](mailto:cdswecker@edge-es.com)>

Subject: RE: [EXTERNAL] RE: Transco SSE - Mussel Survey Plan (VA)

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Jennifer,

Thank you for the revised mussel survey plan.

Please confirm that there are no additional alternative alignments for the Project that will cross a perennial stream with suitable mussel habitat in Virginia.

Thank you,
Jen

Jennifer Stanhope (she/her)
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service - Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
Office: 804-905-9781 (note: new number)
jennifer_stanhope@fws.gov
<https://www.fws.gov/office/virginia-ecological-services>

From: Jennifer Broush <j.broush@gaiconsultants.com>

Sent: Friday, August 2, 2024 11:55 AM

To: Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Luu, Jackie A <jackie_luu@fws.gov>; Andersen, Troy M <troy_andersen@fws.gov>; Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>; Schul, Hannah (DWR) <Hannah.Schul@dwr.virginia.gov>; Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>

Cc: Josh Henry <Josh.Henry@williams.com>; Akers, Shauna <shauna.akers@williams.com>; Casey Swecker <cgswecker@edge-es.com>

Subject: RE: [EXTERNAL] RE: Transco SSE - Mussel Survey Plan (VA)

Jennifer,

Thank you for the comments below. We've updated the SSE Project's VA Mussel Survey Plan to include this alternative alignment for the Project which would cross the Banister River in a different location. Please let us know if there are additional questions or comments.

We appreciate the agencies continued review and coordination on the Project.

Thank you,

Jennifer

From: Stanhope, Jennifer W <jennifer_stanhope@fws.gov>

Sent: Friday, July 26, 2024 8:02 PM

To: Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Jennifer Broush <j.broush@gaiconsultants.com>; Luu, Jackie A <jackie_luu@fws.gov>; Andersen, Troy M <troy_andersen@fws.gov>; Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>; Schul, Hannah (DWR) <Hannah.Schul@dwr.virginia.gov>; Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>

Cc: Josh Henry <Josh.Henry@williams.com>; Akers, Shauna <shauna.akers@williams.com>; Casey Swecker <[cgswecker@edge-es.com](mailto:cdswecker@edge-es.com)>

Subject: RE: [EXTERNAL] RE: Transco SSE - Mussel Survey Plan (VA)

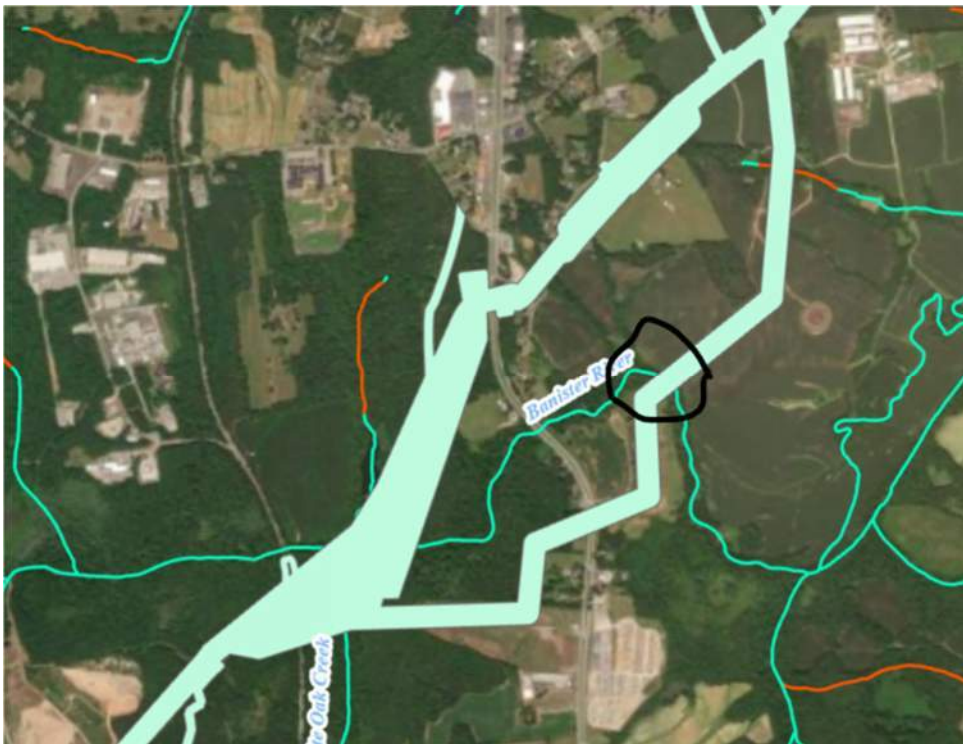
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Jennifer,

We are fine with the mussel survey plan too, except we have a question about one area on the Banister River. In the shapefile shared with us for the proposed project in VA, there is this additional area that overlaps with the Banister River downriver of the pipeline crossing (see screenshot below). It's not clear what activity is occurring there. If instream work is proposed in this area, then I would recommend a full survey there. If there are other streams that will have instream work, please include them in the mussel survey plan and resubmit.

Jen



Jennifer Stanhope (she/her)
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service - Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
Office: 804-905-9781 (note: new number)
Jennifer_stanhope@fws.gov
<https://www.fws.gov/office/virginia-ecological-services>

From: Watson, Brian (DWR) <Brian.Watson@dwr.virginia.gov>
Sent: Friday, July 26, 2024 6:27 PM
To: Jennifer Broush <j.broush@gaiconsultants.com>; Luu, Jackie A <jackie_luu@fws.gov>; Andersen, Troy M <troy_andersen@fws.gov>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>; Schul, Hannah (DWR) <Hannah.Schul@dwr.virginia.gov>; Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>
Cc: Josh Henry <Josh.Henry@williams.com>; Akers, Shauna <shauna.akers@williams.com>; Casey Swecker <cdswecker@edge-es.com>
Subject: [EXTERNAL] RE: Transco SSE - Mussel Survey Plan (VA)

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Jennifer:

DWR is fine with the mussel survey plan as submitted. I received the scientific collection permit amendment request earlier today from our HQ, and I approved the changes on Edge's permit to include this project.

Brian



Brian T. Watson

Aquatic Resources Biologist/State Malacologist

P 434.525.7522, x114 / M 434.941.5990 / F 434.525.7720

Virginia Department of Wildlife Resources

CONSERVE. CONNECT. PROTECT.

A 1132 Thomas Jefferson Road, Forest, VA 24551

www.dwr.virginia.gov

From: Jennifer Broush <j.broush@gaiconsultants.com>
Sent: Thursday, July 25, 2024 3:28 PM
To: Luu, Jackie A <jackie_luu@fws.gov>; Troy Andersen <troy_andersen@fws.gov>; Jennifer Stanhope <jennifer_stanhope@fws.gov>; Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>; Schul, Hannah (DWR) <Hannah.Schul@dwr.virginia.gov>; Watson, Brian (DWR) <Brian.Watson@dwr.virginia.gov>; Amarilys Irizarry <Amarilys_Irizarry@fws.gov>

Cc: Josh Henry <Josh.Henry@williams.com>; Akers, Shauna <shauna.akers@williams.com>; Casey Swecker <[cgswecker@edge-es.com](mailto:cdswecker@edge-es.com)>

Subject: Transco SSE - Mussel Survey Plan (VA)

Transco is pleased to submit the attached mussel survey plan for the Southeast Supply Enhancement for USFWS and Virginia DWR review. Earlier this year Transco completed desktop analysis followed by in-field habitat assessments to identify streams which could support rare, threatened, or endangered mussels. This survey plan represents the resources identified in Virginia during those assessments which warrant further investigation. We ask for your review of this information and guidance on the anticipated planned surveys.

We are available to answer questions or discuss further as needed.

Thank you,
Jennifer

Jennifer Broush, MBA

Associate / Director, Environmental and Energy Services

GAI Consultants, 385 E. Waterfront Drive, Homestead, PA 15120-5005

D 412.399.5317 **M** 724.516.1155 **E** j.broush@gaiconsultants.com

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From: [Henry, Joshua](#)
To: [Virginia Field Office, FW5](#); [Luu, Jackie A](#); [Jennifer Stanhope](#); [Schul, Hannah \(DWR\)](#); [Doucette, Tamara \(DWR\)](#); [Strawderman, Nicole \(DWR\)](#); [Brann, Lee \(DWR\)](#)
Cc: [Jennifer Broush](#); [Jeremy Alberts](#)
Subject: Southeast Supply Enhancement Project- RLP Consultation- IPAC Project Code:2024-0047474
Date: Tuesday, August 27, 2024 5:51:52 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)
[Pesi 2302 Transco SESE Eden Loop VA Roanoke Logperch Habitat Assessment_27 August 2024.pdf](#)
[Pesi 2302 Transco SESE Eden Loop Roanoke Logperch Study Plan_27 August 2024.pdf](#)

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All,

Transcontinental Gas Pipe Line Company, LLC (Transco) is pleased to submit the attached Roanoke Logperch Habitat Assessment and Roanoke Logperch Study Plan for the Southeast Supply Enhancement Project to UFSWS and Virginia DWR for review. We ask for your review of this information and concurrence on the proposed surveys. We are available to answer questions or discuss in more detail as needed.

Thank you,

Josh Henry | Williams | Environmental Specialist

Phone: 412-713-0485 | 2000 Commerce Drive, Park Place 2, Pittsburgh, PA, 15275



If you have received this message in error, please reply to advise the sender of the error and then immediately delete this message.

From: chris@batgate.com
To: ["Trizarry, Amariys \(Ami\)"](#); ["Cameron, Susan"](#); ["Reynolds, Richard \(DWR\)"](#); ["Munzer, Olivia"](#); ["Etchison, Katherine"](#); ["Tompkins, Bryan"](#)
Cc: [Josh Henry](#); [Jennifer Broush](#); [Jason Duffey](#); kevinc@whmggroup.com
Subject: RE: [EXTERNAL] Southeast Supply Enhancement - Southeast Supply Enhancement Structure Removal Plan Bats
Date: Thursday, August 8, 2024 2:02:13 PM
Attachments: [Southeast Supply Enhancement Structure Removal Plan Bats v1-2.pdf](#)

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Thanks for the review and comments, they are helpful, our responses are below.

- COMMENT: It's not clearly stated in the plan, but I assume the proposed structure surveys will be conducted following guidance on Appendix K of the [2024 Range-wide Indiana bat and northern long-eared bat survey guidelines](#) (guidelines)? If not, please describe your proposed structure survey methods.
- RESPONSE: The survey plan primarily follows the guidance in Appendix K; however, unlike bridges and culverts some structures have more inaccessible areas (E.X. under siding and roofing/roof sheathing), and there may be structures (for example, sheds) where we cannot perform interior inspection. In those cases we intend to do emergence counts, both human and night vision, which is not a favored method for bridges and culverts in Appendix K. On a bridge a crevice survey is more effective as bat roosting areas are more exposed, on a barn/shed emergence surveys as detailed in Appendix E Emergence Survey methodology for bat use detection are more effective at determining bat occupancy. In cases where the surveyor can't clear a structure based on the visual inspections called for in Appendix K, we plan to use the emergence survey methodology in Appendix E.
- COMMENT: We recommend using the sample data form at the end of Appendix K of the guidelines to submit with your survey report as it will ensure all the necessary information is provided to the USFWS Field Offices and expedite review of your survey report. If you choose to submit a different data form with your survey report, please ensure, at a minimum, it includes all information requested in the sample data form.
 - RESPONSE: Confirmed, we will do so.
- COMMENT: If bats are detected at a structure, please include high resolution photos for species ID (if/when feasible).

- RESPONSE: Confirmed, we will do so.
- COMMENT: If guano is present at a structure, we recommend collecting guano samples (if/when feasible) to identify bat species through DNA analysis. If you choose to collect guano samples for your survey, please refer to the guano sampling section of Appendix K in the guidelines.
- RESPONSE: Guano will be collected via the protocols outlined in Appendix K. The project is evaluating analysis, potential labs, and costs so we don't have a firm decision on analysis feasibility currently.

Thanks,
Chris

In review of this email chain, I noticed Bryan was not on it, so plan PDF is attached again on this email.

Chris Sanders



Sanders Environmental Inc.
322 Borealis Way
Bellefonte PA 16823
814-659-8257 (cell)

From: Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>

Sent: Wednesday, August 7, 2024 1:02 PM

To: chris@batgate.com; Cameron, Susan <susan_cameron@fws.gov>; 'Reynolds, Richard (DWR)' <Rick.reynolds@dwr.virginia.gov>; 'Munzer, Olivia' <olivia.munzer@ncwildlife.org>; 'Etchison, Katherine' <katherine.etchison@ncwildlife.org>

Cc: 'Josh Henry' <Josh.Henry@williams.com>; 'Jennifer Broush' <j.broush@gaiconsultants.com>; 'Jason Duffey' <J.Duffey@gaiconsultants.com>; kevinc@whmgroup.com

Subject: Re: [EXTERNAL] Southeast Supply Enhancement - Southeast Supply Enhancement Structure Removal Plan Bats

Hi Chris,

Thank you for the opportunity to review your proposed plan. Please see my comments/recommendations below:

- It's not clearly stated in the plan, but I assume the proposed structure surveys will be conducted following guidance on Appendix K of the [2024 Range-wide Indiana bat and northern long-eared bat survey guidelines](#) (guidelines)? If not, please describe your

- proposed structure survey methods.
- We recommend using the sample data form at the end of Appendix K of the guidelines to submit with your survey report as it will ensure all the necessary information is provided to the USFWS Field Offices and expedite review of your survey report. If you choose to submit a different data form with your survey report, please ensure, at a minimum, it includes all information requested in the sample data form.
 - If bats are detected at a structure, please include high resolution photos for species ID (if/when feasible).
 - If guano is present at a structure, we recommend collecting guano samples (if/when feasible) to identify bat species through DNA analysis. If you choose to collect guano samples for your survey, please refer to the guano sampling section of Appendix K in the guidelines.

Please reach out if you have any questions.
Good luck in the field,

Ami Irizarry

Pronouns: [she/her](#)

Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, VA 23061

Co-chair, [Regional JEDIA Team](#)
U.S. Fish and Wildlife Service
Northeast Region

(804) 767-7949
amarilys_irizarry@fws.gov

From: chris@batgate.com <chris@batgate.com>

Sent: Friday, August 2, 2024 2:38 PM

To: Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>; Cameron, Susan <susan_cameron@fws.gov>; 'Reynolds, Richard (DWR)' <Rick.reynolds@dwr.virginia.gov>; 'Munzer, Olivia' <olivia.munzer@ncwildlife.org>; 'Etchison, Katherine' <katherine.etchison@ncwildlife.org>

Cc: 'Josh Henry' <Josh.Henry@williams.com>; 'Jennifer Broush' <j.broush@gaiconsultants.com>; 'Jason Duffey' <J.Duffey@gaiconsultants.com>; kevinc@whmgroup.com <kevinc@whmgroup.com>

Subject: [EXTERNAL] Southeast Supply Enhancement - Southeast Supply Enhancement Structure Removal Plan Bats

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Hello All,

Attached is the proposed plan for bat impact minimization and avoidance for structures that may need to be removed or demolished as part of the SSE project.

This does involve a round of structure surveys this season, please review/comment/let us know your thoughts, as in VA structure surveys will be completed in the next two weeks.

Thanks,
Chris

Chris Sanders



Sanders Environmental Inc.
322 Borealis Way
Bellefonte PA 16823
814-659-8257 (cell)



SANDERS
ENVIRONMENTAL INC.

322 Borealis Way
Bellefonte, PA 16823
814-659-8257 (cell)
sanders@batgate.com

Amarilys Irizarry, Fish and Wildlife Biologist, US FWS VA Field Office
Susan Cameron, Fish and Wildlife Biologist, US FWS NC Asheville Field Office
Rick Reynolds, Lead Bat Biologist VA DWR
Olivia Munzer, Western Piedmont Habitat Conservation Coordinator NC WRC
Katherine Etchison, Wildlife Diversity Biologist NC WRC

Southeast Supply Enhancement – Structure Bat Plan

Transcontinental Gas Pipe Line Company, LLC previously submitted and received approval for their Southeast Supply Enhancement Bat Study Plan. This protocol covers handling of structures being removed or demolished by the Project as part of the proposed construction.

Bats may use structures for various parts of their life cycles, but are most sensitive to disturbance in either the summer occupancy season, when females are selecting roosts and raising young, or in torpor when they may not be able to become active and exit a structure.

Approximately 60 structures (14 in VA and 46 in NC), the vast majority being sheds, are located within the Project workspace and being evaluated to determine if they will need to be removed or demolished as part of proposed activities.

Transco is conducting mist net (VA) and acoustic (VA and NC) surveys across the Project areas to document bat species presence or probable absence.

Transco would complete structure surveys during the 2024 season in VA prior to the end of summer occupancy (August 15th), or in NC prior to the year-round active survey window (October 15th) if access to the structures is granted, to document bat presence or probable absence. Structure surveys would include emergence surveys and/or internal examinations for signs of bat occupancy, if practicable.

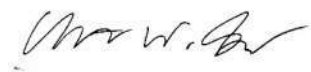


The Project proposes to avoid impacts to bats potentially occupying structures as follows:

- Perform structure surveys in 2024 to gather data on current use, to inform avoidance and minimization decision-making.
- Either remove structures outside of the summer occupancy (VA and NC) and torpor seasons (NC only). In Virginia, no removal during summer occupancy of Apr 1 – Sept 30. In North Carolina, no removal during the summer occupancy of Apr 1 – July 15 or winter torpor Dec 15 – Feb 15.
- Or, outside of the torpor season in North Carolina, perform an emergence count following the Appendix E of the March 2024 U.S. Fish and Wildlife Service Range-Wide Indiana Bat & Northern Long-eared Bat Survey Guidelines and, if survey results are negative, remove the structure the next day.

We request concurrence with this plan. Please feel free to contact Chris Sanders at (814) 659-8257 or chris@batgate.com, if you have any questions.

Sincerely,



Christopher Sanders
President, Sanders Environmental Inc.

Sarah L. Turton

From: chris@batgate.com
Sent: Tuesday, June 18, 2024 10:54 PM
To: 'Irizarry, Amariyls (Ami)'; 'Cameron, Susan'; 'Reynolds, Richard (DWR)'; 'Munzer, Olivia'; 'Etchison, Katherine'
Cc: Josh Henry; Jennifer Broush; Jason Duffey; kevinc@whmggroup.com
Subject: Southeast Supply Enhancement Bat Culvert Survey Plan
Attachments: Southeast Supply Enhancement Bat Culvert Survey Plan v1-0.pdf

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Attached is the Survey Plan for bat use of culverts for the Southeast Supply Enhancement Project.

Please let me know if you have any comments or questions.

Thanks,
Chris

Chris Sanders



Sanders Environmental Inc.
322 Borealis Way
Bellefonte PA 16823
814-659-8257 (cell)



322 Borealis Way
Bellefonte, PA 16823
814-659-8257 (cell)
sanders@batgate.com

Amarilys Irizarry, Fish and Wildlife Biologist, US FWS VA Field Office
Susan Cameron, Fish and Wildlife Biologist, US FWS NC Asheville Field Office
Rick Reynolds, Lead Bat Biologist VA DWR
Olivia Munzer, Western Piedmont Habitat Conservation Coordinator NC WRC
Katherine Etchison, Wildlife Diversity Biologist NC WRC

Southeast Supply Enhancement – Bat Culvert Survey Plan

Transcontinental Gas Pipe Line Company, LLC previously submitted and received approval for their Southeast Supply Enhancement Bat Study Plan. This addendum is proposed to include surveys for culverts 36" or greater as identified in the United States Fish and Wildlife Service March 2024 Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines. Nine culverts 36" or greater are currently known to exist within the Southeast Supply Enhancement Project workspace. It is currently unknown if any of these will be removed, replaced, or disturbed. Six of the culverts are in North Carolina, three are in Virginia. If additional culverts are identified, the survey methods proposed below will be followed.

Methods:

All culverts identified during civil survey within the Project workspace, 36" and greater diameter, will be visually surveyed in daytime following United States Fish and Wildlife Service March 2024 Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines, appendix K.

Schedule:

Surveys will be conducted from May 15th – August 15th.

Please feel free to contact Chris Sanders at (814) 659-8257 or chris@batgate.com, if you have any questions.

Sincerely,

Christopher Sanders
President, Sanders Environmental Inc.



From: chris@batgate.com
Sent: Sunday, June 2, 2024 3:27 PM
To: 'Cameron, Susan'; 'Irizarry, Amarilys (Ami)'
Cc: 'Munzer, Olivia'; 'Etchison, Katherine'; Jennifer Broush; Josh Henry; Jason Duffey; kevinc@whmgroup.com; Elise Merrill; 'Tompkins, Bryan'; Rick.reynolds@dwr.virginia.gov
Subject: SSE - Bat Study Plan Acoustic Microphone Placement Discussion

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Hello Sue and Ami,

We are very excited that study plan concurrence from the VA FO came through Friday, we will be starting netting and acoustics next week Wednesday (6/5/24).

We do have one area of method discrepancy between NC FWS comments and the study plan as approved by VA FWS to address/make sure we are all on the same page regarding acoustic detector placement.

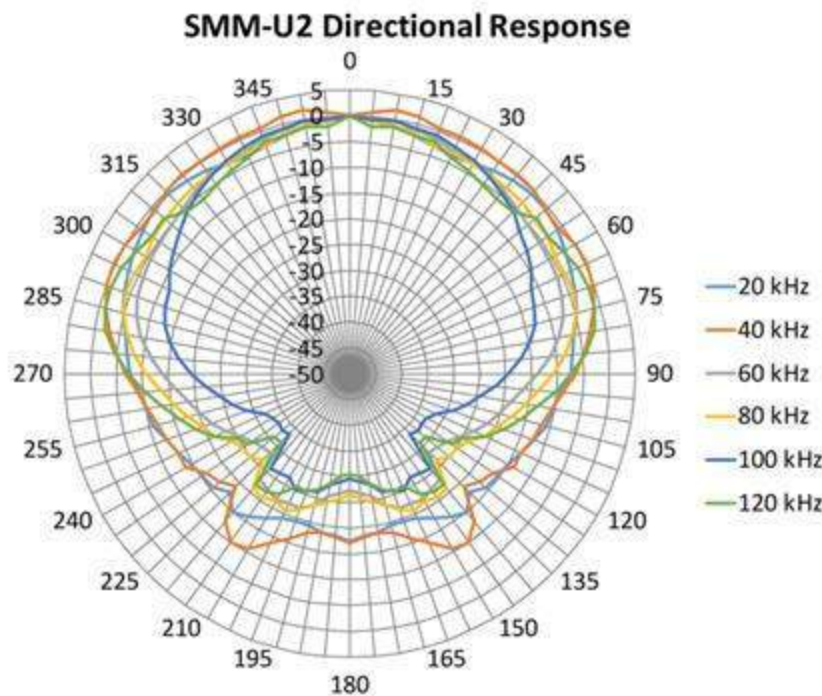
Those unresolved NC FO comments and our initial response from a prior email is below.

Begin text from prior email:

- NC FWS: Your study plan indicates that you will be using omnidirectional microphones oriented at 22-45 degrees. Omnidirectional microphones should be deployed on a pole in the center of the flight path/zone should be oriented horizontally.
- NC FWS: Under additional information it states, "Detector microphones (U2 cardioid) will be mounted at least 3 meters above ground level oriented 22 to 45 degrees upwards to maximize cone of detection area, with mounting poles **near/against vegetation/forest/ROW edge to disguise them.**" Please ensure microphones are at least 10m from vegetation in order to record high quality calls.
 - ***Response: The placement of microphones is an area where the protocol has some contradictory instructions. Stating that novel objects (because bats will use approach phase calls which foil autoclassifiers) such as microphones on poles are bad when in open areas, "Hemispherical microphones are best suited for open areas where deploying at heights greater than 3 meters AGL is problematic because of the lack of structure to hide the microphone and prevent it from becoming a novel item of interest to bats." and also instructing to place poles 10+ meters from tree lines which is too far into an opening for the forest edge to act as camouflage. We selected omni-directional as the type for the U2 mic as the study plan form is binary in choice, it's classified by Wildlife Acoustics as cardioid (see U2 Directional Response chart below), which has some characteristics of all three mic types: omni, hemispherical and directional. Using mics as described in the protocol in hemispherical position, placed low to the ground and aimed vertically does not work as dew and rain can accumulate on the mic. Based on our use/knowledge of U2 mics we find placing them closer to ($\geq 3m$ but generally not more than 6m and with back facing treeline) a treeline to give them some***

camouflage as well as cause myotis type bats (which are prone to flying closer to tree lines) to pass near the mics, and at a slight upward (22-45) angle (our mounts work in 18 degree increments so set at 36 degrees but there's some bend in a 4 to 5m pole so exact angle varies) is enough to avoid water accumulation, but also less of the cone of detection is lost to the ground, is the optimal spot for this hardware. Placement is a balance of impacts from clutter vs impacts from approach phase calls caused by novel objects vs having detectors placed far away from edge habitat resulting in bats hugging the tree line and not pass close enough to the microphone to have good calls recorded.

- **All that said, we are flexible and since the target species is PESU is easy to detect and identify and MYSO and MYSE are not in range (in NC) we think the 10+ meter from vegetation on a pole will probably work. We do not want to switch placement or orientation methodology at the VA/NC line, so our approach to orientation and placement may take a little reconciliation between field offices/I will wait for their comments and then initiate an email chain with both FO review staff so we can get that ironed out.**



End text from prior email.

After some internal bat team and project team discussions, we are comfortable with a microphone placement methodology shift at the state/region border as the classifier list to be used for analysis changes there.

In NC where we are out of MYSE range, and not including that species in the classifier, we will follow NC FWS placement comments. The consistent calls of PESU will be identifiable even if some approach phase call characteristics occur.

In VA, detectors on poles 10+ meters from the forest edge would cause likely approach phase calls of non-myotis species to be falsely identified as MYSE, as well as potentially missing MYSE flying the forest edge (though our netting is targeting MYSE, so admittedly acoustic detection of MYSE is not critical) so we will follow the VA approved study plan methodology with microphones closer (3 meters) to tree lines.

From: [Irizarry, Amariyls \(Ami\)](#)
To: chris@batgate.com; Rick.reynolds@dwr.virginia.gov
Cc: [Josh Henry](#); [Jennifer Broush](#); "Clark, Kevin (EXT)"
Subject: Re: [EXTERNAL] Bat Study Plan Concurrence Request - Transcontinental Gas Pipe Line Company Southeast Supply Enhancement Project - Virginia - Update
Date: Friday, May 31, 2024 2:28:50 PM

You don't often get email from amarilys_irizarry@fws.gov. [Learn why this is important](#)

EXERCISE CAUTION: This is an External Email Message!

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Chris,

This message responds to your request for comments on the study plan, Southeast Supply Enhancement Project, received April 18, 2024, for the federally listed endangered northern long-eared bat (*Myotis septentrionalis*) and federally proposed endangered tricolored bat (*Perimyotis subflavus*) associated with a project in **Pittsylvania County, VA**. The following comments are provided under provisions of the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended.

Your proposed bat survey plan follows the U.S. Fish and Wildlife Service's March 2024 Range-wide Indiana Bat & Northern long-eared Bat Survey Guidelines. We concur with your proposed survey plan.

The proposed net site SSE-EL Potential Bat Net Site 11 overlaps with a known NLEB acoustic detection. This means we already know the species is present in that area. However, you may be able to use the 'outer-tier' survey guidance for some of the segments in this area. Please reach out if you have any questions. Given the magnitude and scope of this project, we encourage you to maintain communication open with our office throughout the survey as things progress and change.

As a reminder, please note that under no scenario can either mist-netting or acoustic Phase 2 surveys be used to challenge the other methods results.

Upon completion of the bat survey, include the results of the survey including the information as listed in the survey guidance. The survey report will be reviewed and at that time we will provide subsequent recommendations as needed.

In addition to your written report we ask that you submit your data to the Virginia Field Office (virginiafieldoffice@fws.gov) using the Northeast Bat Reporting Spreadsheet (excel) available on the Indiana Bat and northern long-eared bat Survey Guidelines webpage: <https://www.fws.gov/media/bat-reporting-spreadsheets>.

Thank you,

Ami Irizarry

Pronouns: [she/her](#)

Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, VA 23061

Co-chair, [Regional JEDIA Team](#)
U.S. Fish and Wildlife Service
Northeast Region

(804) 767-7949
amarilys_irizarry@fws.gov

From: chris@batgate.com <chris@batgate.com>

Sent: Tuesday, May 21, 2024 10:44 AM

To: 'Cameron, Susan' <susan_cameron@fws.gov>; 'Tompkins, Bryan' <bryan_tompkins@fws.gov>

Cc: 'Munzer, Olivia' <olivia.munzer@ncwildlife.org>; 'Etchison, Katherine' <katherine.etchison@ncwildlife.org>; Jennifer Broush <j.broush@gaiconsultants.com>; Josh Henry <Josh.Henry@williams.com>; Jason Duffey <J.Duffey@gaiconsultants.com>; kevinc@whmggroup.com

Subject: SSE - Bat Study Plan Comment Discussion

EXERCISE CAUTION: This is an External Email Message!

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Hello Sue,

We are working to address your comments except detector placement and orientation. We are awaiting response from VA FWS and prefer to have the same methodology between NC/VA, therefore we are awaiting engagement from VA FWS.

- At least portions of the corridor in Rockingham Co. are within a known PESU capture buffer. This means we already know the species is present and surveys aren't appropriate. However, you may be able to use the 'outer-tier' survey guidance for some of the segments in this area. To help with planning, the capture site in Rockingham Co. is at **REDACTED**. Please update the survey maps once you have decided where surveys are appropriate in this area.
 - ***Response: We appreciate the location data and will discuss internally if we will sample the Outer Tier, sites 46, 47, 48 (shifting location of 48 within its segment from inner tier to outer tier), AR-10, AR-09.***
 - ***The project will either eliminate inner tier sites 49, 50, and AR-12, or sample knowing that presence for Tri-colored's will be positive regardless of the results of sampling.***
- After closer inspection, it looks like the Cleveland Co. compressor station (CS-145) is outside of the known acoustic buffer in that area in NC. Based on our call on Thurs., you were going to reach out to the USFWS SC Field Office to determine if there are any nearby known PESU sites in SC. Provided CS-145 is also outside of buffers from SC records, it is appropriate to survey. Please let us know what the final decision is for this area once you have heard back from the SC Field Office.
 - ***Response: SC FWS reports no prior hits in this vicinity.***
- Provided surveys appropriate at CS-145: This is a non-linear feature and will be surveyed as such. However, the size of the polygon or project area at this site is unclear. If ≤ 123 acres, the 14 detector nights of surveys is adequate. Will any forest be cleared on the SC side of border? If so, it would be good to add a third detector site to cover forested area south of border.

- **Response: It's a bit buried in the Additional Survey Information Block, but the compressor station clearing acreages are "Potential tree felling for two compressor stations (CS) are located outside of the linear sampling corridor, CS-165 (approximately 6.4 acres of forest impact) and CS-145 (approximately 16.1 acres of forest impact)."**
- **No tree clearing is currently planned in South Carolina.**
- I understand that the detector locations on the map were done on desktop and will be adjusted in the field, but I do have some general recommendations for detector placement on a handful of segments:
 - there might be a better location for site 17 to the north (i.e., other side Ogeden School Rd. where there is more habitat);
 - **Response: That is a currently unsigned/no access land parcel. We will keep an eye on access and shift if it becomes possible prior to sampling.**
 - site 14 might be impacted by highway noise; please ensure the detector is in suitable habitat that is of sufficient distance from the highway to minimize noise;
 - **Response: Shifted NE across RT66 to another woodlot.**
 - there might be better detector locations for site 1 on south side of Oak Ridge Rd.;
 - **Response: We will shift this site south across Oak Ridge Road to the forest area/marsh.**
 - suggest locating site AR-01 further from highway 68;
 - **Response: We will shift this back away from the road, this access road is likely narrow enough to require a U1 directional microphone.**
 - should there be an AR-2 site in NC?
 - **Response: No, no tree clearing is currently anticipated on AR-02/or it was a road removed from the current plan.**
- Make sure use appropriate species list for this area of NC in the acoustic software (i.e., suggest including TABR and removing LASE throughout; also suggest adding MYGR for the Cleveland Co. sites).
 - **Response: Good edits, a more detailed breakdown of the species to be used in the classifier is below, and will be used. NC WRC suggested Iredell County for Grey bats as well.**

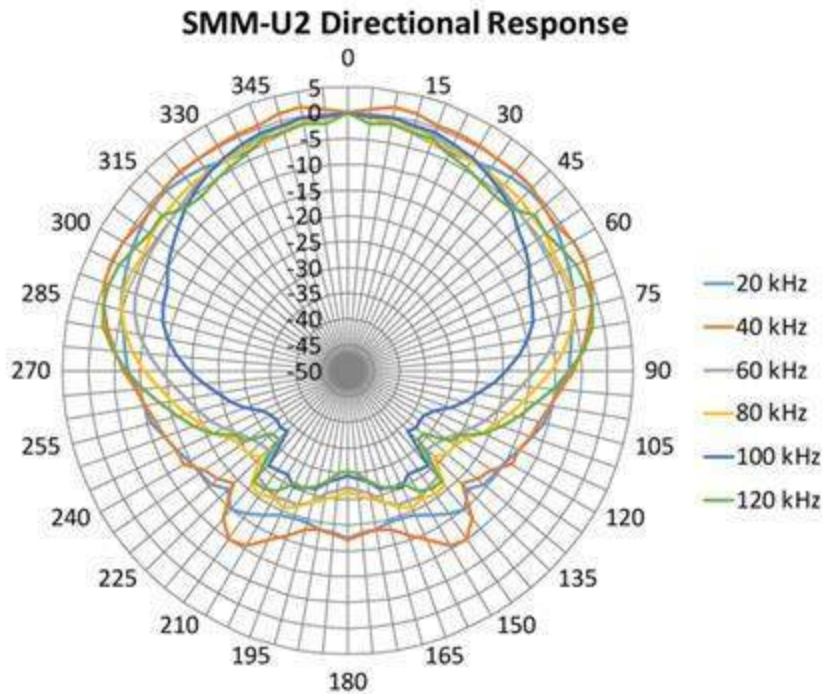
	EPFU	LABO	LACI	TABR	LANO	NYHU	PESU	MYLU	MYGR	MYSE
CS145, Cleveland, NC	X	X	X	X	X	X	X	X	X	
CS 150 Iredell, NC	X	X	X	X	X	X	X	X	X	
CS 155, Salem Loop, Davidson, Guilford, Forsyth, NC	X	X	X	X	X	X	X	X		

Eden Loop, Rockingham, NC	X	X	X		X	X	X	X		
Eden Loop, Pittsylvania, VA	X	X	X		X	X	X	X		X

- Also, the selection of microphone type should be dictated by the survey site, so there may be times when it's more appropriate to use another kind of microphone.
 - Response: We will bring U1 directional mics for the few cases where we run into tighter flyways, but based on desktop level views this should be limited.**
- Regarding qualitative analysis, please note that p. 28 of guidance states, "The acoustic survey protocol may also be used for determining P/A of TCBs using the NLEB LOE for the 2024 field season; however, at this time, qualitative analysis is necessary for linear projects when using an approved version of Kaleidoscope Pro if the MLE is > 0.05 for all site-nights and 10 or more passes are auto-classified as potentially belonging to TCB at any site-night to reduce risk of false negatives. If you choose not to manually vet calls meeting these criteria, then you should assume presence of TCB for the project."
 - Response: We understand the differing trigger level for manual vetting/confirmation for tri-colored bats vs other species.**
- Please update us on potential hibernacula and structures surveys when you learn more.
 - Response: Will do. There will be three separate plans for this project. 1) PA survey 2) Hibernacula 3) Culverts & structures and separate reports for these habitat types.**
- Your study plan indicates that you will be using omnidirectional microphones oriented at 22-45 degrees. Omnidirectional microphones should be deployed on a pole in the center of the flight path/zone should be oriented horizontally.
- Under additional information it states, "Detector microphones (U2 cardioid) will be mounted at least 3 meters above ground level oriented 22 to 45 degrees upwards to maximize cone of detection area, with mounting poles **near/against vegetation/forest/ROW edge to disguise them.**" Please ensure microphones are at least 10m from vegetation in order to record high quality calls.
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use/knowledge of U2 mics we find placing them closer to ($\geq 3\text{m}$ but generally not more than 6m and with back facing treeline) a treeline to give them some camouflage as well as cause myotis type bats (which are prone to flying closer to tree lines) to pass near the mics, and at a slight upward (22-45) angle (our mounts work in 18 degree increments so set at 36 degrees but there's some bend in a 4 to 5m pole so exact angle varies) is enough to avoid water accumulation, but also less of the cone of detection is lost to the ground, is the optimal spot for this hardware. Placement is a balance of impacts from clutter vs impacts from approach phase calls caused by novel objects vs having detectors placed far away from edge habitat resulting in bats hugging the tree line and not pass close enough to the microphone to have good calls recorded.

- *All that said, we are flexible and since the target species is PESU is easy to detect and identify and MYSO and MYSE are not in range we think the 10+ meter from vegetation on a pole will probably work. We do not want to switch placement or orientation methodology at the VA/NC line, so our approach to orientation and placement may take a little reconciliation between field offices/I will wait for their comments and then initiate an email chain with both FO review staff so we can get that ironed out.*



Chris Sanders



Sanders Environmental Inc.
322 Borealis Way
Bellefonte PA 16823

From: chris@batgate.com <chris@batgate.com>

Sent: Thursday, April 18, 2024 12:11 PM

To: Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>; Rick.reynolds@dwr.virginia.gov
<Rick.reynolds@dwr.virginia.gov>

Cc: 'Josh Henry' <Josh.Henry@williams.com>; 'Jennifer Broush' <j.broush@gaiconsultants.com>;
'Clark, Kevin (EXT)' <kevinc@whmgroup.com>; ProjectReview@dwr.virginia.gov
<ProjectReview@dwr.virginia.gov>; Schulz, Cindy <cindy_schulz@fws.gov>; Virginia Field Office,
FW5 <virginiafieldoffice@fws.gov>

Subject: [EXTERNAL] Bat Study Plan Concurrence Request - Transcontinental Gas Pipe Line Company
Southeast Supply Enhancement Project - Virginia - Update

**This email has been received from outside of DOI - Use caution before clicking on
links, opening attachments, or responding.**

Updated for 2024 Guidance Study Plan and potential sampling points are attached.

The Project proponent has initiated consultation (on 3/20/24) with the Service and is providing this survey plan pending species specific discussions with FWS regarding recent ECOS/IPAC changes. We would like to request a Teams meeting to discuss the projects consultation process in regards to bats, study plan, search for potential hibernacula, and IPAC/ECOS bat range map changes.

The Project would also like to request VA DWR input/comments on the study plan.

This study plan is being separately submitting this study plan to NC FWS Field Offices as well as NC state agencies. It is provided in full, but we this concurrence request is for proposed VA activities.

Thanks,
Chris

Chris Sanders



Sanders Environmental Inc.
322 Borealis Way
Bellefonte PA 16823
814-659-8257 (cell)

From: Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>

Sent: Tuesday, April 2, 2024 2:33 PM

To: chris@batgate.com; Virginia Field Office, FW5 <virginiafieldoffice@fws.gov>; Schulz, Cindy
<cindy_schulz@fws.gov>

Cc: 'Josh Henry' <Josh.Henry@williams.com>; 'Jennifer Broush' <j.broush@gaiconsultants.com>;

'Clark, Kevin (EXT)' <kevinc@whmgroup.com>; rreynolds@DGIF.STATE.VA.US

Subject: Re: [EXTERNAL] Bat Study Plan Concurrence Request - Transcontinental Gas Pipe Line Company Southeast Supply Enhancement Project - Virginia - Resend

Hi Chris,

The Range-wide Indiana Bat and Northern Long-eared Bat Survey Guidelines were updated on March 29, 2024. Since we are referring to the 2024 updated Survey Guidelines for the 2024 bat survey season, we are recommending revising the updated guidelines and study plan form before submitting for review.

The updated guidance is available at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>

Please let me know if you have any questions.

Thank you,

Amarilys D. Irizarry (Ami)

Pronouns: **she/her**

Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, VA 23061

(804) 767-7949 <-- new phone number as of 10/1/23 **
amarilys_irizarry@fws.gov

From: chris@batgate.com <chris@batgate.com>

Sent: Thursday, March 28, 2024 5:15 PM

To: Virginia Field Office, FW5 <virginiafieldoffice@fws.gov>; Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>; Schulz, Cindy <cindy_schulz@fws.gov>

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Subject: [EXTERNAL] Bat Study Plan Concurrence Request - Transcontinental Gas Pipe Line Company Southeast Supply Enhancement Project - Virginia - Resend

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Please forgive the resend, we had a typo in one of the email addresses and it bounced back.

Sanders Environmental is requesting U.S. Fish and Wildlife Service (USFWS) concurrence on a bat presence/absence survey covering the Virginia sections of Transcontinental Gas Pipe Line Company's Southeast Supply Enhancement Project. Bat mist netting presence absence study plan and KML of

the bat study area and potential mist net locations is attached. A separate submittal to the North Carolina Field office requesting concurrence on the sections of the project in North Carolina is underway.

On March 20, 2024, Transco initiated consultation with USFWS regarding the Project. Due to the timing of surveys, we are advancing the Bat mist netting presence absence study plan to your attention for review and approval. If USFWS requests surveys, the requested concurrence of this plan would be utilized to initiate surveys.

We would also like to request a call/Teams meeting to discuss potential hibernacula, specifically FWS Bat Survey Guidelines, Appendix H Phase 1, regarding any known hibernacula in the project vicinity, and guidance on next steps the project should be undertaking in desktop and field survey for previously unknown hibernacula.

Thanks,
Chris

Chris Sanders



Sanders Environmental Inc.
322 Borealis Way
Bellefonte PA 16823
814-659-8257 (cell)

Sarah L. Turton

Subject: RE: Transco SSE - Mussel Survey Plan (VA)

From: Jennifer Broush

Sent: Thursday, July 25, 2024 3:28 PM

To: Luu, Jackie A <jackie_luu@fws.gov>; Andersen, Troy M <troy_andersen@fws.gov>; jennifer_stanhope@fws.gov; Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>; Schul, Hannah (DWR) <Hannah.Schul@dwr.virginia.gov>; Brian.Watson@dwr.virginia.gov; Amarilys_Irizarry@fws.gov

Cc: Henry, Joshua <Josh.Henry@williams.com>; shauna.akers@williams.com; Casey Swecker <cdswecker@edge-es.com>

Subject: Transco SSE - Mussel Survey Plan (VA)

Transco is pleased to submit the attached mussel survey plan for the Southeast Supply Enhancement for USFWS and Virginia DWR review. Earlier this year Transco completed desktop analysis followed by in-field habitat assessments to identify streams which could support rare, threatened, or endangered mussels. This survey plan represents the resources identified in Virginia during those assessments which warrant further investigation. We ask for your review of this information and guidance on the anticipated planned surveys.

We are available to answer questions or discuss further as needed.

Thank you,
Jennifer

Jennifer Broush, MBA

Associate / Director, Environmental and Energy Services

GAI Consultants, 385 E. Waterfront Drive, Homestead, PA 15120-5005

D 412.399.5317 **M** 724.516.1155 **E** j.broush@gaiconsultants.com

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From: chris@batgate.com
To: "Irizarry, Amarilys (Ami)"; Rick.reynolds@dwr.virginia.gov
Cc: [Josh Henry](#); [Jennifer Broush](#); "Clark, Kevin (EXT)"; ProjectReview@dwr.virginia.gov; "Schulz, Cindy"; "Virginia Field Office, FW5"
Subject: Bat Study Plan Concurrence Request - Transcontinental Gas Pipe Line Company Southeast Supply Enhancement Project - Virginia - Update
Date: Thursday, April 18, 2024 12:13:32 PM
Attachments: [SSE Potential Bat Sampling 4-18-24.kml](#)
[Transco SSE USFWS 2024 Study Plan Form for Bat Surveys and Monitoring v1.3 CWS Signed.pdf](#)

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Sent: Tuesday, April 2, 2024 2:33 PM
To: chris@batgate.com; Virginia Field Office, FW5 <virginiafieldoffice@fws.gov>; Schulz, Cindy <cindy_schulz@fws.gov>
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Thank you,

Amarilys D. Irizarry (Ami)

Pronouns: **she/her**

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U.S. Fish and Wildlife Service
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Cc: 'Josh Henry' <Josh.Henry@williams.com>; 'Jennifer Broush' <j.broush@gaiconsultants.com>; 'Clark, Kevin (EXT)' <kevinc@whmggroup.com>; rreynolds@DGIF.STATE.VA.US <rreynolds@DGIF.STATE.VA.US>

Subject: [EXTERNAL] Bat Study Plan Concurrence Request - Transcontinental Gas Pipe Line Company Southeast Supply Enhancement Project - Virginia - Resend

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Thanks,
Chris

Chris Sanders



Sanders Environmental Inc.
322 Borealis Way
Bellefonte PA 16823
814-659-8257 (cell)

From: [Jennifer Broush](#)
To: ["Virginia Field Office, FW5"](#)
Cc: [Josh Henry](#)
Subject: RE: [EXTERNAL] Review Request Letter -Transco SSE Project, Pittsylvania County: Project Code: 2024-0047474
Date: Friday, May 3, 2024 12:50:00 PM
Attachments: [SSE_Virginia_StudyArea.zip](#)

Jackie,

Thank you for your continued coordination on the SSE Project. Please see responses to your questions below:

1. I see that your project plans to adhere to the time-of-year restriction for tree clearing to minimize impacts to the tricolored bat. Just to check, is the project adhering to the April 1st - November 15th TOYR?
 - ***The project is committed to restricting tree felling from occurring between April 1st – November 15th in Virginia.***
2. Is the project adhering to proper erosion and sediment control measures?
 - ***The Project will be implementing erosion and sediment control measures in accordance with the Virginia Department of Environmental Quality regulations.***
3. When you hit a stream, are you planning to install the pipeline through an open cut or HDD method?
 - ***The Project team is evaluating open cut, HDD, or other trenchless crossing methods. A combination of crossing types are anticipated to be utilized on the Project.***
4. Can you also send our office a shapefile of your project's action area for review?
 - ***Attached to this email is the current environmental survey corridor (kmz and shp). We have been utilizing this corridor in Project consultations as Project design is refined. The final Project LOD will be smaller, and located within this boundary. Should agency consultation result in the need for additional study areas, Transco would update the environmental study corridor pending landowner approval.***

From: Virginia Field Office, FW5 <virginiafieldoffice@fws.gov>
Sent: Monday, April 29, 2024 8:15 AM
To: Jennifer Broush <j.broush@gaiconsultants.com>
Cc: Josh Henry <Josh.Henry@williams.com>
Subject: Re: [EXTERNAL] Review Request Letter -Transco SSE Project, Pittsylvania County: Project Code: 2024-0047474

EXERCISE CAUTION: This is an External Email Message!

Think before clicking on links, opening attachments, or responding

Hello Jennifer,

Thank you for your project submission. I have a few questions regarding your project.

1. I see that your project plans to adhere to the time-of-year restriction for tree clearing to minimize impacts to the tricolored bat. Just to check, is the project adhering to the April 1st - November 15th TOYR?
2. Is the project adhering to proper erosion and sediment control measures?
3. When you hit a stream, are you planning to install the pipeline through an open cut or HDD method?
4. Can you also send our office a shapefile of your project's action area for review?

Best,
Jackie

From: Jennifer Broush <j.broush@gaiconsultants.com>

Sent: Wednesday, March 20, 2024 8:53 PM

To: Virginia Field Office, FW5 <virginiafieldoffice@fws.gov>

Cc: Josh Henry <Josh.Henry@williams.com>

Subject: [EXTERNAL] Review Request Letter -Transco SSE Project, Pittsylvania County: Project Code: 2024-0047474

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Ms. Cindy Schulz or To Whom it May Concern:

Transcontinental Gas Pipe Line Company, LLC. (Transco), indirectly owned by The Williams Companies, Inc. (Williams), is submitting the enclosed information for the proposed Southeast Supply Enhancement Project (Project) to initiate consultation with the United States Fish and Wildlife Service (USFWS), Virginia Field Office regarding the presence of Threatened, Endangered, and special concern species occurring along or in the vicinity of facilities in Virginia . Please refer to the consultation letter attached.

Thank you,
Jennifer

Jennifer Broush, MBA

Associate / Director, Environmental and Energy Services

GAI Consultants, 385 E. Waterfront Drive, Homestead, PA 15120-5005

D 412.399.5317 **M** 724.516.1155 **E** j.broush@gaiconsultants.com

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Transcontinental Gas Pipe Line Company, LLC
2800 Post Oak Boulevard (77056)
P.O. Box 1396
Houston, Texas 77251-1396
713-215-2000

March 20, 2024

Ms. Cindy Schulz
Field Office Supervisor
United States Fish and Wildlife Service
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410

Re: Threatened and Endangered Species Project Review and
Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act Coordination
Consultation Code: [2024-0047474]
Transcontinental Gas Pipe Line Company, LLC
Southeast Supply Enhancement Project – Eden Loop Pipeline and Compressor Station 165
Pittsylvania County, VA

Dear Ms. Schulz:

Transcontinental Gas Pipe Line Company, LLC. (Transco), indirectly owned by The Williams Companies, Inc. (Williams), is submitting the enclosed information for the proposed Southeast Supply Enhancement (Project) to initiate consultation with the United States Fish and Wildlife Service (USFWS), Virginia Field Office regarding the presence of Threatened, Endangered, and special concern species occurring along or in the vicinity of the Southeast Supply Enhancement Project – Eden Loop Pipeline and Compressor Station 165.

A letter of notification regarding Transco's intention to use the Federal Energy Regulatory Commission (FERC) Pre-Filing Process for the Project was provided to the USFWS Virginia Field Office, on January 31, 2024. Transco is seeking authorization from FERC under Section 7(c) of the Natural Gas Act to construct, own, operate, and maintain the proposed Project facilities. The Project is an expansion of Transco's existing natural gas transmission system that will enable Transco to provide 1,586,900 dekatherms per day (Dth/d) of incremental firm transportation capacity to remove pipeline capacity constraints in Zone 5 and meet growing natural gas-fired power generation, commercial, residential, and industrial demand in the mid-Atlantic and southeast United States. The Project will consist of the following components (bolded components are located in Virginia):

Pipeline Facilities

- **Approximately 26.1 miles of 42-inch-diameter pipeline in Pittsylvania County, Virginia (VA)** and approximately 4.5-miles of 42-inch-diameter pipeline in Rockingham County, North Carolina (NC), designated as the Eden Loop;
 - Regulator installation in Rockingham County, NC near mile post (MP) 1382.53;
 - Regulator installation in Rockingham County, NC near MP 1382.70; and
- Approximately 24.0 miles of 42-inch-diameter pipeline in Guilford, Forsyth, and Davidson Counties, NC, designated as the Salem Loop.

Compression Facilities

- **The addition of two [22,500 horsepower (HP) each] compressor units at Transco's existing Compressor Station 165 located in Pittsylvania County, VA;**
- The addition of one [23,465 International Organization Standardization (ISO) HP] Solar Titan 130 Turbine and two (31,871 ISO HP each) Solar Titan 250 Turbine compressor units at Transco's existing Compressor Station 155 located in Davidson County, NC;



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- The addition of one (15,900 ISO HP) Solar Mars 100 Turbine compressor unit at Transco's existing Compressor Station 150 in Iredell County, NC; and
- Demolition and removal of three (12,500 HP each) existing electric motor-driven (EMD) compressor units and replacement with three (33,000 HP each) EMD compressor units at Transco's existing Compressor Station 145 in Cleveland County, NC.

Facility Modifications

- Piping modifications at Transco's existing Compressor Station 135 in Anderson County, South Carolina (SC);
- Piping modifications at Transco's existing Compressor Station 125 in Walton County, Georgia (GA);
- Regulator installation and piping modifications at Transco's existing Compressor Station 120 in Henry County, GA; and
- Piping modifications at Transco's existing Compressor Station 105 in Coosa County, Alabama (AL).

The use of existing, improved, and new access roads and contractor yards/staging areas would also be required for the Project. Additional ancillary facilities and piping, such as mainline valves (MLVs), cathodic protection, communication facilities, and internal inspection devices (e.g., pig) launchers and receivers would be necessary to support the Project.

Subject to FERC's certification of the Project and receipt of other necessary permits and authorizations, Transco anticipates that construction of the Project would commence in the first quarter of 2026 to meet a proposed in-service date of November 1, 2027.

Project Action Area

Construction activities associated with Transco's Eden Loop Pipeline will consist of the installation of approximately 26.1-miles of 42-inch-diameter pipeline in Pittsylvania County, VA, while construction activities at Compressor Station 165, also located within Pittsylvania County, VA, will consist of the addition of two new compressor units. Tree felling will be required for the construction activities associated with the Compressor Station 165 and the Eden Loop Pipeline. Where tree felling would be required, Transco proposes to perform the required species surveys following USFWS and state agency guidance.

Based on desktop review, mapped National Wetland Inventory wetlands and deepwater habitats, National Hydrography Dataset streams, and hydric soils do occur within the Eden Loop and Compressor Station 165 Project action area. Transco plans to conduct environmental field reviews within Project action area to identify existing streams and wetland resources during the spring and summer of 2024. Transco will design the Project to avoid or minimize impacts to environmental resources to the extent practicable.

A Project Overview Map is in **Attachment A**. United States Geological Survey Mapping depicting the preliminary limits of disturbance for the Project facilities within the USFWS VA Field Office's jurisdiction is shown on the Project Location Map (**Appendix B**).

Preliminary Endangered Species Act (ESA) Considerations

Based on preliminary reviews of the USFWS Information for Planning and Conservation (IPaC) database completed on February 9, 2024 (IPaC Official Species List-**Attachment C**, Technical Assistance for 'Southeast Supply Enhancement Project – Eden Loop pipeline and Compressor Station 165'-**Attachment D**), federally listed threatened and endangered species with the potential to occur at the Project components that are within the USFWS VA Field Office's jurisdiction are outlined in Table 1 (**Attachment E**). IPaC reviews were completed within the following areas: Eden Loop (segments within VA) and Compressor Station 165 IPaC (2024-0047474). Critical habitat for the



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Green Floater (*Lasmigona subviridis*) is wholly or partially within the Project area under the USFWS VA Field Office's jurisdiction.

Migratory Bird Treaty Act (MBTA) and Bald and Golden Eagle Protection Act (BGEPA) Coordination

Transco would like to provide your office with the Project's proposed strategies to avoid and minimize impacts to migratory birds and bald and golden eagles in accordance with the MBTA (16 U.S.C. 703-712; Ch. 128; July 13, 1918; 40 Stat. 755, as amended) and the BGEPA of 1940 (16 U.S.C. 668-668d, 54 Stat. 250, as amended).

The Project is within the Piedmont Bird Conservation Region 29 (BCR 29). According to the United States North American Bird Conservation Initiative, BCR 29 is dominated by a fragmented mixture of pasture, woodlots, and suburban sprawl areas that creates challenges for bird conservation, while interior wetlands, waterbodies, and riverine systems provide migrating and wintering habitat for some shore birds and waterfowl species.

Priority landbirds within BCR 29 include redcockaded woodpecker (*Leuconotopicus borealis*), Bachman's sparrow (*Peucaea aestivalis*), and brown-headed nuthatch (*Sitta pusilla*).

According to the Project IPaC Official Species List, bald and golden eagles are within the Project area, while migratory bird species that are Birds of Conservation Concern (BCCs) are likely to inhabit the Project area and are listed in Table 2 (**Attachment F**).

As noted above, Transco has completed an evaluation of migratory bird species that are BCC's protected under the MBTA and bald and golden eagles protected under the BGEPA and their habitats known to occur in the Project area to determine the potential impacts to these species resulting from construction and operation of the Project.

Addition of compression at Compressor Station 165 will be located within and adjacent to the existing developed and maintained facility. The majority of the Eden Loop will be collocated with the existing Transco pipeline right-of-way (ROW) to the extent practicable. The siting of these facilities will significantly reduce impacts to forested habitat and will minimize new habitat fragmentation. Forested areas along the Project are currently functioning as edge habitat due to the presence of the existing Transco pipeline ROW adjacent to the Project. In accordance with the Transco's Upland Erosion Controls, Revegetation, and Maintenance Plan (Transco Plan) and Wetland and Waterbody Construction Mitigation Procedures (Transco Procedures), forested areas in the temporary construction ROW will not be maintained and will be allowed to return to a forested or scrub-shrub condition. The permanent ROW, which will generally include 25-feet of the existing pipeline ROW and 25-feet of new permanent ROW, will be maintained in an herbaceous or scrub-shrub condition over the length of the pipeline to facilitate operation and maintenance. Therefore, it is anticipated that some existing forested areas will be converted to an herbaceous or scrub-shrub condition. Conversion of forested habitats has the potential to reduce the area of habitat available for forest-dwelling bird species; however, this impact will be minimized to the extent practicable for the Project.

Transco has designed the Project in a manner to minimize potential effects to bird species and will take other measures during Project construction and operation to limit Project effects. These measures include:

- Maximizing the use of the existing Transco pipeline ROW and existing aboveground facilities, to the extent practicable;
- Where practicable, the Project will utilize existing access roads and contractor yards or locate access roads and contractor yards outside of forested areas or within existing disturbed areas;
- Limiting the temporary construction and permanent ROW widths to the minimum necessary to safely construct the Project facilities;
- Conducting mitigation for effects to sensitive resources (e.g., wetlands) through agency permit conditions, as needed;
- Adherence to the measures outlined in the Transco Plan and Transco procedures, during construction of the Project; and



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- Limiting tree felling for construction during the bird nesting season (April 15- August 1).

The Project facilities will be located within or adjacent to the existing Transco pipeline ROW and existing Transco aboveground facilities, to the extent practicable. Consequently, tree felling activities will be minimized and spread over the entire Project area. Additionally, tree felling will be conducted outside of the bird nesting season and the project will be conducted in accordance with the Transco Plan and Procedures, therefore Transco does not anticipate that construction would have a significant adverse or long-term effect on bird species.

Summary

Stream and wetland field surveys within the study area shown on the Project Location Map (**Attachment B**) are scheduled to occur during spring and summer of 2024. Dependent upon those findings, Transco's would be committed to avoiding and minimizing impacts to streams, wetlands, forested areas, and habitats favorable to species presented in the IPaC to the extent practicable.

Transco is requesting information regarding federally listed species, time of year restrictions, and any required surveys for species listed in Table 1 Attachment E. Additionally, Transco requests review and comment regarding the Project's planned avoidance and minimization activities to migratory birds.

Transco is coordinating with the other USFWS field offices which intersects the proposed Project facilities.

If you have questions regarding this correspondence and information request, or if you require additional information, please do not hesitate to call me at 412-713-0485 or email Josh.Henry@williams.com. Alternatively, you can contact Jennifer Broush of GAI Consultants, Inc., at 724-516-1155 or via e-mail at j.broush@gaiconsultants.com. We appreciate your assistance and thank you for your attention to this request.

Respectfully submitted,

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC

Josh Henry
Environmental Specialist

Attachments:

Attachment A (Project Overview), Attachment B (Project Location Map), Attachment C (IPaC Official Species List), Attachment D (Technical Assistance for 'Southeast Supply Enhancement -Eden Loop Pipeline and Compressor Station 165'), Attachment E (Table 1: Federally Protected Species Potentially Occurring within the USFWS VA Field Office Project Area Components), Attachment F (Table 2: BCC Migratory Bird Species Potentially Located within the Project Area)

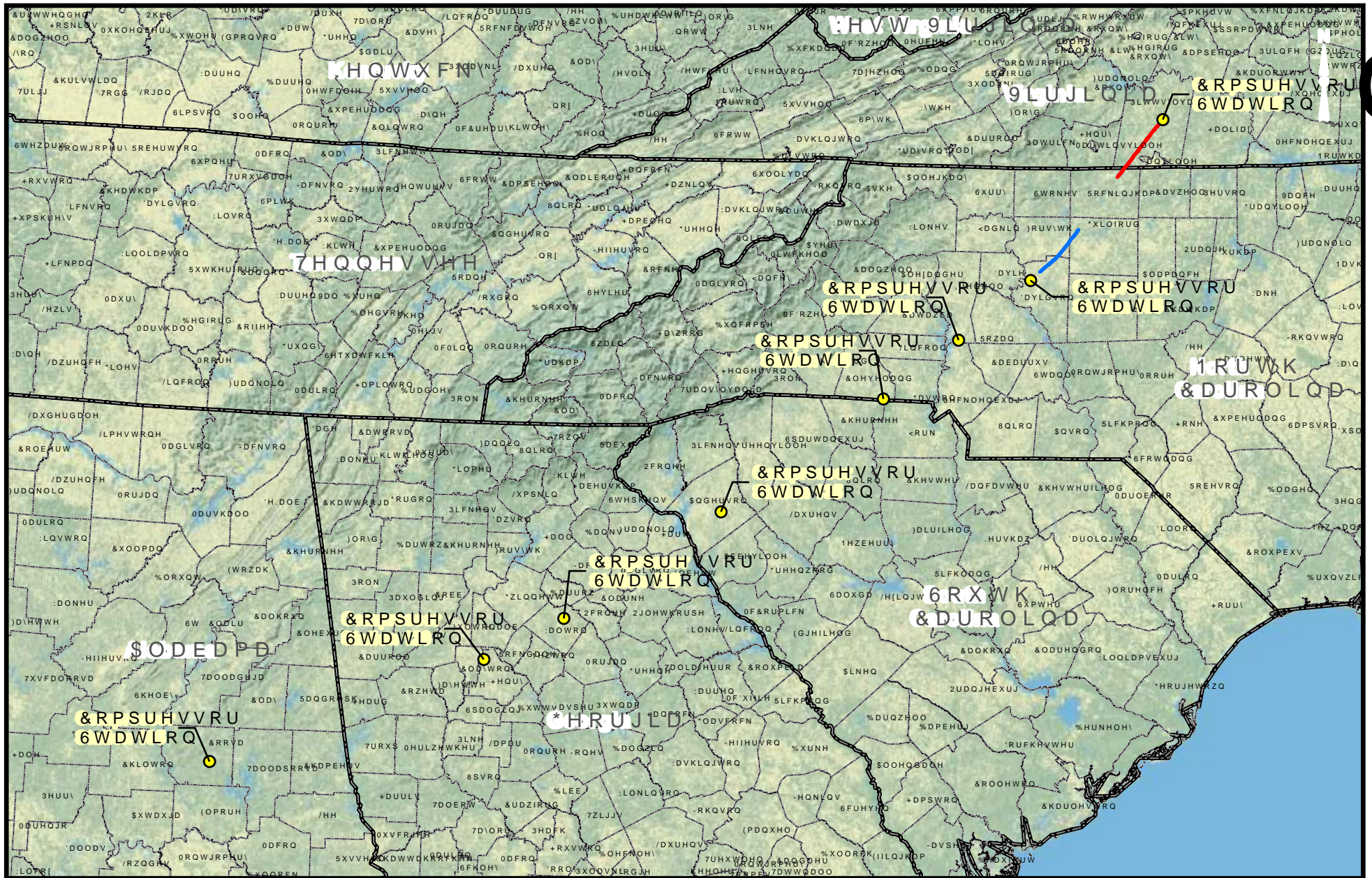
cc: Jennifer Broush, GAI Consultants, Inc.



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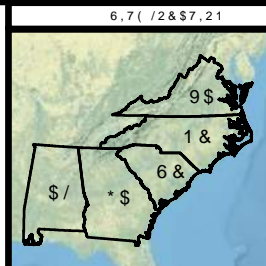
ATTACHMENT A


USFW Project Overview Map



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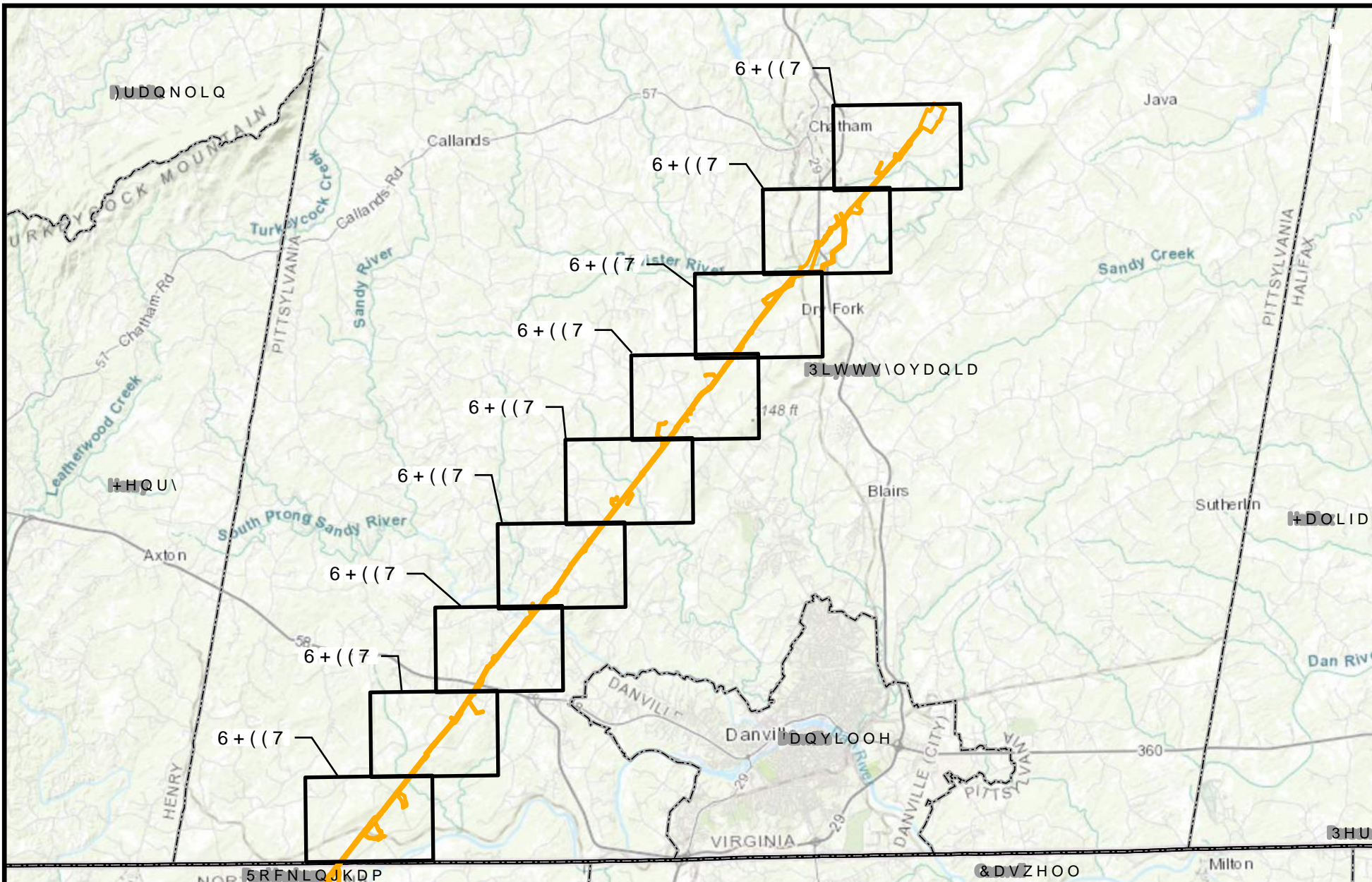




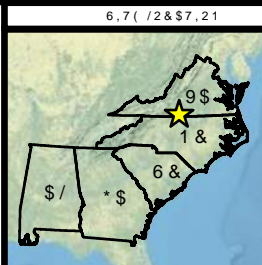
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ATTACHMENT B

Project Location Map

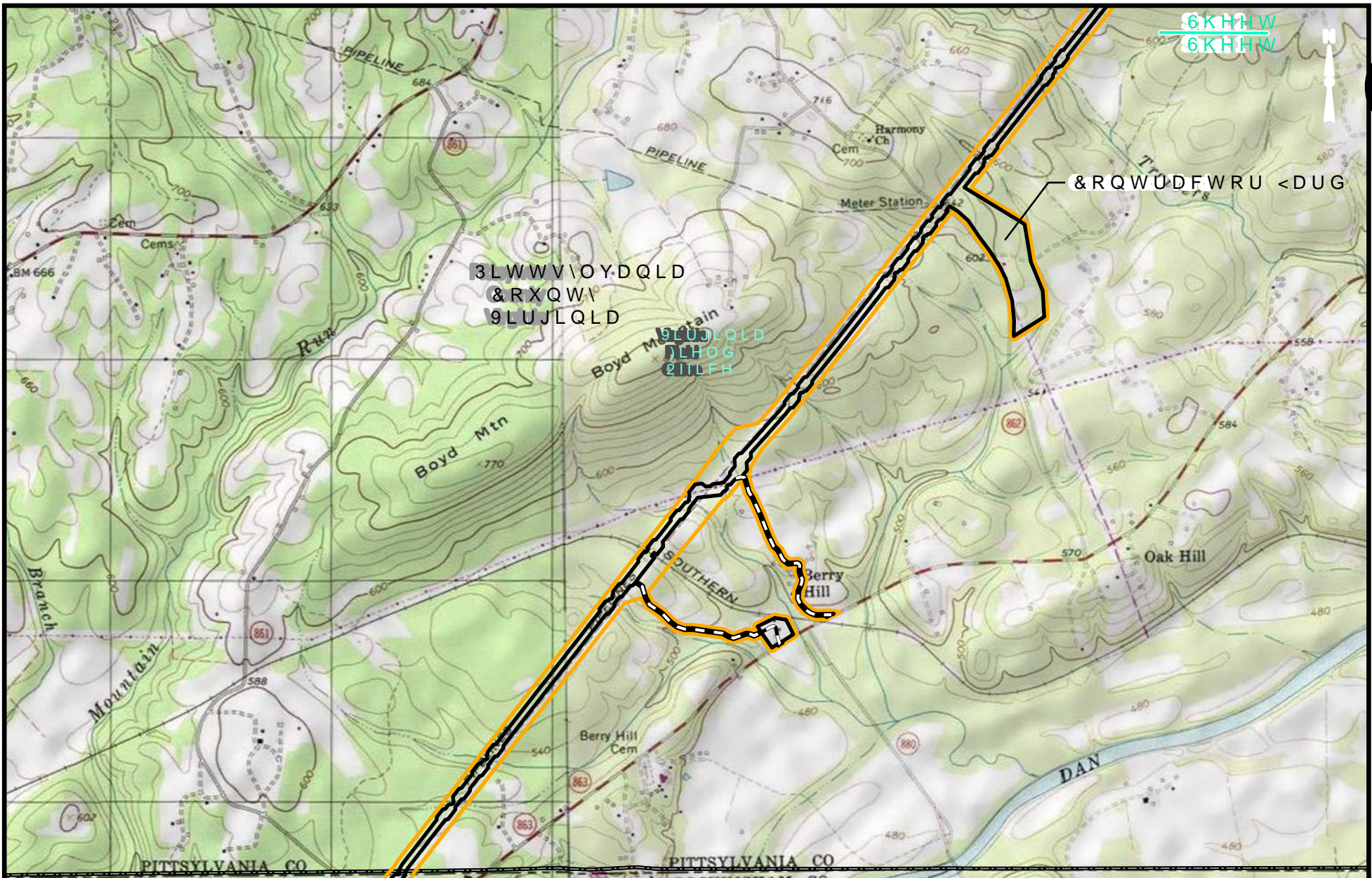


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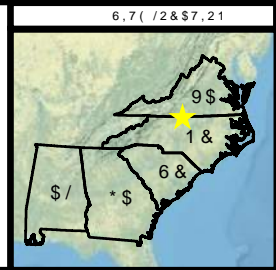
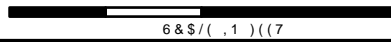
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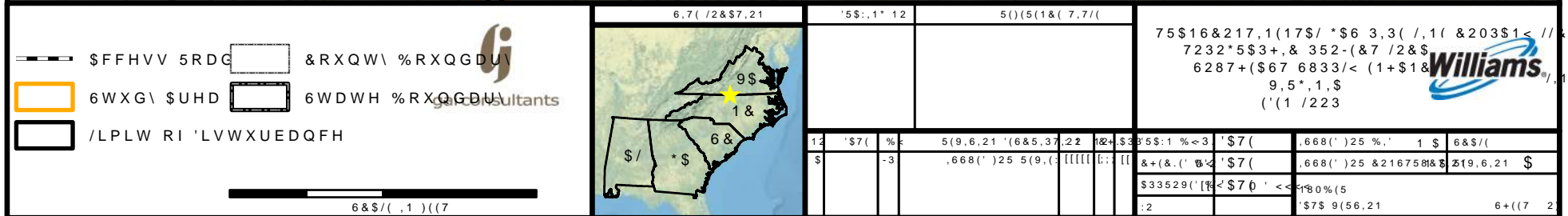
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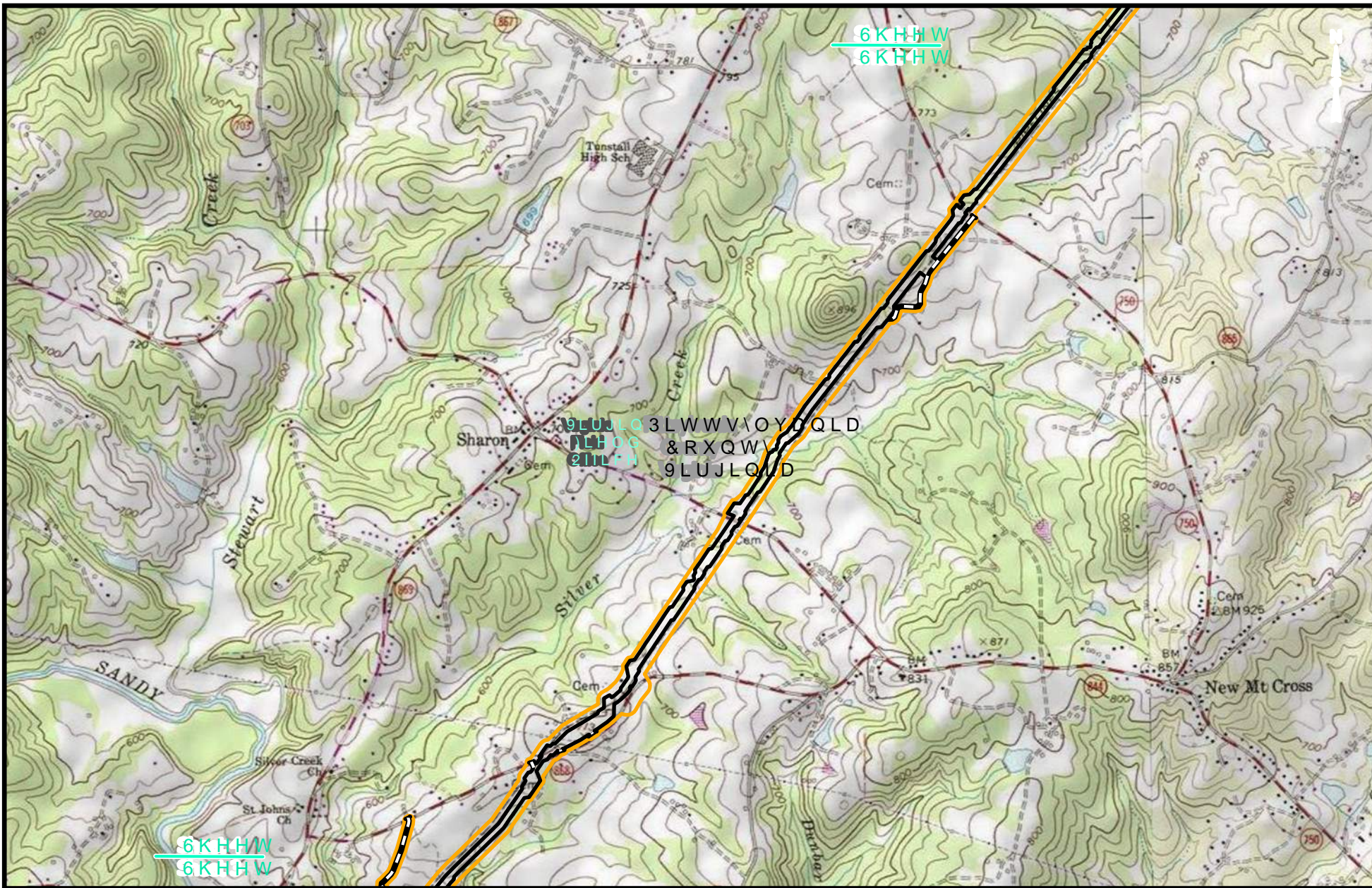
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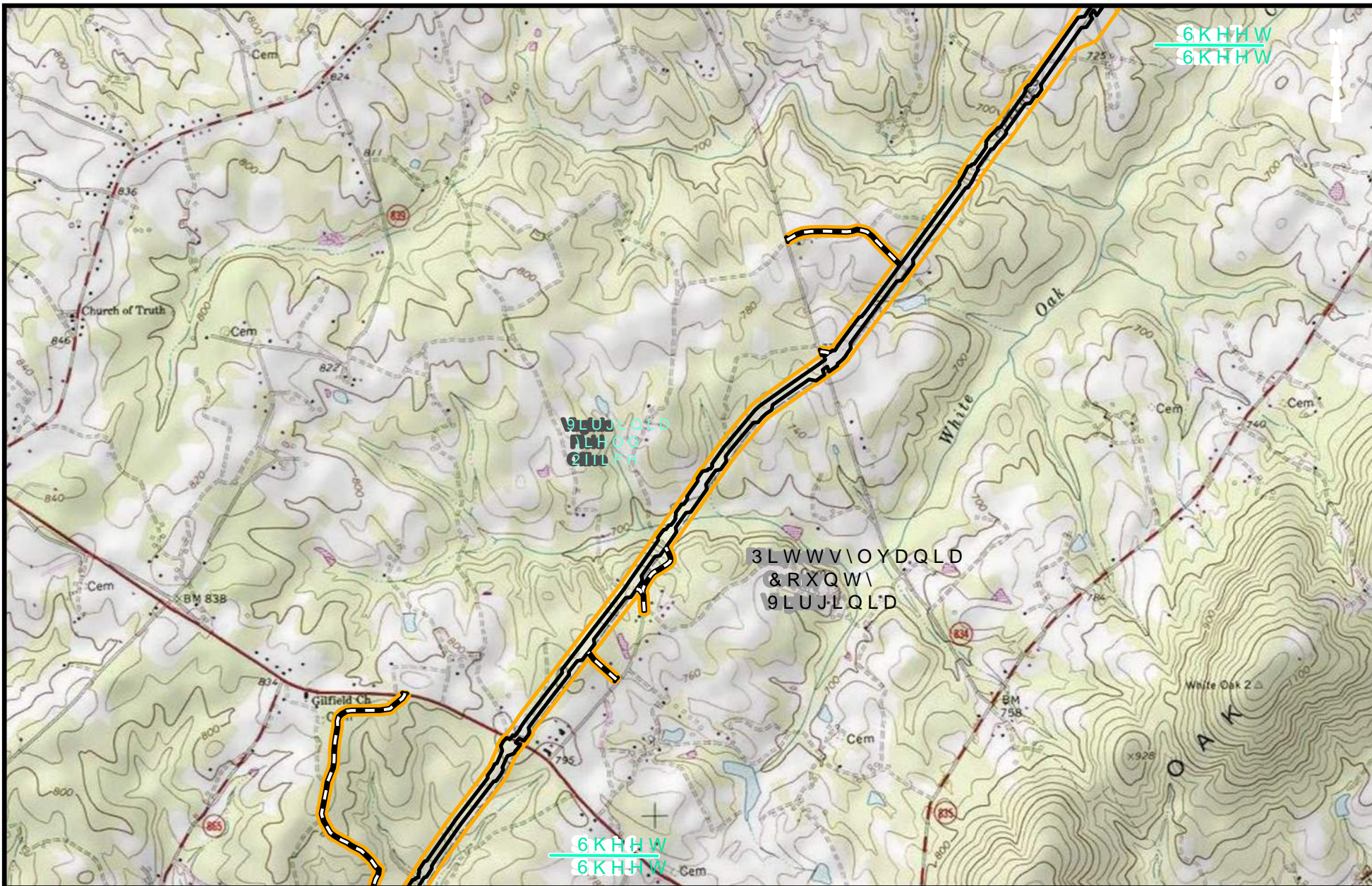




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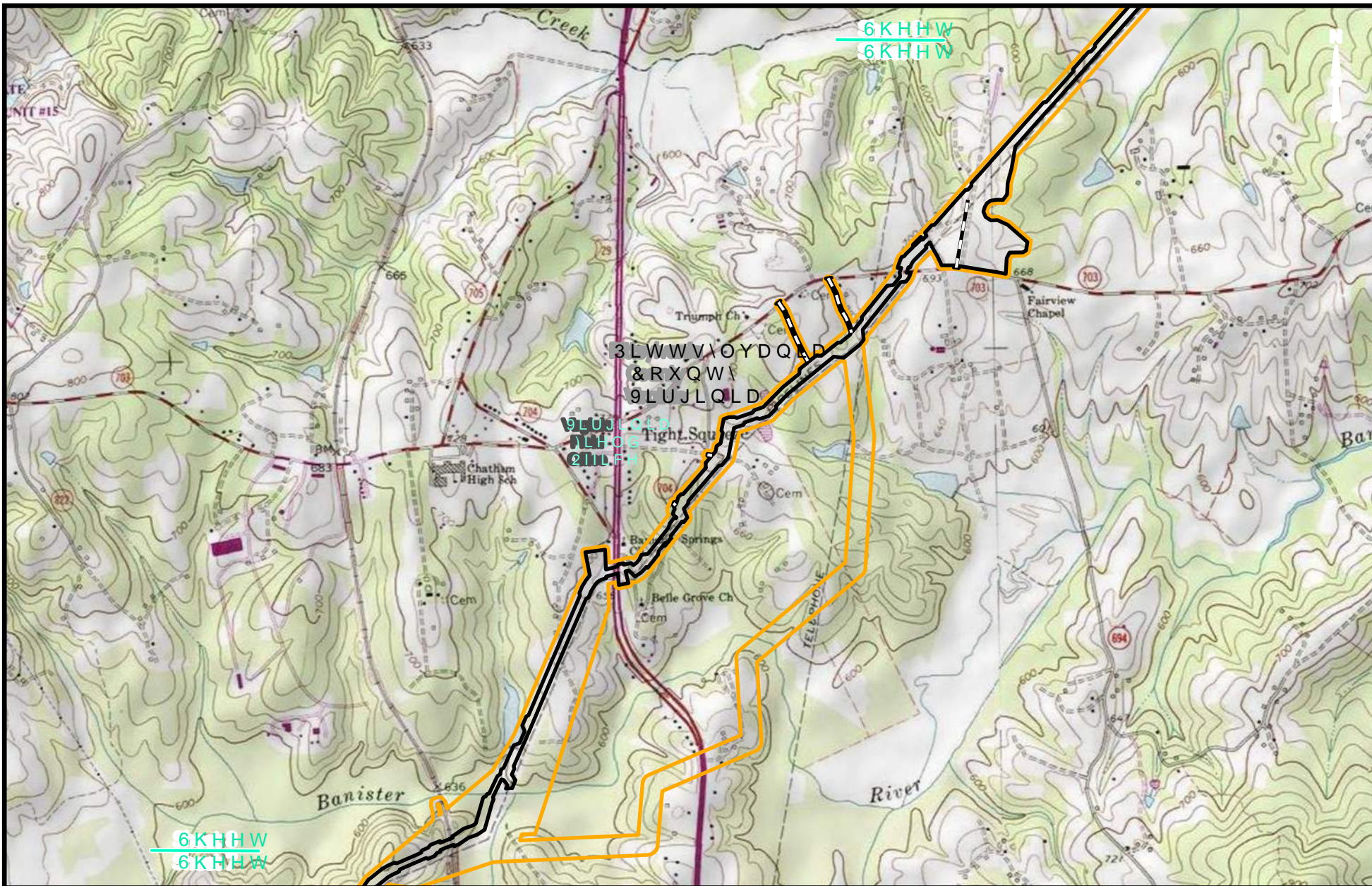
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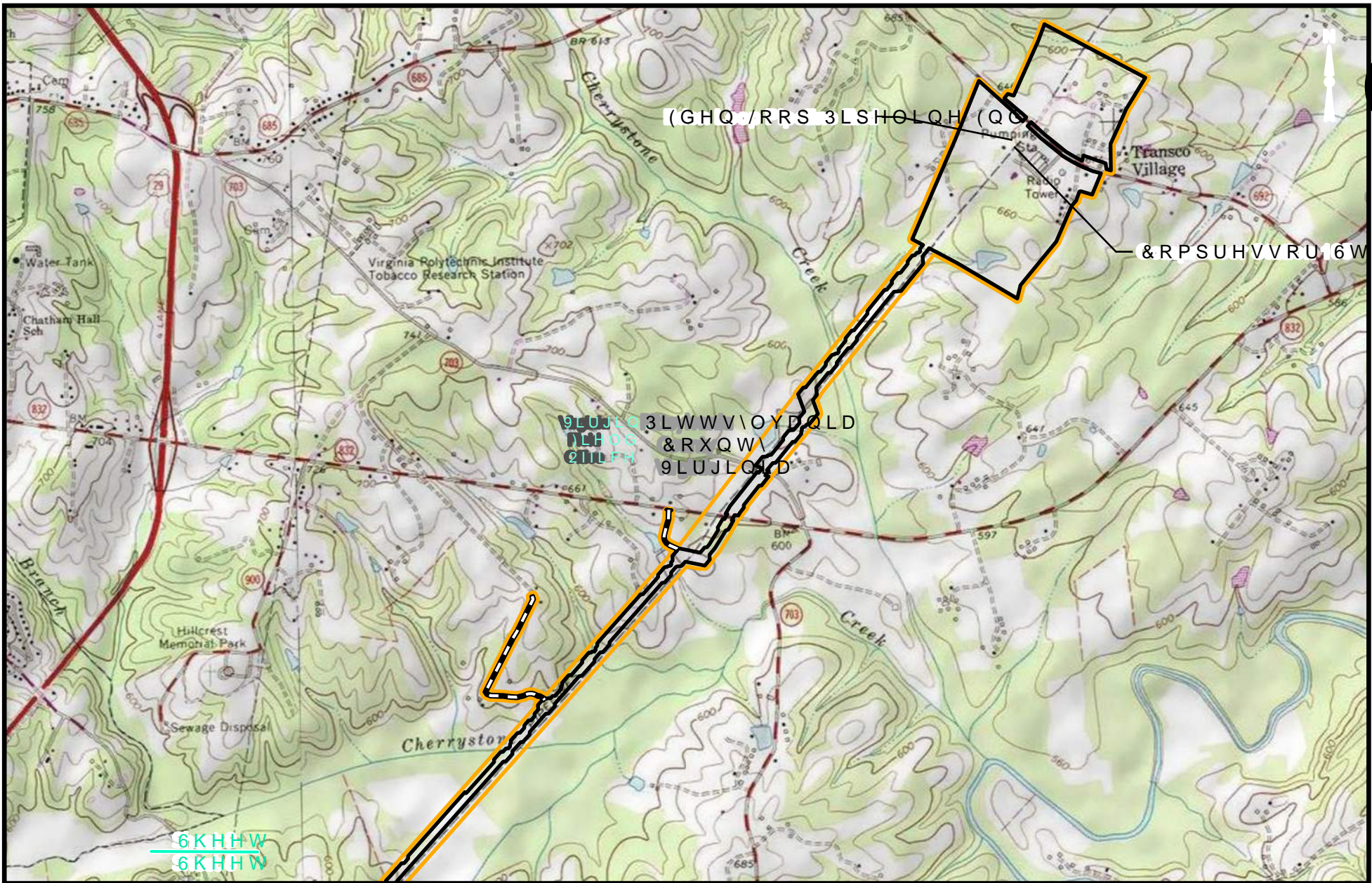
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Transcontinental Gas Pipe Line Company, LLC
2800 Post Oak Boulevard (77056)
P.O. Box 1396
Houston, Texas 77251-1396
713-215-2000

ATTACHMENT C

IPaC Official Species List



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
Phone: (804) 693-6694



In Reply Refer To:

February 09, 2024

Project Code: 2024-0047474

Project Name: Southeast Supply Enhancement Project - Eden Loop Pipeline and Compressor Station 165

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Project Code in the header of this

letter with any request for consultation or correspondence about your project that you submit to our office.

Note: IPaC has provided all available attachments because this project is in multiple field office jurisdictions.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Virginia Ecological Services Field Office

6669 Short Lane
Gloucester, VA 23061-4410
(804) 693-6694

This project's location is within the jurisdiction of multiple offices. However, only one species list document will be provided for all offices. The species and critical habitats in this document reflect the aggregation of those that fall in each of the affiliated office's jurisdiction. Other offices affiliated with the project:

Raleigh Ecological Services Field Office

3916 Sunset Ridge Rd
Raleigh, NC 27607-3726
(919) 856-4520

PROJECT SUMMARY

Project Code: 2024-0047474

Project Name: Southeast Supply Enhancement Project - Eden Loop Pipeline and Compressor Station 165

Project Type: Pipeline - Onshore - New Constr - Below Ground

Project Description: The Project is an expansion of Transco's existing natural gas transmission system that will enable Transco to provide 1,586,900 dekatherms per day (Dth/d) of incremental firm transportation capacity to remove pipeline capacity constraints in Zone 5 and meet growing natural gas-fired power generation, commercial, residential, and industrial demand in the mid-Atlantic and southeast United States. The Project will consist of the following components:

Pipeline Facilities

Approximately 30.6 miles of 42-inch-diameter pipeline in Pittsylvania County, Virginia (VA) and Rockingham County, North Carolina (NC), designated as the Eden Loop;

Regulator installation in Rockingham County, NC near mile post (MP) 1382.53;

Regulator installation in Rockingham County, NC near MP 1382.70; and

Approximately 24.0 miles of 42-inch-diameter pipeline in Guilford, Forsyth, and Davidson Counties, NC, designated as the Salem Loop.

Compression Facilities

The addition of two [22,500 horsepower (HP) each] compressor units at Transco's existing Compressor Station 165 located in Pittsylvania County, VA;

The addition of one [23,465 International Organization Standardization (ISO) HP] Solar Titan 130 Turbine and two (31,871 ISO HP each) Solar Titan 250 Turbine compressor units at Transco's existing Compressor Station 155 located in Davidson County, NC;

The addition of one (15,900 ISO HP) Solar Mars 100 Turbine compressor unit at Transco's existing Compressor Station 150 in Iredell County, NC; and

Demolition and removal of three (12,500 HP each) existing electric motor-driven (EMD) compressor units and replacement with three

(33,000 HP each) EMD compressor units at Transco's existing Compressor Station 145 in Cleveland County, NC.

Facility Modifications

Piping modifications at Transco's existing Compressor Station 135 in Anderson County, South Carolina (SC);

Piping modifications at Transco's existing Compressor Station 125 in Walton County, Georgia (GA);

Regulator installation and piping modifications at Transco's existing Compressor Station 120 in Henry County, GA; and

Piping modifications at Transco's existing Compressor Station 105 in Coosa County, Alabama (AL).

The use of existing, improved, and new access roads and contractor yards/staging areas would also be required for the Project. Additional ancillary facilities and piping, such as mainline valves (MLVs), cathodic protection, communication facilities, and internal inspection devices (e.g., pig) launchers and receivers would be necessary to support the Project.

Subject to FERC's certification of the Project and receipt of other necessary permits and authorizations, Transco anticipates that construction of the Project would commence in the first quarter of 2026 to meet a proposed in-service date of November 1, 2027.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@36.66454835,-79.51108525159214,14z>



Counties: North Carolina and Virginia

ENDANGERED SPECIES ACT SPECIES

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

FISHES

NAME	STATUS
Roanoke Logperch <i>Percina rex</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1134	Endangered

CLAMS

NAME	STATUS
Atlantic Pigtoe <i>Fusconaia masoni</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5164	Threatened
Green Floater <i>Lasmigona subviridis</i> There is proposed critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7541	Proposed Threatened
James Spiny mussel <i>Parvaspina collina</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2212	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Green Floater <i>Lasmigona subviridis</i> https://ecos.fws.gov/ecp/species/7541#crithab	Proposed

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider

implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

1. The [Bald and Golden Eagle Protection Act](#) of 1940.
2. The [Migratory Birds Treaty Act](#) of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

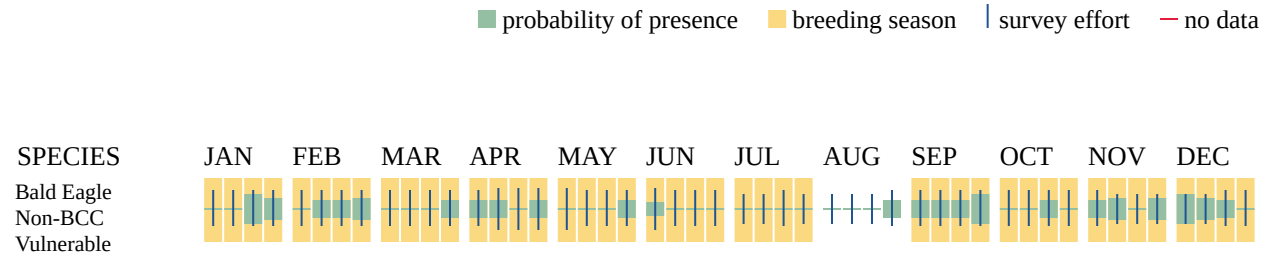
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31
Cerulean Warbler <i>Dendroica cerulea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 28 to Jul 20
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10678	Breeds May 1 to Aug 20
Kentucky Warbler <i>Oporornis formosus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9443	Breeds Apr 20 to Aug 20
Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9513	Breeds May 1 to Jul 31
Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9439	Breeds Apr 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

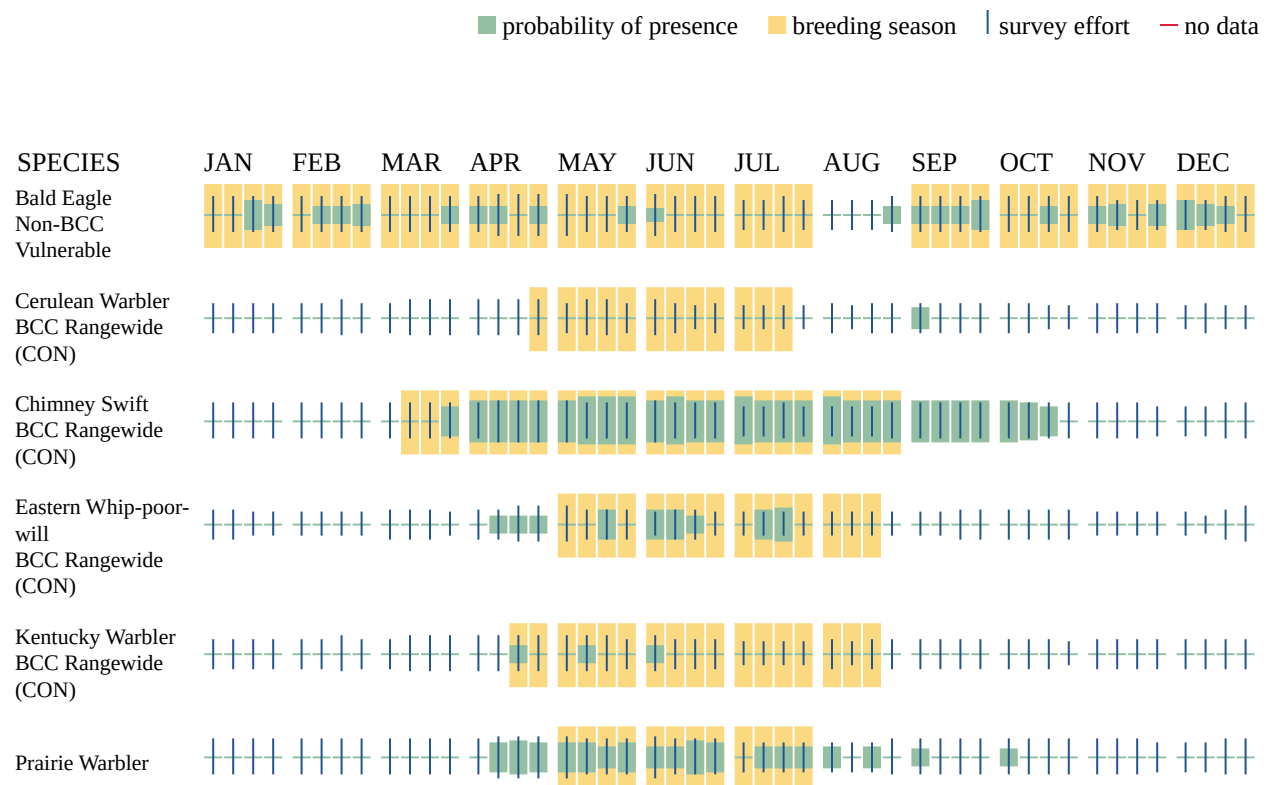
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

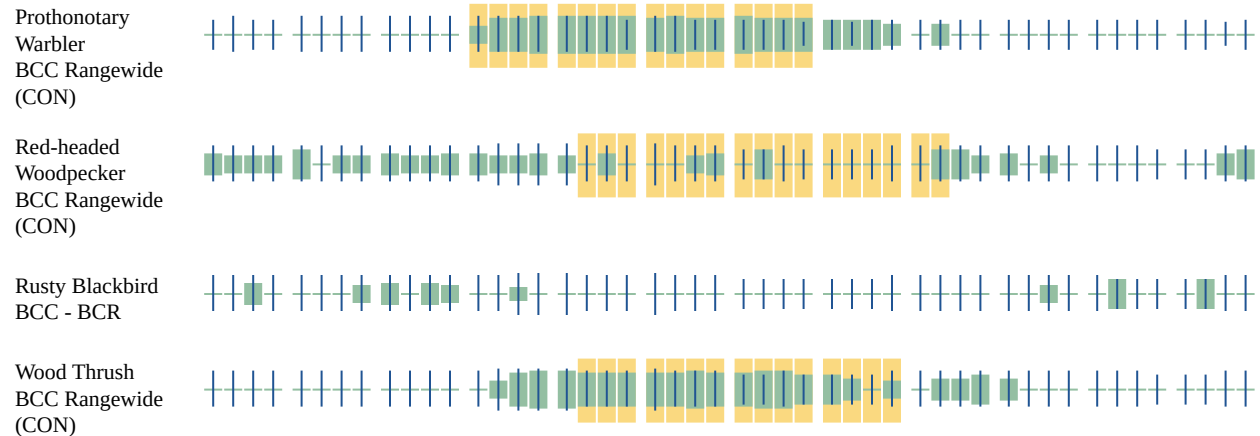
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.



BCC Rangewide
(CON)



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER EMERGENT WETLAND

- PEM1C
- PEM1A
- PEM1Eb

RIVERINE

- R4SBC

- R3UBH
- R5UBH
- R2UBHx
- R2UBH

FRESHWATER FORESTED/SHRUB WETLAND

- PSS1Eb
- PFO1A
- PFO1C
- PFO1Cb
- PFO1/SS1C

FRESHWATER POND

- PUBHh

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Caitlin Lucas
Address: 385 E Waterfront Dr
City: Homestead
State: PA
Zip: 15120
Email: c.lucas@gaiconsultants.com
Phone: 4123995143



Transcontinental Gas Pipe Line Company, LLC
2800 Post Oak Boulevard (77056)
P.O. Box 1396
Houston, Texas 77251-1396
713-215-2000

ATTACHMENT D

**Technical Assistance for ‘Southeast Supply Enhancement Project – Eden Loop Pipeline
and Compressor Station 165’**



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Assistant Regional Director-Ecological Services
5600 American Blvd. West
Bloomington, MN 55437-1458
Phone: (612) 713-5350 Fax: (612) 713-5292



In Reply Refer To:

February 09, 2024

Project code: 2024-0047474

Project Name: Southeast Supply Enhancement Project - Eden Loop Pipeline and Compressor Station 165

Federal Nexus: yes

Federal Action Agency (if applicable): Federal Energy Regulatory Commission

Subject: Technical assistance for 'Southeast Supply Enhancement Project - Eden Loop Pipeline and Compressor Station 165'

Dear Jeffrey Polonoli:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on February 09, 2024, for 'Southeast Supply Enhancement Project - Eden Loop Pipeline and Compressor Station 165' (here forward, Project). This project has been assigned Project Code 2024-0047474 and all future correspondence should clearly reference this number. **Please carefully review this letter. Your Endangered Species Act (Act) requirements are not complete.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project. **Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter.**

Determination for the Northern Long-Eared Bat

Based on your IPaC submission and the standing analysis for the Dkey, your project has reached the determination of "May Affect" the northern long-eared bat.

Next Steps

Your action may qualify for the Interim Consultation Framework for the northern long-eared bat. To determine if it qualifies, review the Interim Consultation Framework posted here <https://www.fws.gov/library/collections/interim-consultation-framework-northern-long-eared-bat>. If you determine it meets the requirements of the Interim Consultation Framework, follow the procedures outlined there to complete section 7 consultation.

If your project does **not** meet the requirements of the Interim Consultation Framework, please contact the Assistant Regional Director-Ecological Services for further coordination on this project. Further consultation or coordination with the Service is necessary for those species or designated critical habitats with a determination of “May Affect”.

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Atlantic Pigtoe *Fusconaia masoni* Threatened
- Green Floater *Lasmigona subviridis* Proposed Threatened
- James Spinemussel *Parvaspina collina* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate
- Roanoke Logperch *Percina rex* Endangered
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered

Critical Habitats:

- Green Floater *Lasmigona subviridis* Proposed Threatened

You may coordinate with our Office to determine whether the Action may cause prohibited take of the species listed above.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Southeast Supply Enhancement Project - Eden Loop Pipeline and Compressor Station 165

2. Description

The following description was provided for the project 'Southeast Supply Enhancement Project - Eden Loop Pipeline and Compressor Station 165':

The Project is an expansion of Transco's existing natural gas transmission system that will enable Transco to provide 1,586,900 dekatherms per day (Dth/d) of incremental firm transportation capacity to remove pipeline capacity constraints in Zone 5 and meet growing natural gas-fired power generation, commercial, residential, and industrial demand in the mid-Atlantic and southeast United States. The Project will consist of the following components:

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Approximately 30.6 miles of 42-inch-diameter pipeline in Pittsylvania County, Virginia (VA) and Rockingham County, North Carolina (NC), designated as the Eden Loop;

Regulator installation in Rockingham County, NC near mile post (MP) 1382.53;

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The addition of one (15,900 ISO HP) Solar Mars 100 Turbine compressor unit at Transco's existing Compressor Station 150 in Iredell County, NC; and

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compressor units at Transco's existing Compressor Station 145 in Cleveland County, NC.

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Piping modifications at Transco's existing Compressor Station 125 in Walton County, Georgia (GA);

Regulator installation and piping modifications at Transco's existing Compressor Station 120 in Henry County, GA; and

Piping modifications at Transco's existing Compressor Station 105 in Coosa County, Alabama (AL).

The use of existing, improved, and new access roads and contractor yards/staging areas would also be required for the Project. Additional ancillary facilities and piping, such as mainline valves (MLVs), cathodic protection, communication facilities, and internal inspection devices (e.g., pig) launchers and receivers would be necessary to support the Project.

Subject to FERC's certification of the Project and receipt of other necessary permits and authorizations, Transco anticipates that construction of the Project would commence in the first quarter of 2026 to meet a proposed in-service date of November 1, 2027.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@36.6645625,-79.51107188874677,14z>



DETERMINATION KEY RESULT

Based on the answers provided, the proposed Action is consistent with a determination of “may affect” for the Endangered northern long-eared bat (*Myotis septentrionalis*).

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. Does any component of the action involve construction or operation of wind turbines?

Note: For federal actions, answer ‘yes’ if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

No

3. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

Yes

4. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

No

5. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

Yes

6. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

No

7. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

Yes

8. Is FERC reviewing the proposed action under the Natural Gas Act, in whole or in part?

Yes

9. Have you determined that your proposed action will have no effect on the northern long-eared bat? Remember to consider the [effects of any activities](#) that would not occur but for the proposed action.

If you think that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, answer “No” below and continue through the key. If you have determined that the northern long-eared bat does not occur in your project’s action area and/or that your project will have no effects whatsoever on the species despite the potential for it to occur in the action area, you may make a “no effect” determination for the northern long-eared bat.

Note: Federal agencies (or their designated non-federal representatives) must consult with USFWS on federal agency actions that may affect listed species [50 CFR 402.14(a)]. Consultation is not required for actions that will not affect listed species or critical habitat. Therefore, this determination key will not provide a consistency or verification letter for actions that will not affect listed species. If you believe that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, please answer “No” and continue through the key. Remember that this key addresses only effects to the northern long-eared bat. Consultation with USFWS would be required if your action may affect another listed species or critical habitat. The definition of [Effects of the Action](#) can be found here: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

No

10. [Semantic] Is the action area located within 0.5 miles of a known northern long-eared bat hibernaculum?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

11. Does the action area contain any caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating northern long-eared bats?

No

12. Does the action area contain or occur within 0.5 miles of (1) talus or (2) anthropogenic or naturally formed rock crevices in rocky outcrops, rock faces or cliffs?

No

13. Is suitable summer habitat for the northern long-eared bat present within 1000 feet of project activities?
(If unsure, answer "Yes.")

Note: If there are trees within the action area that are of a sufficient size to be potential roosts for bats (i.e., live trees and/or snags ≥ 3 inches (12.7 centimeter) dbh), answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat can be found at: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

Yes

14. Will the action cause effects to a bridge?

No

15. Will the action result in effects to a culvert or tunnel?

No

16. Does the action include the intentional exclusion of northern long-eared bats from a building or structure?

Note: Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local U.S. Fish and Wildlife Services Ecological Services Field Office to help assess whether northern long-eared bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures

No

17. Does the action involve removal, modification, or maintenance of a human-made structure (barn, house, or other building) **known or suspected to contain roosting bats**?

Yes

18. Will the proposed action result in the cutting or other means of knocking down, bringing down, or trimming of any trees suitable for northern long-eared bat roosting?

Note: Suitable northern long-eared bat roost trees are live trees and/or snags ≥ 3 inches dbh that have exfoliating bark, cracks, crevices, and/or cavities.

Yes

PROJECT QUESTIONNAIRE

Enter the extent of the action area (in acres) from which trees will be removed - round up to the nearest tenth of an acre. For this question, include the entire area where tree removal will take place, even if some live or dead trees will be left standing.

177

In what extent of the area (in acres) will trees be cut, knocked down, or trimmed during the inactive (hibernation) season for northern long-eared bat? **Note:** Inactive Season dates for spring staging/fall swarming areas can be found here: <https://www.fws.gov/media/inactive-season-dates-swarming-and-staging-areas>

177

In what extent of the area (in acres) will trees be cut, knocked down, or trimmed during the active (non-hibernation) season for northern long-eared bat? **Note:** Inactive Season dates for spring staging/fall swarming areas can be found here: <https://www.fws.gov/media/inactive-season-dates-swarming-and-staging-areas>

0

Will all potential northern long-eared bat (NLEB) roost trees (trees ≥ 3 inches diameter at breast height, dbh) be cut, knocked, or brought down from any portion of the action area greater than or equal to 0.1 acre? If all NLEB roost trees will be removed from multiple areas, select 'Yes' if the cumulative extent of those areas meets or exceeds 0.1 acre.

Yes

Enter the extent of the action area (in acres) from which all potential NLEB roost trees will be removed. If all NLEB roost trees will be removed from multiple areas, entire the total extent of those areas. Round up to the nearest tenth of an acre.

177

For the area from which all potential northern long-eared bat (NLEB) roost trees will be removed, on how many acres (round to the nearest tenth of an acre) will trees be allowed to regrow? Enter '0' if the entire area from which all potential NLEB roost trees are removed will be developed or otherwise converted to non-forest for the foreseeable future.

177

Will any snags (standing dead trees) ≥ 3 inches dbh be left standing in the area(s) in which all northern long-eared bat roost trees will be cut, knocked down, or otherwise brought down?

Yes

Will all project activities be completed by April 1, 2024?

No

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Jeffrey Polonoli
Address: 385 East Waterfront Drive
City: Homestead
State: PA
Zip: 15120-5005
Email: j.polonoli@gaiconsultants.com
Phone: 7243323825

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Energy Regulatory Commission



Transcontinental Gas Pipe Line Company, LLC
2800 Post Oak Boulevard (77056)
P.O. Box 1396
Houston, Texas 77251-1396
713-215-2000

ATTACHMENT E

**Table 1: Federally Protected Species Potentially Occurring within the USFWS VA Field
Office Project Area**



Transcontinental Gas Pipe Line Company, LLC
 2800 Post Oak Boulevard (77056)
 P.O. Box 1396
 Houston, Texas 77251-1396
 713-215-2000

Table 1: Federally Protected Species Potentially Occurring within the USFWS VA Field Office Project Area Components

Species	Status	Areas of Potential Occurrence (Virginia)	Preliminary ESA Section 7 Determination in IPaC	Notes
Tricolored Bat (<i>Pipistrellus subflavus</i>)	Potentially Endangered	Eden Loop Compressor Station 165	-	<p>Tree felling is proposed within the Eden Loop Pipeline and potentially within Compressor Station 165 Project action areas. Where tree felling would be required for construction activities, Transco proposes to complete the tree felling during the appropriate time of year to minimize impacts to the Tri-colored Bat.</p> <p>Please respond if there are any additional considerations or field studies/surveys recommended for the USFWS to make its effects determination for this Project.</p>
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Endangered	Eden Loop Compressor Station 165	May Affect	<p>Tree felling is proposed within the Eden Loop Pipeline and potentially within Compressor Station 165 Project action areas. Where tree felling would be required for construction activities, Transco proposes to complete the tree felling during the appropriate time of year to minimize impacts to the Northern Long Eared Bat.</p> <p>Please respond if there are any additional considerations or studies/surveys recommended for the USFWS to make its effects determination for this Project.</p>
Roanoke Logperch (<i>Percina rex</i>)	Endangered	Eden Loop Compressor Station 165	-	<p>Based on desktop review, potential Roanoke logperch suitable habitat may occur within the Project action area such as: usually large sized, warm streams containing areas of riffles, run, and pool complexes with sand, gravel, or boulder substrates. Transco is evaluating the potential impacts to this species.</p> <p>Please respond if there are any specific field studies/surveys recommended for the USFWS to make its effects determination for this Project.</p>
Atlantic Pigtoe (<i>Fusconaia masoni</i>)	Threatened	Eden Loop Compressor Station 165	-	<p>Based on IPaC results, the Project action area does <u>not</u> overlap the final critical habitat for the Atlantic pigtoe. Based on desktop review, the Project action area</p>



Transcontinental Gas Pipe Line Company, LLC
2800 Post Oak Boulevard (77056)
P.O. Box 1396
Houston, Texas 77251-1396
713-215-2000

				<p>may contain suitable habitat for the Atlantic pigtoe. Transco is evaluating the potential impacts to this species.</p> <p>Please respond if there are any specific field studies/surveys recommended for the USFWS to make its effects determination for this Project.</p>
Green Floater (<i>Lasmigona subviridis</i>)	Potentially Theratened	Eden Loop Compressor Station 165	-	<p>Based on IPaC results, the Project action area does overlap with the green floater proposed critical habitat. Based on desktop review, the Project action area may contain suitable habitat for the green floater. Transco is evaluating the potential impacts to this species.</p> <p>Please respond if there are any specific field studies/surveys recommended for the USFWS to make its effects determination for this Project.</p>
James Spiny mussel (<i>Parvaspina collina</i>)	Endangered	Eden Loop Compressor Station 165	-	<p>Based on desktop review, the Project action area may contain suitable habitat for the James spineymussel. Transco is evaluating the potential impacts to this species.</p> <p>Please respond if there are any specific field studies/surveys recommended for the USFWS to make its effects determination for this Project.</p>
Monarch Butterfly (<i>Danaus plexippus</i>)	Candidate Species	Eden Loop Compressor Station 165	-	<p>Based on desktop review, potential monarch butterfly suitable habitat may occur within the Project action area such as: roadsides, open fields, wet areas, and urban gardens that contain milkweed species or additional flowering plant species needed for supporting monarch habitat. Transco proposes to reduce potential impacts to suitable habitat if identified within the Project action area during reclamation and revegetation following construction through the use of pollinator species in certain areas.</p>



Transcontinental Gas Pipe Line Company, LLC
2800 Post Oak Boulevard (77056)
P.O. Box 1396
Houston, Texas 77251-1396
713-215-2000

ATTACHMENT F

Table 2: BBC Migratory Bird Species Potentially Located within the Project Area



Transcontinental Gas Pipe Line Company, LLC
2800 Post Oak Boulevard (77056)
P.O. Box 1396
Houston, Texas 77251-1396
713-215-2000

Table 2: BCC Migratory Bird Species Potentially Located within the Project Area^{1, 2}

Species	Months of Probability of Presence within Project Area	Breeding Season
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	January to June, and August to December	September 1 to July 31
Chimney Swift (<i>Chaetura pelagica</i>)	March to October	March 15 to August 25
Cerulean Warbler (<i>Dendroica cerulea</i>)	September	April 28 to July 20
Eastern Whip-poor-will (<i>Antrostomus vociferus</i>)	April to July	May 1 to August 20
Kentucky Warbler (<i>Oporornis formosus</i>)	April to June	April 20 to August 20
Prairie Warbler (<i>Dendroica discolor</i>)	April to October	May 1 to July 31
Prothonotary Warbler (<i>Protonotaria citrea</i>)	April to September	April 1 to July 31
Red-headed Woodpecker (<i>Melanerpes erythrocephalus</i>)	January to July, September to October, and December	May 10 to September 10
Rusty Blackbird (<i>Euphagus carolinus</i>)	October to April	Breeds Elsewhere
Wood Thrush (<i>Hylocichla mustelina</i>)	April to October	May 10 to August 31

Notes:

- ¹ Species, presence probabilities and breeding seasons as indicated on the USFWS IPaC Official Species List (Attachment C).
- ² Bald eagle included within Table 2 is not listed as a Bird Species of Conservation Concern within Project area as stated in the IPaC Official Species List.

Virginia Department of Wildlife Resources

From: [Cooper, Jeffrey \(DWR\)](#)
To: [Jason Duffey](#); [Jennifer Stanhope](#)
Cc: [Jennifer Broush](#); [Josh Henry](#); [Jeremy Alberts](#); [Troy Andersen](#)
Subject: Re: [EXTERNAL] Transco SSE - VA Bald Eagle Survey Report
Date: Friday, March 28, 2025 3:04:09 PM
Attachments: [image001.png](#)
[image002.png](#)

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We concur too

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From: Stanhope, Jennifer W <jennifer_stanhope@fws.gov>
Sent: Friday, March 28, 2025 3:00:56 PM
To: Jason Duffey <J.Duffey@gaiconsultants.com>; Cooper, Jeffrey (DWR) <Jeff.Cooper@dwr.virginia.gov>
Cc: Jennifer Broush <j.broush@gaiconsultants.com>; Josh Henry <Josh.Henry@williams.com>; Jeremy Alberts <JAlberts@envsi.com>; Troy Andersen <troy_andersen@fws.gov>
Subject: RE: [EXTERNAL] Transco SSE - VA Bald Eagle Survey Report

Jason,

We have reviewed the survey report entitled “Surveys for Bald Eagle (*Haliaeetus leucocephalus*) on the Southeast Supply Enhancement Project in Pittsylvania County, Virginia,” dated February 28, 2025 and received on March 7, 2025. The following comments are provided under provisions of the Bald and Golden Eagle Protection Act (16 USC 668-668d), as amended.

Aerial surveys for bald eagle nests were conducted on January 13, 2025 per the study plan, updated and received on November 4, 2024. No bald eagle or eagle nests were identified during the surveys. We concur with the results of the survey report.

Thank you,

Jen

Jennifer Stanhope
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service - Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
Office: 804-905-9781 (note: new number)
Jennifer_stanhope@fws.gov
<https://www.fws.gov/office/virginia-ecological-services>

From: Jason Duffey <J.Duffey@gaiconsultants.com>
Sent: Friday, March 7, 2025 12:59 PM
To: Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Cooper, Jeffrey (DWR) <Jeff.Cooper@dwr.virginia.gov>
Cc: Jennifer Broush <j.broush@gaiconsultants.com>; Josh Henry <Josh.Henry@williams.com>; Jeremy Alberts <JAlberts@envsi.com>; Andersen, Troy M <troy_andersen@fws.gov>
Subject: [EXTERNAL] Transco SSE - VA Bald Eagle Survey Report

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Ms. Stanhope and Mr. Cooper,

Transcontinental Gas Pipe Line Company, LLC (Transco) is pleased to submit the Virginia (VA) Bald Eagle Survey Report. The bald eagle survey was conducted in support of the proposed Southeast Supply Enhancement (Project) in Pittsylvania County, VA. We look forward to your review and comment regarding the report and are available to discuss at your convenience. We are submitting via a OneDrive download link for security and due to the size of the report here:

 [VA Bald Eagle Report](#)

We appreciate the continued coordination between Transco, U.S. Fish and Wildlife Service VA Field office, and VA Department of Wildlife Resources regarding sensitive species in VA. Should you have any questions while reviewing, please do not hesitate to contact Josh Henry of Transco or a member of our team.

Thanks!

Jason Duffey
Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042
M 937.554.8488



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From: [Jason Duffey](#)
To: [Stanhope, Jennifer W](#); ["Cooper, Jeffrey \(DWR\)"](#)
Cc: [Jennifer Broush](#); [Josh Henry](#); [Jeremy Alberts](#); ["troy_andersen@fws.gov"](#)
Subject: Transco SSE - VA Bald Eagle Survey Report
Date: Friday, March 7, 2025 12:56:00 PM
Attachments: [image001.png](#)
[image002.png](#)

Ms. Stanhope and Mr. Cooper,

Transcontinental Gas Pipe Line Company, LLC (Transco) is pleased to submit the Virginia (VA) Bald Eagle Survey Report. The bald eagle survey was conducted in support of the proposed Southeast Supply Enhancement (Project) in Pittsylvania County, VA. We look forward to your review and comment regarding the report and are available to discuss at your convenience. We are submitting via a OneDrive download link for security and due to the size of the report here:

 [VA Bald Eagle Report](#)

We appreciate the continued coordination between Transco, U.S. Fish and Wildlife Service VA Field office, and VA Department of Wildlife Resources regarding sensitive species in VA. Should you have any questions while reviewing, please do not hesitate to contact Josh Henry of Transco or a member of our team.

Thanks!

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



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From: [Jason Duffey](#)
To: ["Stanhope, Jennifer W"](#); [Jennifer Broush](#); ["Watson, Brian \(DWR\)"](#); ["Argo, Emily E"](#)
Cc: ["Josh Henry"](#); ["Jeremy Alberts"](#); [Casey Swecker](#); [Akers, Shauna](#); ["kevinc@whmggroup.com"](#)
Subject: RE: [EXTERNAL] Transco SSE - VA Freshwater Mussel Survey and RLP Habitat Assessments - 1 of 2
Date: Sunday, March 2, 2025 8:53:00 PM
Attachments: [image001.png](#)
[image002.png](#)

Hello Ms. Stanhope,

On behalf of Jennifer Broush, Josh Henry, and the rest of the Transco team, I am providing you with updated Roanoke Logperch and Virginia Freshwater Mussel reports that address your questions in your email below. Both updated reports include the dates and names of the permitted biologists that conducted surveys along each reach. The Virginia Freshwater Mussel Report includes additional language on whether the permitted surveyors considered each of the streams where no mussels were observed to have suitable mussel habitat.

The reports are available for download from the folder here:

 [VA Aquatics Reports](#)

We also included in the folder the Project Proposed HDD Inadvertent Returns Contingency Plans as requested by the VA Field Office in recent discussions.

We greatly appreciate the continued coordination with the VA Field Office. If you have any questions or require additional information, please do not hesitate to contact Josh Henry of Transco or members of our team.

Thank you!

Jason Duffey
Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042
M 937.554.8488



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From: Stanhope, Jennifer W <jennifer_stanhope@fws.gov>
Sent: Monday, February 3, 2025 4:31 PM
To: Jennifer Broush <j.broush@gaiconsultants.com>; Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Argo, Emily E <emily_argo@fws.gov>
Cc: Josh Henry <Josh.Henry@williams.com>; Jeremy Alberts <JAlberts@envsi.com>; Casey Swecker

<cdswecker@edge-es.com>; Akers, Shauna <shauna.akers@williams.com>; Jason Duffey <J.Duffey@gaiconsultants.com>

Subject: RE: [EXTERNAL] Transco SSE - VA Freshwater Mussel Survey and RLP Habitat Assessments - 1 of 2

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Jennifer B.,

Thank you for sending the survey reports for freshwater mussels and RLP habitat in VA.

My questions/comments below pertain to the mussel survey report dated December 17, 2024.

1. When were each of the surveys conducted? Please provide the dates for each stream.
2. Who were the VDWR permitted biologists leading the surveys at each of the streams?
3. For each of the streams where no mussels were observed, please indicate if the qualified, permitted surveyor considered the stream to have suitable mussel habitat? Or do we assume because the stream was surveyed, the surveyors would characterize the habitat as suitable for mussels?

Thank you,
Jen

Jennifer Stanhope
Acting Assistant Field Office Supervisor - Endangered Species
U.S. Fish and Wildlife Service - Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
Office: 804-905-9781 (*note: new number*)
Jennifer_stanhope@fws.gov
<https://www.fws.gov/office/virginia-ecological-services>

From: Jennifer Broush <j.broush@gaiconsultants.com>

Sent: Wednesday, December 18, 2024 2:43 PM

To: Luu, Jackie A <jackie_luu@fws.gov>; Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Argo, Emily E <emily_argo@fws.gov>

Cc: Josh Henry <Josh.Henry@williams.com>; Jeremy Alberts <JAlberts@envsi.com>; Casey Swecker

<cdswecker@edge-es.com>; Akers, Shauna <shauna.akers@williams.com>; Jason Duffey
<J.Duffey@gaiconsultants.com>

Subject: [EXTERNAL] Transco SSE - VA Freshwater Mussel Survey and RLP Habitat Assessments - 1 of 2

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Ms. Luu and Mr. Watson (**Email 1 of 2**),

Transcontinental Gas Pipe Line Company, LLC (Transco) is pleased to submit the Virginia (VA) Freshwater Mussel Survey Report and Roanoke Logperch Habitat Assessments which were conducted in support of the proposed Southeast Supply Enhancement (Project) in Pittsylvania County, VA. We look forward to your review and comment regarding these reports and are available to discuss at your convenience. We are submitting via two emails due to the size of the files.

We appreciate the continued coordination between Transco, U.S. Fish and Wildlife Service VA Field office, and VA Department of Wildlife Resources regarding sensitive species in VA. Should you have any questions while reviewing, please do not hesitate to contact Josh Henry (Transco) or me. If the size of the documents are too large to be accepted, we will provide a link to download.

Regards,
Jennifer

Jennifer Broush, MBA

Senior Associate / Environmental Director

GAI Consultants, 385 E. Waterfront Drive, Homestead, PA 15120-5005

D 412.399.5317 **M** 724.516.1155 **E** j.broush@gaiconsultants.com

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From: [Reynolds, Richard \(DWR\)](#)
To: chris@batgate.com; "[Case, Rachel L](#)"; "[Cameron, Susan](#)"
Cc: [Josh Henry](#); [Jason Duffey](#); [Jennifer Broush](#); "[Munzer, Olivia](#)"; "[Etchison, Katherine](#)"
Subject: RE: SSE Baat Culvert Hiber Survey Plan
Date: Monday, February 10, 2025 9:57:52 AM

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As long as you are following the USFWS survey guidelines then VDWR concurs with the plan.

Rick

Rick Reynolds
Wildlife Biologist
Virginia Department of Wildlife Resources
Region 4 Verona
P.O. Box 996
Verona, VA 24482
rick.reynolds@dwr.virginia.gov
540-248-9386

From: chris@batgate.com <chris@batgate.com>
Sent: Sunday, February 9, 2025 11:50 PM
To: 'Case, Rachel L' <rachel_case@fws.gov>; 'Cameron, Susan' <susan_cameron@fws.gov>
Cc: 'Josh Henry' <Josh.Henry@williams.com>; 'Jason Duffey' <J.Duffey@gaiconsultants.com>;
'Jennifer Broush' <j.broush@gaiconsultants.com>; 'Munzer, Olivia' <olivia.munzer@ncwildlife.org>;
'Etchison, Katherine' <katherine.etchison@ncwildlife.org>; Reynolds, Richard (DWR)
<rick.reynolds@dwr.virginia.gov>
Subject: SSE Baat Culvert Hiber Survey Plan

Study plan for Southeast Supply Enhancement culvert hibernacula survey is attached. Please review and concur/comment, we are hoping to mobilize very rapidly, and appreciate the offers of a quick turnaround.

Thanks,
Chris

Chris Sanders



Sanders Environmental Inc.
322 Borealis Way
Bellefonte PA 16823

From: chris@batgate.com
To: ["Case, Rachel L"; "Cameron, Susan"](#)
Cc: [Josh Henry](#); [Jason Duffey](#); [Jennifer Broush](#); ["Munzer, Olivia"](#); ["Etchison, Katherine"](#); rick.reynolds@dwr.virginia.gov
Subject: SSE Baat Culvert Hiber Survey Plan
Date: Sunday, February 9, 2025 11:50:01 PM
Attachments: [Southeast Supply Enhancement Bat Culvert Hiber Survey Plan v1-5.pdf](#)

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Study plan for Southeast Supply Enhancement culvert hibernacula survey is attached. Please review and concur/comment, we are hoping to mobilize very rapidly, and appreciate the offers of a quick turnaround.

Thanks,
Chris

Chris Sanders



Sanders Environmental Inc.
322 Borealis Way
Bellefonte PA 16823
814-659-8257 (cell)



SANDERS
ENVIRONMENTAL INC.

322 Borealis Way
Bellefonte, PA 16823
814-659-8257 (cell)
sanders@batgate.com

Rachael Case, Fish and Wildlife Biologist, US FWS VA Field Office
Susan Cameron, Fish and Wildlife Biologist, US FWS NC Asheville Field Office
Rick Reynolds, Lead Bat Biologist VA DWR
Olivia Munzer, Western Piedmont Habitat Conservation Coordinator NC WRC
Katherine Etchison, Wildlife Diversity Biologist NC WRC

Southeast Supply Enhancement – Bat Culvert Hibernation Survey Plan

Transcontinental Gas Pipe Line Company, LLC previously submitted and received approval for their Southeast Supply Enhancement (Project) Bat Study Plan, including surveys for summer roosting bats in culverts. This addendum is proposed to include hibernation surveys at culverts, 36" or greater diameter and 23' or longer, along all Project facilities in Virginia and North Carolina. It is currently unknown if any of these will be removed, replaced, or disturbed.

Methods:

All culverts identified along Project facilities in Virginia and North Carolina that fall within the Project workspace and areas within 150 feet of the Project Centerline (where landowner access can be obtained), will be visually surveyed in daytime following United States Fish and Wildlife Service March 2024 Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines, Appendix K. Surveyors will wear N95 masks during the survey.

Schedule:

Surveys will be conducted February 10 – February 15, 2025 in North Carolina and prior to February 28, 2025 in Virginia.

Please feel free to contact Chris Sanders at (814) 659-8257 or chris@batgate.com, if you have any questions.

Sincerely,

Christopher Sanders
President, Sanders Environmental Inc.



From: [Stanhope, Jennifer W](#)
To: [Jennifer Broush](#); [Watson, Brian \(DWR\)](#); [Argo, Emily E](#)
Cc: [Josh Henry](#); [Jeremy Alberts](#); [Casey Swecker](#); [Akers, Shauna](#); [Jason Duffey](#)
Subject: RE: [EXTERNAL] Transco SSE - VA Freshwater Mussel Survey and RLP Habitat Assessments - 1 of 2
Date: Monday, February 3, 2025 4:31:14 PM

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Jennifer B.,

Thank you for sending the survey reports for freshwater mussels and RLP habitat in VA.

My questions/comments below pertain to the mussel survey report dated December 17, 2024.

1. When were each of the surveys conducted? Please provide the dates for each stream.
2. Who were the VDWR permitted biologists leading the surveys at each of the streams?
3. For each of the streams where no mussels were observed, please indicate if the qualified, permitted surveyor considered the stream to have suitable mussel habitat? Or do we assume because the stream was surveyed, the surveyors would characterize the habitat as suitable for mussels?

Thank you,
Jen

Jennifer Stanhope
Acting Assistant Field Office Supervisor - Endangered Species
U.S. Fish and Wildlife Service - Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
Office: 804-905-9781 (*note: new number*)
Jennifer_stanhope@fws.gov
<https://www.fws.gov/office/virginia-ecological-services>

From: Jennifer Broush <j.broush@gaiconsultants.com>

Sent: Wednesday, December 18, 2024 2:43 PM

To: Luu, Jackie A <jackie_luu@fws.gov>; Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Argo, Emily E <emily_argo@fws.gov>

Cc: Josh Henry <Josh.Henry@williams.com>; Jeremy Alberts <JAlberts@envsi.com>; Casey Swecker <cdswecker@edge-es.com>; Akers, Shauna <shauna.akers@williams.com>; Jason Duffey <J.Duffey@gaiconsultants.com>

Subject: [EXTERNAL] Transco SSE - VA Freshwater Mussel Survey and RLP Habitat Assessments - 1 of 2

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Ms. Luu and Mr. Watson (**Email 1 of 2**),

Transcontinental Gas Pipe Line Company, LLC (Transco) is pleased to submit the Virginia (VA) Freshwater Mussel Survey Report and Roanoke Logperch Habitat Assessments which were conducted in support of the proposed Southeast Supply Enhancement (Project) in Pittsylvania County, VA. We look forward to your review and comment regarding these reports and are available to discuss at your convenience. We are submitting via two emails due to the size of the files.

We appreciate the continued coordination between Transco, U.S. Fish and Wildlife Service VA Field office, and VA Department of Wildlife Resources regarding sensitive species in VA. Should you have any questions while reviewing, please do not hesitate to contact Josh Henry (Transco) or me. If the size of the documents are too large to be accepted, we will provide a link to download.

Regards,
Jennifer

Jennifer Broush, MBA

Senior Associate / Environmental Director

GAI Consultants, 385 E. Waterfront Drive, Homestead, PA 15120-5005

D 412.399.5317 **M** 724.516.1155 **E** j.broush@gaiconsultants.com

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From: [Jason Duffey](#)
To: [Cameron, Susan](#)
Cc: [Jennifer Broush](#); kevinc@whmggroup.com; chris@batgate.com; [Josh Henry](#); [Tompkins, Bryan](#); [Katherine Etchison](#); [Munzer, Olivia](#); [Irizarry, Amariys \(Ami\)](#); [Virginia Field Office, FW5](#); rick.reynolds@dwr.virginia.gov; [Case, Rachel L](#)
Subject: RE: [EXTERNAL] Transco SSE - NC Bat Survey Reports USFWS Project Codes: 2024-0136694, 2024-0047469, 2024-0047464, 2024-0047462, 2024-0137949, 2024-0137941, and 2024-0047458
Date: Thursday, December 19, 2024 7:19:05 PM
Attachments: [image001.png](#)
[image002.png](#)

Sue,

Thank you for reviewing the bat reports and providing feedback. The Bat Culvert Report, Structures Report, and Hibernacula Report were updated to incorporate additional information. Those updated reports are available for you to download from our Project's shared One Drive site noted below. Additionally, please see the following responses to your comments.

North Carolina agency folks copied on this email should be able to access the reports here:

 [NC Bat Reports](#)

Virginia agency folks copied on this email should be able to access the reports here:

 [VA Bat Reports](#)

If someone else in your organization requires access to download the reports, please notify me and I can grant access.

USFWS Comment 1: Since you are still working on the acoustic analysis, I wanted to provide a reminder that during review of the study plan, USFWS and partners had recommended included gray bats on the acoustic software list for Rockingham, Cleveland, and Iredell counties in NC.

Transco Response: The gray bat was included in the acoustic analysis software when analyzing acoustic data collected in Rockingham, Cleveland and Iredell counties. The bat acoustic survey report is being submitted to you concurrently under a different cover and will also be available at the link above.

USFWS Comment 2: Based on Figure 2, it looks like there are a large number of mines near King's Mountain. Are these all mines or is this a mistake?

Transco Response: There are a large number of mines near King's Mountain. Many appear to be surface mines or flooded and reclaimed; however, subsurface mines may exist. Sanders conducted additional desktop reviews of the available data included a detailed figure showing mines in the Kings Mountain area in the updated Hibernacula Report. Due to the pre-existing nature of the facilities in this area and that the modifications are proposed primarily within the existing fence line with only minor additional permanent workspace, Transco does not expect the Project to affect potential bat hibernacula including those potentially occupying subsurface mines.

USFWS Comment 3: Can you add project component names to the maps so we can easily cross reference the list of mines with the maps?

Transco Response: The Hibernacula Report figures have been updated to include labels for Project components.

USFWS Comment 4: We have lots of caves in NC that are used by bats and are not in karst. These are largely fissure caves and boulder caves. Did you look for these types of features or talk to local grottos?

Transco Response: Environmental survey crews collected information noting rocky habitats/rock shelter/boulder type habitats found during field reviews within the environmental survey corridor. One was identified and described in the Hibernacula Report as unsuitable for use by bats. Transco does not expect the Project to affect these types of fissure or rocky habitat features.

Following receipt of this comment. Sanders contacted the local branch of the National Speleological Society (NSS) in Raleigh, NC to inquire if that organization tracks rock shelter type caves. The updated Hibernacula Report was revised to include this information.

USFWS Comment 5: The report states, "For the culverts visited outside of the survey season, and potential suitability was confirmed, bat presence/absence will not be determined until the culvert is assessed within the appropriate survey season in 2025." How are you defining 'potential suitability' or is the intention to revisit all culverts of appropriate length/width?

Transco Response: The Culvert Report has been updated to clarify.

USWS Comment 6: It is my understanding that suitable culverts (per the survey guidance) that will be directly impacted (e.g., replaced) we're surveyed. Can you remind me if there is any blasting or other activities that would indirectly impact culvert roosts? I just want to make sure we've covered all of the culvert surveys that are needed.

Transco Response: Suitable culverts (per the USFWS Guidelines) located within the Project limits of disturbance (LOD) were surveyed (with 10 proposed for survey in 2025). Culverts within the LOD could potentially be directly or indirectly affected by the Project.

The Hibernacula Report has been updated to indicate that Transco will use seismically controlled blasting techniques in compliance with federal and state regulation. See the Hibernacula Report for more information. Transco does not expect the Project to directly or indirectly affect unknown or unsurveyed culverts outside of the Project LOD.

USFWS Comment 7: The summary of results at the start of the report indicates that all structures were surveyed during the summer survey season and that no surveys are planned for 2025. However, based on information later in the report, it sounds like there are still four structures that need to be surveyed (to get to the total of 58 structures) as well as a couple of emergence surveys. Can you please clarify?

Transco Response: Sanders updated the Structures Report to clarify that the remaining four structures that were not surveyed in 2024 are anticipated to be assessed for bat use in

2025.

USFWS Comment 8: It is difficult to tell from the report which culverts and structures were in the year round vs. hibernation range and whether they were surveyed during the appropriate windows. I think all of the more southern sites are in the year-round range, but that some of the northern sites are in the hibernation range. Is it possible to clarify in the results perhaps by either adding which range a culvert/structure is in to the data sheet or adding a field to the tables?

Transco Response: Sanders updated both reports to include hibernating and active range labels in the results summary tables.

Transco appreciates your attention to the Project and looks forward to your guidance and concurrence on the attached reports. Should you have questions related to this report, please let us know.

Thanks!

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



GAI Consultants

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From: Jason Duffey

Sent: Friday, November 22, 2024 2:28 PM

To: 'Cameron, Susan' <susan_cameron@fws.gov>

Cc: Jennifer Broush <j.broush@gaiconsultants.com>; kevinc@whmgroup.com; chris@batgate.com; Josh Henry <Josh.Henry@williams.com>; Tompkins, Bryan <bryan_tompkins@fws.gov>; Katherine Etchison <katherine.etchison@ncwildlife.org>; Munzer, Olivia <olivia.munzer@ncwildlife.org>; Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>

Subject: RE: [EXTERNAL] Transco SSE - NC Bat Survey Reports USFWS Project Codes: 2024-0136694, 2024-0047469, 2024-0047464, 2024-0047462, 2024-0137949, 2024-0137941, and 2024-0047458

Thank you, Sue! We will address the comments and get back to you.

Thanks,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042
M 937.554.8488



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From: Cameron, Susan <susan_cameron@fws.gov>

Sent: Friday, November 22, 2024 1:26 PM

To: Jason Duffey <J.Duffey@gaiconsultants.com>

Cc: Jennifer Broush <j.broush@gaiconsultants.com>; kevinc@whmgroup.com; chris@batgate.com; Josh Henry <Josh.Henry@williams.com>; Tompkins, Bryan <bryan_tompkins@fws.gov>; Katherine Etchison <katherine.etchison@ncwildlife.org>; Munzer, Olivia <olivia.munzer@ncwildlife.org>; Irizarry, Amariyls (Ami) <amarilys_irizarry@fws.gov>

Subject: Re: [EXTERNAL] Transco SSE - NC Bat Survey Reports USFWS Project Codes: 2024-0136694, 2024-0047469, 2024-0047464, 2024-0047462, 2024-0137949, 2024-0137941, and 2024-0047458

EXERCISE CAUTION: This is an External Email Message!

Think before clicking on links, opening attachments, or responding

Hi Jason,

Thanks again for sharing the report and sorry for the delay in review. I have the following questions and comments.

- Since you are still working on the acoustic analysis, I wanted to provide a reminder that during review of the study plan, USFWS and partners had recommended included gray bats on the acoustic software list for Rockingham, Cleveland and Iredell counties in NC.
- Based on Figure 2, it looks like there are a large number of mines near King's Mountain. Are these all mines or is this a mistake?
- Can you add project component names to the maps so we can easily cross reference the list of mines with the maps?
- We have lots of caves in NC that are used by bats and are not in karst. These are largely fissure caves and boulder caves. Did you look for these types of features or talk to local grottos?
- The report states, "For the culverts visited outside of the survey season, and potential

suitability was confirmed, but presence/absence will not be determined until the culvert is assessed within the appropriate survey season in 2025." How are you defining 'potential suitability' or is the intention to revisit all culverts of appropriate length/width?

- It is my understanding that suitable culverts (per the survey guidance) that will be directly impacted (e.g., replaced) we're surveyed. Can you remind me if there is any blasting or other activities that would indirectly impact culvert roosts? I just want to make sure we've covered all of the culvert surveys that are needed.
- The summary of results at the start of the report indicates that all structures were surveyed during the summer survey season and that no surveys are planned for 2025. However, based on information later in the report, it sounds like there are still four structures that need to be surveyed (to get to the total of 58 structures) as well as a couple of emergence surveys. Can you please clarify?
- It is difficult to tell from the report which culverts and structures were in the year round vs. hibernation range and whether they were surveyed during the appropriate windows. I think all of the more southern sites are in the year-round range, but that some of the northern sites are in the hibernation range. Is it possible to clarify in the results perhaps by either adding which range a culvert/structure is in to the data sheet or adding a field to the tables?

Best,
Sue

Sue Cameron
U. S. Fish and Wildlife Service
Asheville Field Office
160 Zillicoa Street
Asheville, NC 28801
828-450-7469
susan_cameron@fws.gov

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From: Munzer, Olivia <olivia.munzer@ncwildlife.org>
Sent: Tuesday, November 12, 2024 5:11 AM
To: Cameron, Susan <susan_cameron@fws.gov>; Jason Duffey <J.Duffey@gaiconsultants.com>
Cc: Jennifer Broush <j.broush@gaiconsultants.com>; kevinc@whmgroup.com

<kevinc@whmgroup.com>; chris@batgate.com <chris@batgate.com>; Josh Henry
<Josh.Henry@williams.com>; Tompkins, Bryan <bryan_tompkins@fws.gov>; Etchison, Katherine
<katherine.etchison@ncwildlife.org>

Subject: Re: [EXTERNAL] Transco SSE - NC Bat Survey Reports USFWS Project Codes: 2024-0136694, 2024-0047469, 2024-0047464, 2024-0047462, 2024-0137949, 2024-0137941, and 2024-0047458

Good morning,

My apologies. I had a family emergency come up. I will review the report this week.

Olivia Munzer

NC Wildlife Resources Commission

336-269-0074

From: Cameron, Susan <susan_cameron@fws.gov>

Sent: Monday, November 4, 2024 9:03 AM

To: Jason Duffey <J.Duffey@gaiconsultants.com>; Munzer, Olivia <olivia.munzer@ncwildlife.org>

Cc: Jennifer Broush <j.broush@gaiconsultants.com>; kevinc@whmgroup.com

<kevinc@whmgroup.com>; chris@batgate.com <chris@batgate.com>; Josh Henry

<Josh.Henry@williams.com>; Tompkins, Bryan <bryan_tompkins@fws.gov>; Etchison, Katherine

<katherine.etchison@ncwildlife.org>

Subject: Re: [EXTERNAL] Transco SSE - NC Bat Survey Reports USFWS Project Codes: 2024-0136694, 2024-0047469, 2024-0047464, 2024-0047462, 2024-0137949, 2024-0137941, and 2024-0047458

CAUTION: External email. Do not click links or open attachments unless verified. Report suspicious emails with the Report Message button located on your Outlook menu bar on the Home tab.

Thank you Jason. I was able to access the report and will review it this week.

Best,

Sue

Sue Cameron

U. S. Fish and Wildlife Service

Asheville Field Office

160 Zillico Street

Asheville, NC 28801

828-450-7469

susan_cameron@fws.gov

NOTE: This email correspondence and any attachments to and from this sender is subject to the Freedom of Information Act (FOIA) and may be disclosed to third parties. ?

From: Jason Duffey <J.Duffey@gaiconsultants.com>
Sent: Tuesday, October 29, 2024 3:18 PM
To: Cameron, Susan <susan_cameron@fws.gov>; 'Munzer, Olivia' <olivia.munzer@ncwildlife.org>
Cc: Jennifer Broush <j.broush@gaiconsultants.com>; kevinc@whmgroupp.com <kevinc@whmgroupp.com>; chris@batgate.com <chris@batgate.com>; Josh Henry <Josh.Henry@williams.com>; Tompkins, Bryan <bryan_tompkins@fws.gov>; 'Etchison, Katherine' <katherine.etchison@ncwildlife.org>
Subject: [EXTERNAL] Transco SSE - NC Bat Survey Reports USFWS Project Codes: 2024-0136694, 2024-0047469, 2024-0047464, 2024-0047462, 2024-0137949, 2024-0137941, and 2024-0047458

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Ms. Cameron and Ms. Munzer,

Transcontinental Gas Pipe Line Company, LLC. (Transco), an indirect, wholly owned subsidiary of The Williams Companies, Inc. (Williams), is seeking authorization from the Federal Energy Regulatory Commission under Sections 7(b) and 7(c) of the Natural Gas Act for appropriate abandonment authority and a certificate of public convenience and necessity (Certificate) to construct, own, operate, and maintain the proposed Southeast Supply Enhancement Project (Project) facilities.

Transco is pleased to provide the linked Bat Survey Reports for your review and comment. Transco conducted various bat surveys along the portions of the Project in NC in 2024, based on the most recent USFWS guidelines. The following secure link allows those copied on this email to download the cover letter and reports:

 [NC Bat Reports](#)

If someone else in your organization requires access to download the reports, please notify me and I can grant access.

Transco appreciates your attention to the Project and looks forward to your guidance and concurrence on the attached reports. Should you have questions related to this report, please let us know.

Thank you,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



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From: [Jason Duffey](#)
To: [Virginia Field Office, FW5](#); rick.reynolds@dwr.virginia.gov; [Case, Rachel L](#); [Irizarry, Amariyls \(Ami\)](#)
Cc: [Josh Henry](#); kevinc@whmgroupp.com; chris@batgate.com; [Jennifer Broush](#)
Subject: Transco SSE - VA Bat Acoustic Survey Report USFWS Project Codes: 2024-0047474 and 2024-0137992
Date: Thursday, December 19, 2024 6:47:03 PM
Attachments: [image002.png](#)
[image003.png](#)

Ms. Case and Mr. Reynolds,

RE: Bat Acoustic Survey Report

Transcontinental Gas Pipe Line Company, LLC. (Transco), an indirect, wholly owned subsidiary of The Williams Companies, Inc. (Williams), is seeking authorization from the Federal Energy Regulatory Commission under Sections 7(b) and 7(c) of the Natural Gas Act for appropriate abandonment authority and a certificate of public convenience and necessity (Certificate) to construct, own, operate, and maintain the proposed Southeast Supply Enhancement Project (Project) facilities.

Transco is pleased to provide the linked Bat Acoustics Survey Report for your review and comment. Transco previously submitted Bat Mist Net, Structures, Culverts, and Hibernacula Survey Reports to you via the link below on October 29, 2024. The following secure link allows those copied on this email to download the cover letter and reports:

 [VA Bat Reports](#)

If someone else in your organization requires access to download the reports, please notify me and I can grant access.

Transco appreciates your attention to the Project and looks forward to your guidance and concurrence on the attached reports. Should you have questions related to this report, please let us know.

Thank you,

Jason Duffey

Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

M 937.554.8488



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From: [Jennifer Broush](#)
To: [Luu, Jackie A](#); [Watson, Brian \(DWR\)](#); [Jennifer Stanhope](#); ["Emily E"](#)
Cc: [Henry, Joshua](#); [Jeremy Alberts](#); [Casey Swecker](#); [shauna.akers@williams.com](#); [Jason Duffey](#)
Subject: Transco SSE - VA Freshwater Mussel Survey and RLP Habitat Assessments - 1 of 2
Date: Wednesday, December 18, 2024 2:43:00 PM
Attachments: [241218 Transco SSE VA RLP and Mussels Reports_OUT.pdf](#)
[AttA Transco SSE Virginia Mussel Survey Report.pdf](#)

Ms. Luu and Mr. Watson (**Email 1 of 2**),

Transcontinental Gas Pipe Line Company, LLC (Transco) is pleased to submit the Virginia (VA) Freshwater Mussel Survey Report and Roanoke Logperch Habitat Assessments which were conducted in support of the proposed Southeast Supply Enhancement (Project) in Pittsylvania County, VA. We look forward to your review and comment regarding these reports and are available to discuss at your convenience. We are submitting via two emails due to the size of the files.

We appreciate the continued coordination between Transco, U.S. Fish and Wildlife Service VA Field office, and VA Department of Wildlife Resources regarding sensitive species in VA. Should you have any questions while reviewing, please do not hesitate to contact Josh Henry (Transco) or me. If the size of the documents are too large to be accepted, we will provide a link to download.

Regards,
Jennifer

Jennifer Broush, MBA

Senior Associate / Environmental Director

GAI Consultants, 385 E. Waterfront Drive, Homestead, PA 15120-5005

D 412.399.5317 **M** 724.516.1155 **E** j.broush@gaiconsultants.com

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From: [Jennifer Broush](#)
To: [Luu, Jackie A](#); [Watson, Brian \(DWR\)](#); [Jennifer Stanhope](#); [Emily E](#)
Cc: [Henry, Joshua](#); [Jeremy Alberts](#); [Casey Swecker](#); [shauna.akers@williams.com](#); [Jason Duffey](#)
Subject: Transco SSE - VA Freshwater Mussel Survey and RLP Habitat Assessments - 2 of 2
Date: Wednesday, December 18, 2024 2:47:00 PM
Attachments: [AttB Transco SSE Virginia Roanoke Logperch Habitat Assessment.pdf](#)

Ms. Luu and Mr. Watson (**Email 2 of 2**),

Transcontinental Gas Pipe Line Company, LLC (Transco) is pleased to submit the Virginia (VA) Freshwater Mussel Survey Report and Roanoke Logperch Habitat Assessments which were conducted in support of the proposed Southeast Supply Enhancement (Project) in Pittsylvania County, VA. We look forward to your review and comment regarding these reports and are available to discuss at your convenience. We are submitting via **two emails** due to the size of the files.

We appreciate the continued coordination between Transco, U.S. Fish and Wildlife Service VA Field office, and VA Department of Wildlife Resources regarding sensitive species in VA. Should you have any questions while reviewing, please do not hesitate to contact Josh Henry (Transco) or me. If the size of the documents are too large to be accepted, we will provide a link to download.

Regards,
Jennifer

Jennifer Broush, MBA

Senior Associate / Environmental Director

GAI Consultants, 385 E. Waterfront Drive, Homestead, PA 15120-5005

D 412.399.5317 **M** 724.516.1155 **E** j.broush@gaiconsultants.com

[Facebook](#) | [YouTube](#) | [LinkedIn](#) | [Instagram](#) | [Glassdoor](#) | [News & Insights](#)

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Transcontinental Gas Pipe Line Company, LLC
2800 Post Oak Boulevard (77056)
P.O. Box 1396
Houston, Texas 77251-1396
713-215-2000

December 18, 2024

Ms. Jackie Luu
United States Fish and Wildlife Service
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061

Mr. Brian Watson
Virginia Department of Wildlife Resources
Region 2 Office
1132 Thomas Jefferson Road
Forest, VA 24551

Re: Threatened and Endangered Species Project Review: Aquatic Species Survey Reports and Habitat Assessments
USFWS Project Codes: 2024-0047474 and 2024-0137992
Transcontinental Gas Pipe Line Company, LLC
Southeast Supply Enhancement Project – Eden Loop Pipeline and Compressor Station 165
Pittsylvania County, VA

Dear Ms. Luu and Mr. Watson:

Transcontinental Gas Pipe Line Company, LLC (Transco), an indirect, wholly owned subsidiary of The Williams Companies, Inc. (Williams), is submitting the Virginia Freshwater Mussel Survey Report and Habitat Assessments for Roanoke Logperch conducted in support of the proposed Southeast Supply Enhancement (Project) in Pittsylvania County, Virginia (VA).

Project Description

Transco is seeking authorization from the Federal Energy Regulatory Commission (FERC or Commission) under Sections 7(b) and 7(c) of the Natural Gas Act for appropriate abandonment authority and a Certificate of Public Convenience and Necessity (Certificate) to construct, own, operate, and maintain the proposed Project facilities.

The Project is an expansion of Transco's existing natural gas transmission system that will enable Transco to provide 1,596,900 dekatherms per day (Dth/d) of incremental firm transportation capacity to remove pipeline capacity constraints in Zones 4 and 5 and meet growing natural gas-fired power generation, commercial, residential, and industrial demand in the southeast United States. Transco is proposing to collocate the proposed Project within or adjacent to the existing Transco Mainline System to the extent practicable. This collocation design will help reduce the overall operational footprint of the Project, minimizing new disturbances to the extent practicable. The Project will consist of the following components (bolded components are located in VA):

Pipeline Facilities

- **Approximately 26.4 miles of 42-inch-diameter pipeline in Pittsylvania County, VA** and approximately 4.4 miles of 42-inch-diameter pipeline in Rockingham County, North Carolina (NC), **designated as the Eden Loop;**
 - Regulator installation in Rockingham County, NC near milepost (MP) 1382.53, designated as the Eden Regulator Station;
 - Approximately 294 feet of 30-inch-diameter pipeline and ancillary valves in Rockingham County, NC, designated as the Dan River Inlet Piping; and,
- Approximately 24.1 miles of 42-inch-diameter pipeline in Guilford, Forsyth, and Davidson Counties, NC, designated as the Salem Loop.

Compression Facilities

- **The addition of two [33,000 horsepower (HP) each] electric motor-driven (EMD) compressor units at Transco's existing Compressor Station 165 located in Pittsylvania County,**



Transcontinental Gas Pipe Line Company, LLC
2800 Post Oak Boulevard (77056)
P.O. Box 1396
Houston, Texas 77251-1396
713-215-2000

VA. Compressor Station 165 will be limited to a total incremental output of 45,000 HP, thereby increasing the total certificated station output to 96,930 HP;

- The addition of one [23,465 International Standardization Organization (ISO) HP] Solar Titan 130 Turbine and two (31,871 ISO HP each) Solar Titan 250 Turbine driven compressor units at Transco's existing Compressor Station 155 located in Davidson County, NC. Compressor Station 155 will have a total incremental output of 87,207 HP, thereby increasing the total certificated station output to 110,709 HP;
- The addition of one (15,900 ISO HP) Solar Mars 100 Turbine driven compressor unit at Transco's existing Compressor Station 150 in Iredell County, NC. Compressor Station 150 will have a total incremental output of 15,900 HP, thereby increasing the total certificated station output to 77,830 HP; and
- The addition of three (33,000 HP each) EMD compressor units at Transco's existing Compressor Station 145 in Cleveland County, NC, to provide the incremental HP required by the Project and accommodate the abandonment (in-place) of three (12,500 HP each) existing EMD Compressor Units. Compressor Station 145 will have a total incremental output of 61,500 HP, thereby increasing the total certificated station output to 99,000 HP.

Facility Modifications

- Modifications to valve controls at existing mainline valve (MLV) setting MLV-145B21 in Lincoln County, NC;
- Modifications to valve controls at existing MLV setting MLV-145B20 in Gaston County, NC;
- Piping modifications at Transco's existing Compressor Station 135 in Anderson County, South Carolina (SC) to make the station bi-directional;
- Piping modifications at Transco's existing Compressor Station 125 in Walton County, Georgia (GA) to make the station bi-directional;
- Regulator installation and piping modifications at Transco's existing Compressor Station 120 in Henry County, GA to make the station bi-directional; and
- Piping modifications at Transco's existing Compressor Station 105 in Coosa County, Alabama (AL) to make the station bi-directional.

The use of existing, improved, and new access roads, and contractor yards will also be required for the Project. Additional ancillary facilities and piping, such as MLVs, cathodic protection, communication facilities, and internal inspection devices (e.g., pig launchers and receivers) will be necessary to support the Project.

Subject to FERC's certification of the Project and receipt of other necessary permits and authorizations, Transco anticipates that construction of the Project would commence in the third quarter of 2026 to meet a proposed in-service date of November 1, 2027.

Listed Aquatic Species

Based on a Project review conducted through the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) system, the Project is in the range of the following listed aquatic species in VA:

- Green Floater (*Lasmigona subviridis*) – Fed: Proposed Threatened; VA: Threatened
- Roanoke logperch (*Percina rex*) – Fed: Endangered; VA: Endangered

Based on desktop review the green floater is known to occur in the lower Banister River, downstream of Lake Banister, approximately 50 stream miles from the Project and is the only record of this species in the Banister River. The green floater and Roanoke logperch are known to occur in the Dan River and Cascade Creek. The Project crosses these streams in NC.



Transcontinental Gas Pipe Line Company, LLC
2800 Post Oak Boulevard (77056)
P.O. Box 1396
Houston, Texas 77251-1396
713-215-2000

Summary of Consultation with the USFWS VA Field Office and VA DWR regarding aquatic surveys

- March 20, 2024 – Transco provided a letter to the USFWS VA Field Office initiating consultation on threatened and endangered species, the Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act.
- April 5, 2024 – Transco provided a letter to the VA Department of Wildlife Resources (DWR) requesting a threatened and endangered species Project review.
- May 7, 2024 – The VA DWR responded to Transco’s letter providing recommendations and information regarding threatened and endangered species.
- July and August 2024 – Transco submitted the results of a mussel habitat assessment and a freshwater mussel survey study plan to the USFWS VA Field Office and the VA DWR. The USFWS VA Field Office and the VA DWR approved the freshwater mussel survey study plan.
- August and September 2024 – Transco submitted a preliminary Roanoke logperch habitat assessment in support of a survey plan to USFWS VA Field Office and VA DWR. VA DWR concurred with the methodology and findings related to the Roanoke logperch plans. USFWS VA Field Office recommended Transco not conduct surveys for Roanoke logperch and requested additional information be provided to evaluate potential impacts to the Roanoke logperch.

Summary of Results of the VA Freshwater Mussel Survey and Habitat Assessments for Roanoke Logperch

Freshwater Mussel Survey

In VA, Transco conducted in field mussel habitat assessments at 17 stream crossings and completed subsequent mussel occupancy surveys at 15 Project stream crossings during the 2024 VA mussel survey season during normal to low flow (i.e., suitable for mussel surveys) stream conditions. None of the surveyed reaches supported green floater populations or habitat to suggest rare, threatened, or endangered mussel species were present within the vicinity of the Project. No incidental observations of Roanoke logperch occurred while conducting the mussel habitat or occupancy surveys. The freshwater mussel survey report is included herein as Attachment A.

Roanoke Logperch Habitat Assessments

Transco identified six streams traversed by or near the Project as having potential to support Roanoke logperch in VA. Four of the streams are crossed by the Project while two streams are adjacent to Project workspace. These streams were assessed to determine if they could support Roanoke logperch in the vicinity of proposed Project crossings. Within the study areas, none of the streams provide habitat of the quality and quantity that would readily indicate the likely permanent presence of Roanoke logperch. No Roanoke logperch were observed during any of the field habitat assessments. The Roanoke logperch habitat assessment report is included herein as Attachment B.

Avoidance and Minimization Measures

Transco proposes to cross the Banister River, UNT1 Banister River, and Sandy River (and the Dan River and Cascade Creek in NC) via horizontal directional drill (HDD). If an HDD is unsuccessful, Transco will implement its contingency plan included within the HDD Monitoring, Inadvertent Return Response, and Contingency Plan. Transco is proposing to cross Sandy Creek using dry open-cut installation methods. There are no known occurrences of Roanoke logperch in Sandy Creek, and the Project crosses the stream approximately 13.1 miles upstream of its confluence with the Dan River. The remaining two streams assessed for Roanoke logperch habitat are adjacent to Project workspace and will not be crossed.

Transco will implement erosion and sediment control measures and best management practices as described in the Transco Plan and Procedures as well as in accordance with state and federal requirements.



Transcontinental Gas Pipe Line Company, LLC
2800 Post Oak Boulevard (77056)
P.O. Box 1396
Houston, Texas 77251-1396
713-215-2000

Transco is seeking review and concurrence on the mussel survey results and the findings within Roanoke logperch habitat assessments and the proposed avoidance and minimization measures to be employed for the Project.

Transco is committed to continue to coordinate with USFWS VA Field Office and VA DWR on the avoidance and minimization of effects to listed aquatic species. Should Project alignments change warranting additional survey or habitat assessments, Transco would complete that work, as applicable, and would provide an addendum to the agencies.

If you have questions regarding this correspondence and information request, or if you require additional information, please contact me at 412-713-0485 or email Josh.Henry@williams.com. Alternatively, you may contact Jennifer Broush of GAI Consultants, Inc., at 724-516-1155 or via e-mail at j.broush@gaiconsultants.com. We appreciate your assistance and thank you for your attention to this request.

Respectfully submitted,

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC

A handwritten signature in blue ink, appearing to read "Joshua J. Henry". The signature is written in a cursive, flowing style.

Josh Henry
Environmental Specialist

Attachments:

Attachment A (Virginia Freshwater Mussel Survey Report)
Attachment B (Habitat Assessments for Roanoke Logperch)

cc: Jennifer Broush, GAI Consultants, Inc.

From: [Jason Duffey](#)
To: [Irizarry, Amariyls \(Ami\)](#); [Virginia Field Office, FW5](#); rick.reynolds@dwr.virginia.gov
Cc: ["Josh Henry"](#); kevinc@whmggroup.com; chris@batgate.com; [Jennifer Broush](#)
Subject: Transco SSE - VA Bat Survey Reports USFWS Project Codes: 2024-0047474 and 2024-0137992
Date: Tuesday, October 29, 2024 2:51:00 PM
Attachments: [image001.png](#)
[image002.png](#)

Ms. Irizarry and Mr. Reynolds,

Transcontinental Gas Pipe Line Company, LLC. (Transco), an indirect, wholly owned subsidiary of The Williams Companies, Inc. (Williams), is seeking authorization from the Federal Energy Regulatory Commission under Sections 7(b) and 7(c) of the Natural Gas Act for appropriate abandonment authority and a certificate of public convenience and necessity (Certificate) to construct, own, operate, and maintain the proposed Southeast Supply Enhancement Project (Project) facilities.

Transco is pleased to provide the linked Bat Survey Reports for your review and comment. Transco conducted various bat surveys along the portions of the Project in VA in 2024, based on the most recent USFWS guidelines. The following secure link allows those copied on this email to download the cover letter and reports:

 [VA Bat Reports](#)

If someone else in your organization requires access to download the reports, please notify me and I can grant access.

Transco appreciates your attention to the Project and looks forward to your guidance and concurrence on the attached reports. Should you have questions related to this report, please let us know.

Thank you,

Jason Duffey
Assistant Environmental Manager

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042
M 937.554.8488



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From: [Jeremy Alberts](#)
To: [Doucette, Tamara \(DWR\)](#)
Cc: [Schul, Hannah \(DWR\)](#); [Strawderman, Nicole \(DWR\)](#); [Josh Henry](#); [Jennifer Broush](#)
Subject: Re: Southeast Supply Enhancement Project- RLP Consultation- IPAC Project Code:2024-0047474
Date: Monday, September 16, 2024 10:15:06 PM
Attachments: [Outlook-mwm0kztj.png](#)
[Outlook-mwm0kztj.png](#)

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Thank you both, I appreciate the response!

Jeremy
Jeremy M. Alberts, Ph.D.
(304) 308-0160
Teays Valley, WV
www.envsi.com

On Sep 16, 2024, at 5:16 AM, Doucette, Tamara (DWR)
<Tamara.Doucette@dwr.virginia.gov> wrote:

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Jeremy,

Our taxa expert has reviewed these RLP documents and concurs with the plan/methodology and findings. Let us know if you need anything further regarding this project.

Thank you,

Tamara

Tamara Doucette
Environmental Services Biologist
Wildlife Information and Environmental Services

P 804.367.8364



Department of Wildlife Resources

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7870 Villa Park Drive, P.O. Box 90778, Henrico, VA 23228
www.VirginiaWildlife.gov

From: Schul, Hannah (DWR) <Hannah.Schul@dwr.virginia.gov>

Sent: Monday, September 16, 2024 10:57 AM

To: Jeremy Alberts <JAlberts@envsi.com>

Cc: Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>; Strawderman, Nicole (DWR) <Nicole.Strawderman@dwr.virginia.gov>

Subject: Re: Southeast Supply Enhancement Project- RLP Consultation- IPAC Project Code:2024-0047474

Good morning Jeremy,

The study plan and habitat assessment report were sent to our taxonomic expert for review. Field season often extends typical review timeframes. We will be in touch once we receive a response.

Thank you for your patience.



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Hannah Schul

Environmental Services Program Manager
(804) 968-8546

[Virginia Department of Wildlife Resources](http://www.VirginiaWildlife.gov)

7870 Villa Park Drive
P.O. Box 90778
Henrico, VA 23228

<https://dwr.virginia.gov/wies/environmental-services/>

From: Jeremy Alberts <JAlberts@envsi.com>
Sent: Friday, September 6, 2024 11:19 AM
To: Henry, Joshua <Josh.Henry@williams.com>
Cc: Virginia Field Office, FW5 <virginiafieldoffice@fws.gov>; Luu, Jackie A <jackie_luu@fws.gov>; Jennifer Stanhope <jennifer_stanhope@fws.gov>; Schul, Hannah (DWR) <Hannah.Schul@dwr.virginia.gov>; Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>; Strawderman, Nicole (DWR) <Nicole.Strawderman@dwr.virginia.gov>; Brann, Lee (DWR) <Lee.Brann@dwr.virginia.gov>; Broush, Jennifer (EXT) <j.broush@gaiconsultants.com>
Subject: Re: Southeast Supply Enhancement Project- RLP Consultation- IPAC Project
Code:2024-0047474

Hi all,

I wanted to check in and see if anyone has any questions on either the study plan or habitat assessment report.

Thanks,
Jeremy

Jeremy M. Alberts, Ph.D.
(304) 308-0160
Teays Valley, WV
www.envsi.com

On Aug 27, 2024, at 2:51 PM, Henry, Joshua
<Josh.Henry@williams.com> wrote:

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All,

Transcontinental Gas Pipe Line Company, LLC (Transco) is pleased to submit the attached Roanoke Loggerch Habitat Assessment and Roanoke Loggerch Study Plan for the Southeast Supply Enhancement Project to UFSWS and Virginia DWR for review. We ask for your review of this information and concurrence on the proposed surveys. We are available to answer questions or discuss in more detail as needed.

Thank you,

[<image001.png>](#)

Josh Henry | Williams | Environmental Specialist

Phone: 412-713-0485 | 2000 Commerce Drive, Park Place 2, Pittsburgh, PA, 15275

[<image002.png>](#)

[<image003.png>](#)

[<image004.png>](#)

[<image005.png>](#)

[<image006.png>](#)

[<image007.png>](#)

If you have received this message in error, please reply to advise the sender of the error and then immediately delete this message.

<Pesi 2302 Transco SESE Eden Loop VA_Roanoke Logperch
Habitat Assessment_27 August 2024.pdf>

<Pesi 2302 Transco SESE Eden Loop_Roanoke Logperch Study
Plan_27 August 2024.pdf>

Sarah L. Turton

From: Shaun Kline <skline@envsi.com>
Sent: Friday, September 6, 2024 11:28 AM
To: jackie_luu@fws.gov; troy_andersen@fws.gov; Rick.Reynolds@DWR.virginia.gov; Tamara.Doucette@DWR.virginia.gov; Sergio.Harding@DWR.virginia.gov
Cc: Jeremy Alberts; Jennifer Broush; Josh Henry; Jason Duffey
Subject: Southeast Supply Enhancement Project Bald Eagle Survey Study Plan (Virginia)
Attachments: Pesi 2302_Transco SESE_Bald Eagle Study Plan_Eden Loop Virginia_6 September 2024.pdf

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All:

On behalf of Transco, please find the proposed study plan for bald eagle surveys for the Southeast Supply Enhancement Project (Project) attached. We are looking for concurrence and authorization to proceed with the proposed methods and surveys in the Project area.



Shaun Kline, Ph.D., P.E.

Vice President

Environmental Solutions & Innovations, Inc.
1158 Dutilh Road
Mars, Pennsylvania 16046-9448
office: 513.451.1777 | fax: 513.451.3321
cell: 352.514.3340

skline@envsi.com | www.envsi.com



From: [Henry, Joshua](#)
To: [Virginia Field Office, FW5](#); [Luu, Jackie A](#); [Jennifer Stanhope](#); [Schul, Hannah \(DWR\)](#); [Doucette, Tamara \(DWR\)](#); [Strawderman, Nicole \(DWR\)](#); [Brann, Lee \(DWR\)](#)
Cc: [Jennifer Broush](#); [Jeremy Alberts](#)
Subject: Southeast Supply Enhancement Project- RLP Consultation- IPAC Project Code:2024-0047474
Date: Tuesday, August 27, 2024 5:51:52 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)
[Pesi 2302 Transco SESE Eden Loop VA Roanoke Logperch Habitat Assessment_27 August 2024.pdf](#)
[Pesi 2302 Transco SESE Eden Loop Roanoke Logperch Study Plan_27 August 2024.pdf](#)

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All,

Transcontinental Gas Pipe Line Company, LLC (Transco) is pleased to submit the attached Roanoke Logperch Habitat Assessment and Roanoke Logperch Study Plan for the Southeast Supply Enhancement Project to UFSWS and Virginia DWR for review. We ask for your review of this information and concurrence on the proposed surveys. We are available to answer questions or discuss in more detail as needed.

Thank you,

Josh Henry | Williams | Environmental Specialist

Phone: 412-713-0485 | 2000 Commerce Drive, Park Place 2, Pittsburgh, PA, 15275



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From: Schul, Hannah (DWR)
To: Jennifer Broush; Jennifer Stanhope; Watson, Brian (DWR); Luu, Jackie A; Troy Andersen; Doucette, Tamara (DWR); Irizarry, Amariyls (Ami)
Cc: Josh Henry; Akers, Shauna; Casey Swecker; Brann, Lee (DWR); Strawderman, Nicole (DWR); Doucette, Tamara (DWR)
Subject: Re: Updated(2) Transco SSE - Mussel Survey Plan (VA)
Date: Wednesday, August 14, 2024 11:54:02 AM
Attachments: [image001.png](#)
[image002.png](#)
[Outlook-thabpq2v.png](#)

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Hi Jennifer,

DWR is supportive of the updated mussel survey plan as proposed. Please let me know if you have any further questions.

Thank you,



Hannah Schul
Environmental Services Program Manager
(804) 968-8546

[Virginia Department of Wildlife Resources](#)

7870 Villa Park Drive
P.O. Box 90778
Henrico, VA 23228

<https://dwr.virginia.gov/wies/environmental-services/>

From: Jennifer Broush <j.broush@gaiconsultants.com>
Sent: Tuesday, August 13, 2024 5:45 PM
To: Jennifer Stanhope <jennifer_stanhope@fws.gov>; Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Luu, Jackie A <jackie_luu@fws.gov>; Troy Andersen <troy_andersen@fws.gov>; Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>; Schul, Hannah (DWR) <Hannah.Schul@dwr.virginia.gov>; Irizarry, Amariyls (Ami) <amarilys_irizarry@fws.gov>
Cc: Josh Henry <Josh.Henry@williams.com>; Akers, Shauna <shauna.akers@williams.com>; Casey Swecker <cadswecker@edge-es.com>
Subject: Updated(2) Transco SSE - Mussel Survey Plan (VA)

Transco is pleased to submit the attached **updated** mussel survey plan for the Southeast Supply Enhancement to USFWS and Virginia DWR for review. The updated plan incorporates all currently identified Project alternatives and comments received to date.

We ask for your review of this information and guidance on the anticipated planned surveys. We are available to answer questions or discuss further as needed.

Thank you,
Jennifer

Jennifer Broush, MBA
Associate / Director, Environmental and Energy Services
GAI Consultants, 385 E. Waterfront Drive, Homestead, PA 15120-5005
D 412.399.5317 **M** 724.516.1155 **E** j.broush@gaiconsultants.com

From: Stanhope, Jennifer W <jennifer_stanhope@fws.gov>
Sent: Wednesday, August 7, 2024 12:38 PM
To: Jennifer Broush <j.broush@gaiconsultants.com>; Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Luu, Jackie A <jackie_luu@fws.gov>; Andersen, Troy M <troy_andersen@fws.gov>; Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>; Schul, Hannah (DWR) <Hannah.Schul@dwr.virginia.gov>; Irizarry, Amariyls (Ami) <amarilys_irizarry@fws.gov>
Cc: Josh Henry <Josh.Henry@williams.com>; Akers, Shauna <shauna.akers@williams.com>; Casey Swecker <cadswecker@edge-es.com>
Subject: RE: [EXTERNAL] RE: Transco SSE - Mussel Survey Plan (VA)

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Jennifer,

Thank you for the revised mussel survey plan.

Please confirm that there are no additional alternative alignments for the Project that will cross a perennial stream with suitable mussel habitat

in Virginia.

Thank you,
Jen

Jennifer Stanhope (she/her)
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service - Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
Office: 804-905-9781 (note: new number)
jennifer_stanhope@fws.gov
<https://www.fws.gov/office/virginia-ecological-services>

From: Jennifer Broush <j.broush@gaiconsultants.com>
Sent: Friday, August 2, 2024 11:55 AM
To: Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Luu, Jackie A <jackie_luu@fws.gov>; Andersen, Troy M <troy_andersen@fws.gov>; Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>; Schul, Hannah (DWR) <Hannah.Schul@dwr.virginia.gov>; Irizarry, Amariyls (Ami) <amariyls_irizarry@fws.gov>
Cc: Josh Henry <Josh.Henry@williams.com>; Akers, Shauna <shauna.akers@williams.com>; Casey Swecker <cdswecker@edge-es.com>
Subject: RE: [EXTERNAL] RE: Transco SSE - Mussel Survey Plan (VA)

Jennifer,
Thank you for the comments below. We've updated the SSE Project's VA Mussel Survey Plan to include this alternative alignment for the Project which would cross the Banister River in a different location.
Please let us know if there are additional questions or comments.
We appreciate the agencies continued review and coordination on the Project.
Thank you,
Jennifer

From: Stanhope, Jennifer W <jennifer_stanhope@fws.gov>
Sent: Friday, July 26, 2024 8:02 PM
To: Watson, Brian (DWR) <brian.watson@dwr.virginia.gov>; Jennifer Broush <j.broush@gaiconsultants.com>; Luu, Jackie A <jackie_luu@fws.gov>; Andersen, Troy M <troy_andersen@fws.gov>; Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>; Schul, Hannah (DWR) <Hannah.Schul@dwr.virginia.gov>; Irizarry, Amariyls (Ami) <amariyls_irizarry@fws.gov>
Cc: Josh Henry <Josh.Henry@williams.com>; Akers, Shauna <shauna.akers@williams.com>; Casey Swecker <cdswecker@edge-es.com>
Subject: RE: [EXTERNAL] RE: Transco SSE - Mussel Survey Plan (VA)

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Jennifer,

We are fine with the mussel survey plan too, except we have a question about one area on the Banister River. In the shapefile shared with us for the proposed project in VA, there is this additional area that overlaps with the Banister River downriver of the pipeline crossing (see screenshot below). It's not clear what activity is occurring there. If instream work is proposed in this area, then I would recommend a full survey there. If there are other streams that will have instream work, please include them in the mussel survey plan and resubmit.

Jen



Jennifer Stanhope (she/her)
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service - Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
Office: 804-905-9781 (note: new number)
Jennifer_stanhope@fws.gov
<https://www.fws.gov/office/virginia-ecological-services>

From: Watson, Brian (DWR) <Brian.Watson@dwr.virginia.gov>
Sent: Friday, July 26, 2024 6:27 PM
To: Jennifer Broush <j.broush@gaiconsultants.com>; Luu, Jackie A <jackie_luu@fws.gov>; Andersen, Troy M <troy_andersen@fws.gov>; Stanhope, Jennifer W <jennifer_stanhope@fws.gov>; Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>; Schul, Hannah (DWR) <Hannah.Schul@dwr.virginia.gov>; Irizarry, Amariyls (Ami) <amariyls_irizarry@fws.gov>
Cc: Josh Henry <josh.henry@williams.com>; Akers, Shauna <shauna.akers@williams.com>; Casey Swecker <cdswecker@edge-es.com>
Subject: [EXTERNAL] RE: Transco SSE - Mussel Survey Plan (VA)

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Jennifer:

DWR is fine with the mussel survey plan as submitted. I received the scientific collection permit amendment request earlier today from our HQ, and I approved the changes on Edge's permit to include this project.

Brian



Brian T. Watson

Aquatic Resources Biologist/State Malacologist
P 434.525.7522, x114 / M 434.941.5990 / F 434.525.7720

Virginia Department of Wildlife Resources

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A 1132 Thomas Jefferson Road, Forest, VA 24551
www.dwr.virginia.gov

From: Jennifer Broush <j.broush@gaiconsultants.com>
Sent: Thursday, July 25, 2024 3:28 PM
To: Luu, Jackie A <jackie_luu@fws.gov>; Troy Andersen <troy_andersen@fws.gov>; Jennifer Stanhope <jennifer_stanhope@fws.gov>; Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>; Schul, Hannah (DWR) <Hannah.Schul@dwr.virginia.gov>; Watson, Brian (DWR) <Brian.Watson@dwr.virginia.gov>; Amariyls Irizarry <Amariyls_Irizarry@fws.gov>
Cc: Josh Henry <josh.henry@williams.com>; Akers, Shauna <shauna.akers@williams.com>; Casey Swecker <cdswecker@edge-es.com>
Subject: Transco SSE - Mussel Survey Plan (VA)

Transco is pleased to submit the attached mussel survey plan for the Southeast Supply Enhancement for USFWS and Virginia DWR review. Earlier this year Transco completed desktop analysis followed by in-field habitat assessments to identify streams which could support rare, threatened, or endangered mussels. This survey plan represents the resources identified in Virginia during those assessments which warrant further investigation. We ask for your review of this information and guidance on the anticipated planned surveys.

We are available to answer questions or discuss further as needed.

Thank you,
Jennifer

Jennifer Broush, MBA

Associate / Director, Environmental and Energy Services

GAI Consultants, 385 E. Waterfront Drive, Homestead, PA 15120-5005

D 412.399.5317 **M** 724.516.1155 **E** j.broush@gaiconsultants.com

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From: chris@batgate.com
To: ["Trizarry, Amariys \(Ami\)"](#); ["Cameron, Susan"](#); ["Reynolds, Richard \(DWR\)"](#); ["Munzer, Olivia"](#); ["Etchison, Katherine"](#); ["Tompkins, Bryan"](#)
Cc: [Josh Henry](#); [Jennifer Broush](#); [Jason Duffey](#); kevinc@whmgroup.com
Subject: RE: [EXTERNAL] Southeast Supply Enhancement - Southeast Supply Enhancement Structure Removal Plan Bats
Date: Thursday, August 8, 2024 2:02:13 PM
Attachments: [Southeast Supply Enhancement Structure Removal Plan Bats v1-2.pdf](#)

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Thanks for the review and comments, they are helpful, our responses are below.

- COMMENT: It's not clearly stated in the plan, but I assume the proposed structure surveys will be conducted following guidance on Appendix K of the [2024 Range-wide Indiana bat and northern long-eared bat survey guidelines](#) (guidelines)? If not, please describe your proposed structure survey methods.
- RESPONSE: The survey plan primarily follows the guidance in Appendix K; however, unlike bridges and culverts some structures have more inaccessible areas (E.X. under siding and roofing/roof sheathing), and there may be structures (for example, sheds) where we cannot perform interior inspection. In those cases we intend to do emergence counts, both human and night vision, which is not a favored method for bridges and culverts in Appendix K. On a bridge a crevice survey is more effective as bat roosting areas are more exposed, on a barn/shed emergence surveys as detailed in Appendix E Emergence Survey methodology for bat use detection are more effective at determining bat occupancy. In cases where the surveyor can't clear a structure based on the visual inspections called for in Appendix K, we plan to use the emergence survey methodology in Appendix E.
- COMMENT: We recommend using the sample data form at the end of Appendix K of the guidelines to submit with your survey report as it will ensure all the necessary information is provided to the USFWS Field Offices and expedite review of your survey report. If you choose to submit a different data form with your survey report, please ensure, at a minimum, it includes all information requested in the sample data form.
 - RESPONSE: Confirmed, we will do so.
- COMMENT: If bats are detected at a structure, please include high resolution photos for species ID (if/when feasible).

- RESPONSE: Confirmed, we will do so.
- COMMENT: If guano is present at a structure, we recommend collecting guano samples (if/when feasible) to identify bat species through DNA analysis. If you choose to collect guano samples for your survey, please refer to the guano sampling section of Appendix K in the guidelines.
- RESPONSE: Guano will be collected via the protocols outlined in Appendix K. The project is evaluating analysis, potential labs, and costs so we don't have a firm decision on analysis feasibility currently.

Thanks,
Chris

In review of this email chain, I noticed Bryan was not on it, so plan PDF is attached again on this email.

Chris Sanders



Sanders Environmental Inc.
322 Borealis Way
Bellefonte PA 16823
814-659-8257 (cell)

From: Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>

Sent: Wednesday, August 7, 2024 1:02 PM

To: chris@batgate.com; Cameron, Susan <susan_cameron@fws.gov>; 'Reynolds, Richard (DWR)' <Rick.reynolds@dwr.virginia.gov>; 'Munzer, Olivia' <olivia.munzer@ncwildlife.org>; 'Etchison, Katherine' <katherine.etchison@ncwildlife.org>

Cc: 'Josh Henry' <Josh.Henry@williams.com>; 'Jennifer Broush' <j.broush@gaiconsultants.com>; 'Jason Duffey' <J.Duffey@gaiconsultants.com>; kevinc@whmgroup.com

Subject: Re: [EXTERNAL] Southeast Supply Enhancement - Southeast Supply Enhancement Structure Removal Plan Bats

Hi Chris,

Thank you for the opportunity to review your proposed plan. Please see my comments/recommendations below:

- It's not clearly stated in the plan, but I assume the proposed structure surveys will be conducted following guidance on Appendix K of the [2024 Range-wide Indiana bat and northern long-eared bat survey guidelines](#) (guidelines)? If not, please describe your

- proposed structure survey methods.
- We recommend using the sample data form at the end of Appendix K of the guidelines to submit with your survey report as it will ensure all the necessary information is provided to the USFWS Field Offices and expedite review of your survey report. If you choose to submit a different data form with your survey report, please ensure, at a minimum, it includes all information requested in the sample data form.
 - If bats are detected at a structure, please include high resolution photos for species ID (if/when feasible).
 - If guano is present at a structure, we recommend collecting guano samples (if/when feasible) to identify bat species through DNA analysis. If you choose to collect guano samples for your survey, please refer to the guano sampling section of Appendix K in the guidelines.

Please reach out if you have any questions.

Good luck in the field,

Ami Irizarry

Pronouns: [she/her](#)

Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, VA 23061

Co-chair, [Regional JEDIA Team](#)
U.S. Fish and Wildlife Service
Northeast Region

(804) 767-7949

amarilys_irizarry@fws.gov

From: chris@batgate.com <chris@batgate.com>

Sent: Friday, August 2, 2024 2:38 PM

To: Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>; Cameron, Susan

<susan_cameron@fws.gov>; 'Reynolds, Richard (DWR)' <Rick.reynolds@dwr.virginia.gov>; 'Munzer, Olivia' <olivia.munzer@ncwildlife.org>; 'Etchison, Katherine' <katherine.etchison@ncwildlife.org>

Cc: 'Josh Henry' <Josh.Henry@williams.com>; 'Jennifer Broush' <j.broush@gaiconsultants.com>; 'Jason Duffey' <J.Duffey@gaiconsultants.com>; kevinc@whmgroup.com <kevinc@whmgroup.com>

Subject: [EXTERNAL] Southeast Supply Enhancement - Southeast Supply Enhancement Structure Removal Plan Bats

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Hello All,

Attached is the proposed plan for bat impact minimization and avoidance for structures that may need to be removed or demolished as part of the SSE project.

This does involve a round of structure surveys this season, please review/comment/let us know your thoughts, as in VA structure surveys will be completed in the next two weeks.

Thanks,
Chris

Chris Sanders



Sanders Environmental Inc.
322 Borealis Way
Bellefonte PA 16823
814-659-8257 (cell)

Sarah L. Turton

From: chris@batgate.com
Sent: Tuesday, June 18, 2024 10:54 PM
To: 'Irizarry, Amariyls (Ami)'; 'Cameron, Susan'; 'Reynolds, Richard (DWR)'; 'Munzer, Olivia'; 'Etchison, Katherine'
Cc: Josh Henry; Jennifer Broush; Jason Duffey; kevinc@whmgroup.com
Subject: Southeast Supply Enhancement Bat Culvert Survey Plan
Attachments: Southeast Supply Enhancement Bat Culvert Survey Plan v1-0.pdf

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Attached is the Survey Plan for bat use of culverts for the Southeast Supply Enhancement Project.

Please let me know if you have any comments or questions.

Thanks,
Chris

Chris Sanders



Sanders Environmental Inc.
322 Borealis Way
Bellefonte PA 16823
814-659-8257 (cell)

Sarah L. Turton

Subject: RE: ESSLog #45119_Williams FERC_Southeast Supply Enhancement
Project_DWR_TMD20240507

From: Doucette, Tamara (DWR) <Tamara.Doucette@dwr.virginia.gov>
Sent: Tuesday, May 7, 2024 2:13 PM
To: Jennifer Broush <j.broush@gaiconsultants.com>
Cc: Strawderman, Nicole (DWR) <Nicole.Strawderman@dwr.virginia.gov>; Schul, Hannah (DWR) <Hannah.Schul@dwr.virginia.gov>
Subject: ESSLog #45119_Williams FERC_Southeast Supply Enhancement Project_DWR_TMD20240507

You don't often get email from tamara.doucette@dwr.virginia.gov. [Learn why this is important](#)

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Jennifer,

We have reviewed the Transco Southeast Supply Enhancement project. The Dan River is a Threatened and Endangered Water due to the presence of Federal Proposed/State Threatened Atlantic Pigtoe, State Threatened Green Floater and Federally Endangered James Spiny mussel. Cascade Creek is a Threatened and Endangered Water due to the presence of Federally Endangered Roanoke Logperch. We document State Endangered Tri-colored Bats and Federally Endangered Northern Long-eared Bats from the project area.

To best protect aquatic resources found from the Dan River, we recommend any in-stream work within the Dan River or any tributaries to the Dan within one-mile upstream of the Dan occur outside of the TOYR of April 15- July 31, and August 15 through September 30, including cofferdam installation and removal, should cofferdams be utilized for in-stream work. We recommend any work occurring within Cascade Creek or its tributaries up to one-mile upstream occur outside of the TOYR of March 15- June 30th, protective of Roanoke Logperch. It is unclear the exact stream impacts that will be necessary for this project. Once specific stream impacts are proposed and the applicant is in the wetland permitting phase of the project, further coordination with DWR is recommended to assess further impacts to aquatic species, and any mussel surveys that may be necessary in impacted stream reaches.

Although we note an occurrence of Tri-colored Bat from the project area search buffer, DWR's online bat hibernacula and roost applications do not indicate that the project site occurs within any regulatory buffers of Tri-Colored Bat hibernacula or roosts. Therefore, we do not anticipate significant adverse impacts upon this species to result from activities associated with this project. However, we do recommend review of DWR's Best Management Practices for Tri-Colored and Little Brown Bats, accessible here:

http://www.dwr.virginia.gov/wp-content/uploads/LBBA_TCBA_Guidance.pdf.

This project is within the regulatory buffer surrounding the capture of a Northern Long-eared Bat. We recommend coordination with the USFWS concerning this species. The U.S. Fish and Wildlife Service (in

Virginia) utilizes an online project review process (<https://www.fws.gov/office/virginia-ecological-services/virginia-field-office-online-review-process>) to facilitate compliance with the Endangered Species Act (16 U.S.C. 1531-1544, 87 Stat. 884) (ESA), as amended. The process enables users to 1) follow step-by-step guidance; 2) access information that will allow them to identify threatened and endangered species, designated critical habitat, and other Federal trust resources that may be affected by their project; and 3) accurately reach determinations regarding the potential effects of their project on these resources as required under the ESA. If you have questions regarding the online review process, please contact Rachel Case at rachel_case@fws.gov.

In addition to the listed species and wildlife resources mentioned above, a number of species designated as Species of Greatest Conservation Need in Virginia's Wildlife Action Plan are likely to occur, if suitable habitat exists, in and around the project area. We recommend that the Virginia Wildlife Action Plan (available through www.bewildvirginia.gov) be reviewed to determine what threats are known to these species, what constitutes suitable habitat for these species, and how to best protect them and their habitats from harm.

To minimize the adverse impacts of linear utility/road project development on wildlife resources, we offer the following general recommendations: avoid and minimize impacts to undisturbed forest, wetlands, and streams to the fullest extent practicable; maintain naturally vegetated buffers of at least 100 feet in width around wetlands and on both sides of perennial and intermittent streams, where practicable; conduct significant tree removal and ground clearing activities outside of the primary songbird nesting season of March 15 through August 15; and, implement and maintain appropriate erosion and sediment controls throughout project construction and site restoration. We understand that adherence to these general recommendations may be infeasible in some situations. We are happy to work with the applicant to develop project-specific measures as necessary to minimize project impacts upon the Commonwealth's wildlife resources.

We recommend conducting any in-stream activities during low or no-flow conditions, using non-erodible cofferdams or turbidity curtains to isolate the construction area, blocking no more than 50% of the streamflow at any given time (minimal overlap of construction footprint notwithstanding), stockpiling excavated material in a manner that prevents reentry into the stream, restoring original streambed and streambank contours, revegetating barren areas with native vegetation, and implementing strict erosion and sediment control measures. We recommend that instream work be designed and performed in a manner that minimizes impacts upon natural streamflow and movement of resident aquatic species. If a dam and pump-around must be used, we recommend it be used for as limited a time as possible and that water returned to the stream be free of sediment and excess turbidity. To minimize potential wildlife entanglements resulting from use of synthetic/plastic erosion and sediment control matting, we recommend use of matting made from natural/organic materials such as coir fiber, jute, and/or burlap. To minimize harm to the aquatic environment and its residents resulting from use of the Tremie method to install concrete, installation of grout bags, and traditional pouring of concrete, we recommend that such activities occur only in the dry, allowing all concrete to harden prior to contact with open water. Due to future maintenance costs associated with culverts, and the loss of riparian and aquatic habitat, we prefer stream crossings to be constructed via clear-span bridges. However, if this is not possible, we recommend countersinking any culverts below the streambed at least 6 inches, or the use of bottomless culverts, to allow passage of aquatic organisms. We also recommend the installation of floodplain culverts to carry bankfull discharges.

Stream buffers:

- We recommend protecting from impacts a naturally vegetated buffer of at least 100 ft on both sides of all intermittent or perennial streams, including those known to support wild trout or anadromous fishes.
- We recommend protecting from impacts a naturally vegetated buffer of at least 200 ft on both sides of all perennial tributaries to waters known to support listed aquatic species.
- We recommend protecting from impacts a naturally vegetated buffer of at least 300 ft on both sides of waters known to support listed aquatic species.

Wetland buffers:

- We recommend protecting from impacts a naturally vegetated buffer of at least 100 ft on all sides of any wetland.
- We recommend no impacts upon wetlands or vernal pools known to support any listed species. We also recommend protecting from impacts and preserving, planting, and/or enhancing an undisturbed naturally vegetated buffer of at least 900 feet on all sides of any wetland known to support a listed species.

We recommend coordination with DCR-DNH to assess any potential impacts to resources under their jurisdiction.

Thank you,

Tamara



Tamara Doucette

Environmental Services Biologist
Wildlife Information and Environmental Services

P 804.367.8364

Department of Wildlife Resources

CONSERVE. CONNECT. PROTECT.

A 7870 Villa Park Drive, P.O. Box 90778, Henrico, VA 23228

www.VirginiaWildlife.gov

From: [Reynolds, Richard \(DWR\)](#)
To: chris@batgate.com; ["Irizarry, Amariys \(Ami\)"](#)
Cc: [Josh Henry](#); [Jennifer Broush](#); ["Clark, Kevin \(EXT\)"](#); [ProjectReview \(DWR\)](#); [Cindy Schulz](#); ["Virginia Field Office, FW5"](#)
Subject: RE: Bat Study Plan Concurrence Request - Transcontinental Gas Pipe Line Company Southeast Supply Enhancement Project - Virginia - Update
Date: Tuesday, April 23, 2024 12:56:50 PM

You don't often get email from rick.reynolds@dwr.virginia.gov. [Learn why this is important](#)

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Got it, thanks Chris.

Rick Reynolds
Wildlife Biologist
Virginia Department of Wildlife Resources
Region 4 Verona
P.O. Box 996
Verona, VA 24482
rick.reynolds@dwr.virginia.gov
540-248-9386

From: chris@batgate.com <chris@batgate.com>
Sent: Tuesday, April 23, 2024 12:51 PM
To: Reynolds, Richard (DWR) <Rick.reynolds@dwr.virginia.gov>; 'Irizarry, Amariys (Ami)' <amarilys_irizarry@fws.gov>
Cc: 'Josh Henry' <Josh.Henry@williams.com>; 'Jennifer Broush' <j.broush@gaiconsultants.com>; 'Clark, Kevin (EXT)' <kevinc@whmgroupp.com>; ProjectReview (DWR) <ProjectReview@dwr.virginia.gov>; Cindy Schulz <Cindy_Schulz@fws.gov>; 'Virginia Field Office, FW5' <virginiafieldoffice@fws.gov>
Subject: RE: Bat Study Plan Concurrence Request - Transcontinental Gas Pipe Line Company Southeast Supply Enhancement Project - Virginia - Update

Thanks Rick.

I think the key variance to be aware of is the project proposes to exceed FWS guidelines by sampling for PESU with acoustics placed in open/edge habitat, as well as net for MYSE in more cluttered habitats, in each sampling segment in VA.

Thanks,
Chris

Chris Sanders



Sanders Environmental Inc.
322 Borealis Way
Bellefonte PA 16823
814-659-8257 (cell)

From: Reynolds, Richard (DWR) <Rick.reynolds@dwr.virginia.gov>
Sent: Tuesday, April 23, 2024 8:20 AM
To: chris@batgate.com; 'Irizarry, Amarilys (Ami)' <amarilys_irizarry@fws.gov>
Cc: 'Josh Henry' <Josh.Henry@williams.com>; 'Jennifer Broush' <j.broush@gaiconsultants.com>; 'Clark, Kevin (EXT)' <kevinc@whmgroupp.com>; ProjectReview (DWR) <ProjectReview@dwr.virginia.gov>; Cindy Schulz <Cindy_Schulz@fws.gov>; 'Virginia Field Office, FW5' <virginiafieldoffice@fws.gov>
Subject: RE: Bat Study Plan Concurrence Request - Transcontinental Gas Pipe Line Company Southeast Supply Enhancement Project - Virginia - Update

As long as you are following the FWS guidelines then DWR is okay with the plan.

Rick

Rick Reynolds
Wildlife Biologist
Virginia Department of Wildlife Resources
Region 4 Verona
P.O. Box 996
Verona, VA 24482
rick.reynolds@dwr.virginia.gov
540-248-9386

From: chris@batgate.com <chris@batgate.com>
Sent: Thursday, April 18, 2024 12:11 PM
To: 'Irizarry, Amarilys (Ami)' <amarilys_irizarry@fws.gov>; Reynolds, Richard (DWR) <Rick.reynolds@dwr.virginia.gov>
Cc: 'Josh Henry' <Josh.Henry@williams.com>; 'Jennifer Broush' <j.broush@gaiconsultants.com>; 'Clark, Kevin (EXT)' <kevinc@whmgroupp.com>; ProjectReview (DWR) <ProjectReview@dwr.virginia.gov>; Cindy Schulz <cindy_schulz@fws.gov>; 'Virginia Field Office, FW5' <virginiafieldoffice@fws.gov>
Subject: Bat Study Plan Concurrence Request - Transcontinental Gas Pipe Line Company Southeast Supply Enhancement Project - Virginia - Update

Updated for 2024 Guidance Study Plan and potential sampling points are attached.

The Project proponent has initiated consultation (on 3/20/24) with the Service and is providing this survey plan pending species specific discussions with FWS regarding recent ECOS/IPAC changes. We

would like to request a Teams meeting to discuss the projects consultation process in regards to bats, study plan, search for potential hibernacula, and IPAC/ECOS bat range map changes.

The Project would also like to request VA DWR input/comments on the study plan.

This study plan is being separately submitting this study plan to NC FWS Field Offices as well as NC state agencies. It is provided in full, but we this concurrence request is for proposed VA activities.

Thanks,
Chris

Chris Sanders



Sanders Environmental Inc.
322 Borealis Way
Bellefonte PA 16823
814-659-8257 (cell)

From: Irizarry, Amarilys (Ami) <amarilys_irizarry@fws.gov>

Sent: Tuesday, April 2, 2024 2:33 PM

To: chris@batgate.com; Virginia Field Office, FW5 <virginiafieldoffice@fws.gov>; Schulz, Cindy <cindy_schulz@fws.gov>

Cc: 'Josh Henry' <Josh.Henry@williams.com>; 'Jennifer Broush' <j.broush@gaiconsultants.com>; 'Clark, Kevin (EXT)' <kevinc@whmgroupp.com>; rreynolds@DGIF.STATE.VA.US

Subject: Re: [EXTERNAL] Bat Study Plan Concurrence Request - Transcontinental Gas Pipe Line Company Southeast Supply Enhancement Project - Virginia - Resend

Hi Chris,

The Range-wide Indiana Bat and Northern Long-eared Bat Survey Guidelines were updated on March 29, 2024. Since we are referring to the 2024 updated Survey Guidelines for the 2024 bat survey season, we are recommending revising the updated guidelines and study plan form before submitting for review.

The updated guidance is available at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>

Please let me know if you have any questions.

Thank you,

Amarilys D. Irizarry (Ami)

Pronouns: [she/her](#)

Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, VA 23061

(804) 767-7949 <-- new phone number as of 10/1/23 **
amarilys_irizarry@fws.gov

From: chris@batgate.com <chris@batgate.com>

Sent: Thursday, March 28, 2024 5:15 PM

To: Virginia Field Office, FW5 <virginiafieldoffice@fws.gov>; Irizarry, Amariyls (Ami)

<amarilys_irizarry@fws.gov>; Schulz, Cindy <cindy_schulz@fws.gov>

Cc: 'Josh Henry' <Josh.Henry@williams.com>; 'Jennifer Broush' <j.broush@gaiconsultants.com>;

'Clark, Kevin (EXT)' <kevinc@whmggroup.com>; rreynolds@DGIF.STATE.VA.US

<rreynolds@DGIF.STATE.VA.US>

Subject: [EXTERNAL] Bat Study Plan Concurrence Request - Transcontinental Gas Pipe Line Company Southeast Supply Enhancement Project - Virginia - Resend

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Please forgive the resend, we had a typo in one of the email addresses and it bounced back.

Sanders Environmental is requesting U.S. Fish and Wildlife Service (USFWS) concurrence on a bat presence/absence survey covering the Virginia sections of Transcontinental Gas Pipe Line Company's Southeast Supply Enhancement Project. Bat mist netting presence absence study plan and KML of the bat study area and potential mist net locations is attached. A separate submittal to the North Carolina Field office requesting concurrence on the sections of the project in North Carolina is underway.

On March 20, 2024, Transco initiated consultation with USFWS regarding the Project. Due to the timing of surveys, we are advancing the Bat mist netting presence absence study plan to your attention for review and approval. If USFWS requests surveys, the requested concurrence of this plan would be utilized to initiate surveys.

We would also like to request a call/Teams meeting to discuss potential hibernacula, specifically FWS Bat Survey Guidelines, Appendix H Phase 1, regarding any known hibernacula in the project vicinity, and guidance on next steps the project should be undertaking in desktop and field survey for previously unknown hibernacula.

Thanks,
Chris

Chris Sanders



Transcontinental Gas Pipe Line Company, LLC
2800 Post Oak Boulevard (77056)
P.O. Box 1396
Houston, Texas 77251-1396
713-215-2000

April 5, 2024

Frances Greenway
Virginia Department of Wildlife Resources, Wildlife Information and Environmental Services
P.O. Box 90778
Henrico, VA 23228

Re: Threatened and Endangered Species Project Review
Transcontinental Gas Pipe Line Company, LLC
Southeast Supply Enhancement Project – Eden Loop Pipeline Project and Compressor Station 165
Pittsylvania County, VA

Transcontinental Gas Pipe Line Company, LLC. (Transco), indirectly owned by The Williams Companies, Inc. (Williams), is in the initial planning stages of the Southeast Supply Enhancement Project (Project). Transco is seeking authorization from the Federal Energy Regulatory Commission (FERC) under Section 7(c) of the Natural Gas Act to construct, own, operate, and maintain the proposed Project facilities. The Project is an expansion of Transco's existing natural gas transmission system that will enable Transco to provide 1,586,900 dekatherms per day of incremental firm transportation capacity to meet growing natural gas-fired power generation, commercial, residential, and industrial demand in the mid-Atlantic and southeast United States.

Transco is providing information to initiate consultation with the Virginia Department of Wildlife Resources (DWR) for the proposed Southeast Supply Enhancement Project (Project). Transco completed desktop reviews utilizing the following online resources: Virginia Fish and Wildlife Information Services (VAFWIS) Initial Project Assessment Report, Wildlife Environmental Review Map Service (WERMS), and preliminary desktop analysis of the DWR online mapping applications. The enclosed information for the proposed Project, is intended to initiate consultation with DWR regarding the presence of imperiled wildlife, and designated wildlife resources, bat hibernacula and roosts, and bald eagle nests along or in the vicinity of the proposed Project. The Project will consist of the following components (bolded components are located in Virginia):

Pipeline Facilities

- **Approximately 26.4 miles of 42-inch-diameter pipeline in Pittsylvania County, Virginia (VA)** and approximately 4.4-miles of 42-inch-diameter pipeline in Rockingham County, North Carolina (NC), designated as the Eden Loop;
 - Regulator installation in Rockingham County, NC near mile post (MP) 1382.53;
 - Regulator installation in Rockingham County, NC near MP 1382.70; and
- Approximately 24.0 miles of 42-inch-diameter pipeline in Guilford, Forsyth, and Davidson Counties, NC, designated as the Salem Loop.

Compression Facilities

- **The addition of two [22,500 horsepower (HP) each] compressor units at Transco's existing Compressor Station 165 located in Pittsylvania County, VA;**
- The addition of one [23,465 International Organization Standardization (ISO) HP] Solar Titan 130 Turbine and two (31,871 ISO HP each) Solar Titan 250 Turbine compressor units at Transco's existing Compressor Station 155 located in Davidson County, NC;
- The addition of one (15,900 ISO HP) Solar Mars 100 Turbine compressor unit at Transco's existing Compressor Station 150 in Iredell County, NC; and



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- Demolition and removal of three (12,500 HP each) existing electric motor-driven (EMD) compressor units and replacement with three (33,000 HP each) EMD compressor units at Transco's existing Compressor Station 145 in Cleveland County, NC.

Facility Modifications

- Piping modifications at Transco's existing Compressor Station 135 in Anderson County, South Carolina (SC);
- Piping modifications at Transco's existing Compressor Station 125 in Walton County, Georgia (GA);
- Regulator installation and piping modifications at Transco's existing Compressor Station 120 in Henry County, GA; and
- Piping modifications at Transco's existing Compressor Station 105 in Coosa County, Alabama (AL).

The use of existing, improved, and new access roads and contractor yards/staging areas would also be required for the Project. Additional ancillary facilities and piping, such as mainline valves (MLVs), cathodic protection, communication facilities, and internal inspection devices (e.g., pig) launchers and receivers would be necessary to support the Project.

Subject to FERC's certification of the Project and receipt of other necessary permits and authorizations, Transco anticipates that construction of the Project would commence in the first quarter of 2026 to meet a proposed in-service date of November 1, 2027.

Project Setting for Project Components within Virginia

Construction activities associated with Transco's Eden Loop Pipeline will consist of the installation of approximately 26.4-miles of 42-inch-diameter pipeline in Pittsylvania County, VA, while construction activities at Compressor Station 165, also located within Pittsylvania County, VA, will consist of the addition of two new compressor units. Tree felling will be required for the construction activities associated with the Compressor Station 165 and the Eden Loop Pipeline. Where tree felling would be required, Transco proposes to perform the required species surveys following USFWS and state agency guidance.

Based on desktop review, mapped National Wetland Inventory wetlands and deepwater habitats, National Hydrography Dataset streams, and hydric soils occur within the Eden Loop and Compressor Station 165 Project action area. Transco is conducting environmental field reviews within Project action areas to identify existing streams and wetland resources. Transco will design the Project to avoid or minimize impacts to environmental resources to the extent practicable.

A Project Overview Map is in **Attachment A**. United States Geological Survey Mapping depicting the preliminary limits of disturbance for the Project facilities is shown on the Project Location Map (**Appendix B**).

Preliminary State-Agency Threatened and Endangered Species Consultation

Transco completed online reviews of several available databases. Results provided by the VAFWIS Initial Project Assessment Report (**Attachment C**) show species within 2 miles of the Project Action area. Those species with a federal or state status listing are included in Table 1 (**Attachment D**).

Based on the WERMS database review, no records of the following layers intersect nor are within one mile of the Project Action area: Bald Eagle Concentration Areas and Roosts, Colonial Water Birds, Northern long-eared



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bat roost trees, and bat hibernacula. WERMS data review included results from the Species Observation Database. Those federally and state listed are included in Table 1 (**Attachment D**).

Summary

Project facilities will be located within or adjacent to the existing Transco pipeline right-of-way and existing Transco aboveground facilities, to the extent practicable. Stream and wetland field surveys will continue through spring and summer of 2024. Transco would be committed to avoiding and minimizing impacts to streams, wetlands, forested areas, and habitats favorable to federal and state listed species to the extent practicable.

Transco proposes to adhere to VA Department of Environmental Quality erosion and sediment control and stormwater management laws and regulations where applicable. If the Project proposes drilling of any resources, a trenchless construction contingency plan will be developed. Transco will also develop and implement emergency spill plan, best management practices for hydrostatic testing and dewatering which will be included in Transco's Plan and Procedures. Transco will minimize or avoid impact to VA Department of Conservation and Recreation noted Ecological Cores to the extent practical. Since the Project is collocated with existing Transco facilities, the majority of tree felling associated with the Project will occur on the edges of existing forest habitat, where necessary. An invasive species plan is being developed and will include language concerning Transco's revegetation and restoration plan.

Transco is requesting information regarding state listed species, time of year restrictions, and any required surveys for rare, threatened, or endangered species.

Transco is coordinating with the United States Fish and Wildlife Service's VA Ecological Services Field Office concerning federally listed species. Additionally, Transco is coordinating with the VA Department of Conservation and Recreation's Division of Natural Heritage.

If you have questions regarding this correspondence and information request, or if you require additional information, please do not hesitate to call me at 412-713-0485 or email Josh.Henry@williams.com. Alternatively, you can contact Jennifer Broush of GAI Consultants, Inc., at 724-516-1155 or via e-mail at j.broush@gaiconsultants.com. We appreciate your assistance and thank you for your attention to this request.

Respectfully submitted,

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC

A handwritten signature in blue ink, appearing to read "Joshua J. Henry".

Josh Henry
Environmental Specialist

Attachments: Attachment A (Project Overview), Attachment B (Project Location Map), Attachment C (VAFWIS Initial Project Assessment Report), Attachment D (Table 1: List of Federal and State Listed Species within the Project Action Area)

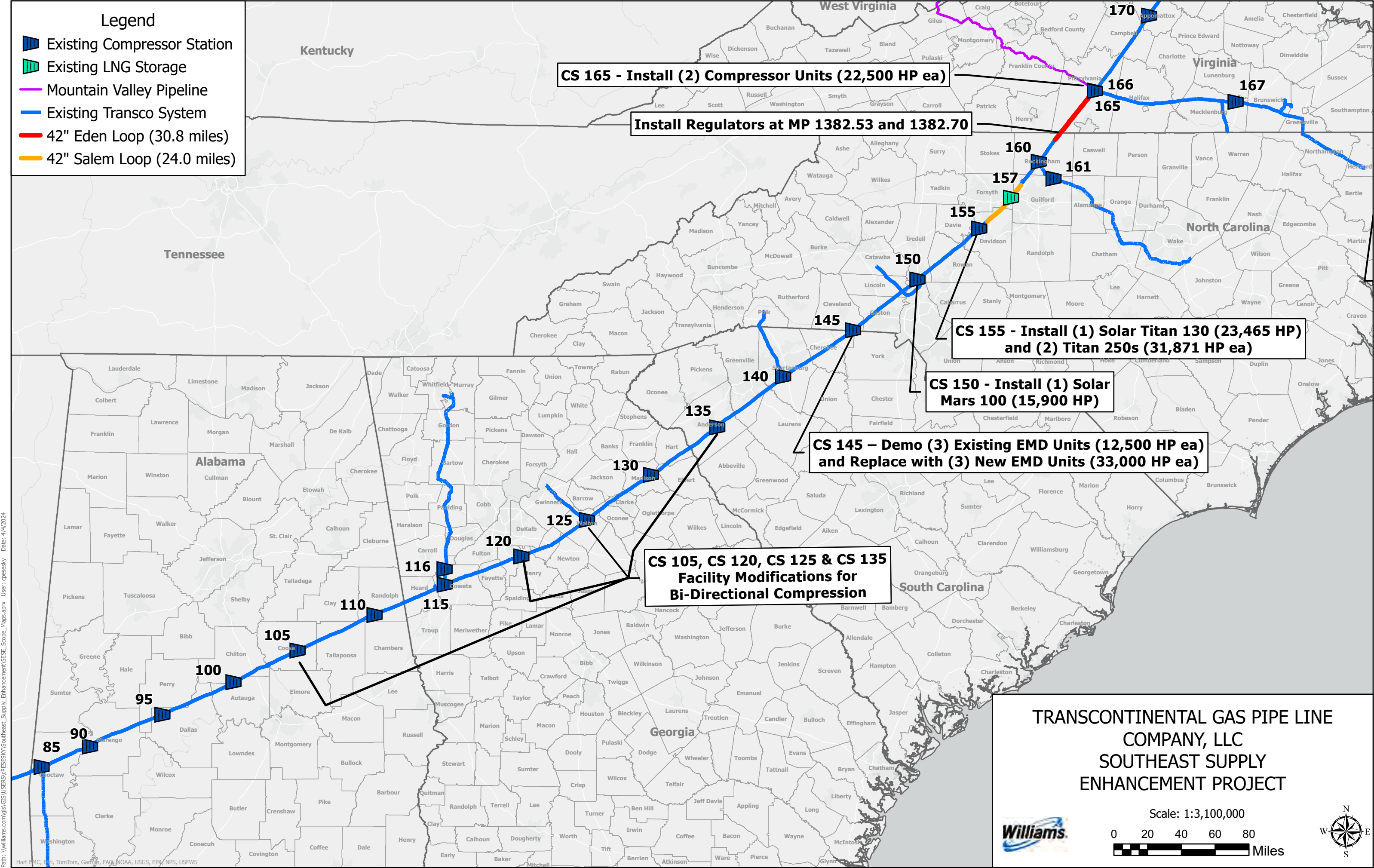
cc: Jennifer Broush, GAI Consultants, Inc.



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2800 Post Oak Boulevard (77056)
P.O. Box 1396
Houston, Texas 77251-1396
713-215-2000

ATTACHMENT A

Project Overview Map

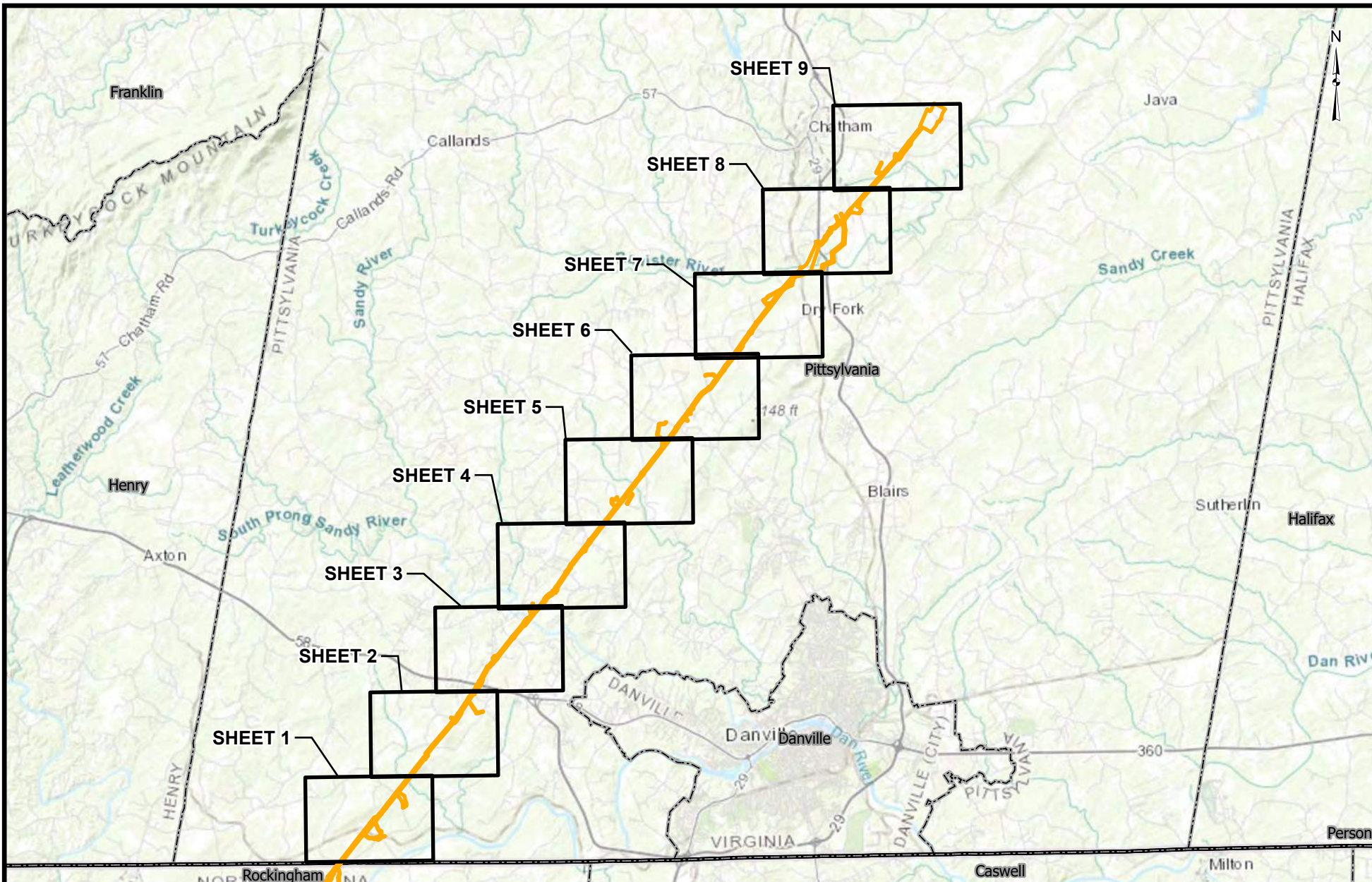








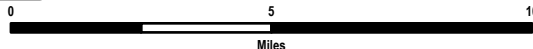
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Houston, Texas 77251-1396
713-215-2000

ATTACHMENT B

Project Location Map



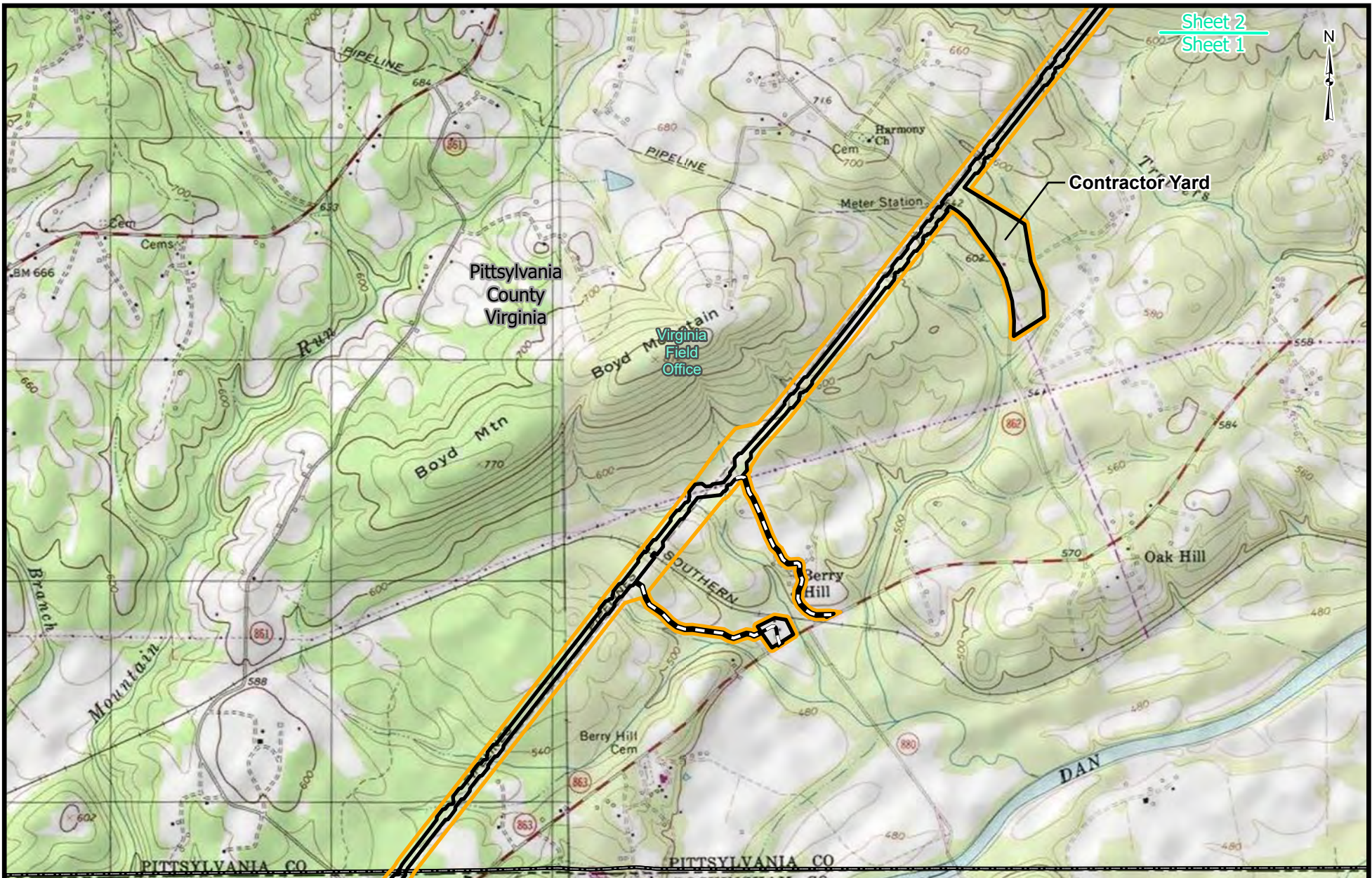
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-  Study Area
-  State Boundary
-  County Boundary



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Access Road

Study Area

Limit of Disturbance

County Boundary

State Boundary

SCALE IN FEET

SITE LOCATION

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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
TOPOGRAPHIC PROJECT LOCATION MAP
SOUTHEAST SUPPLY ENHANCEMENT
VIRGINIA
EDEN LOOP

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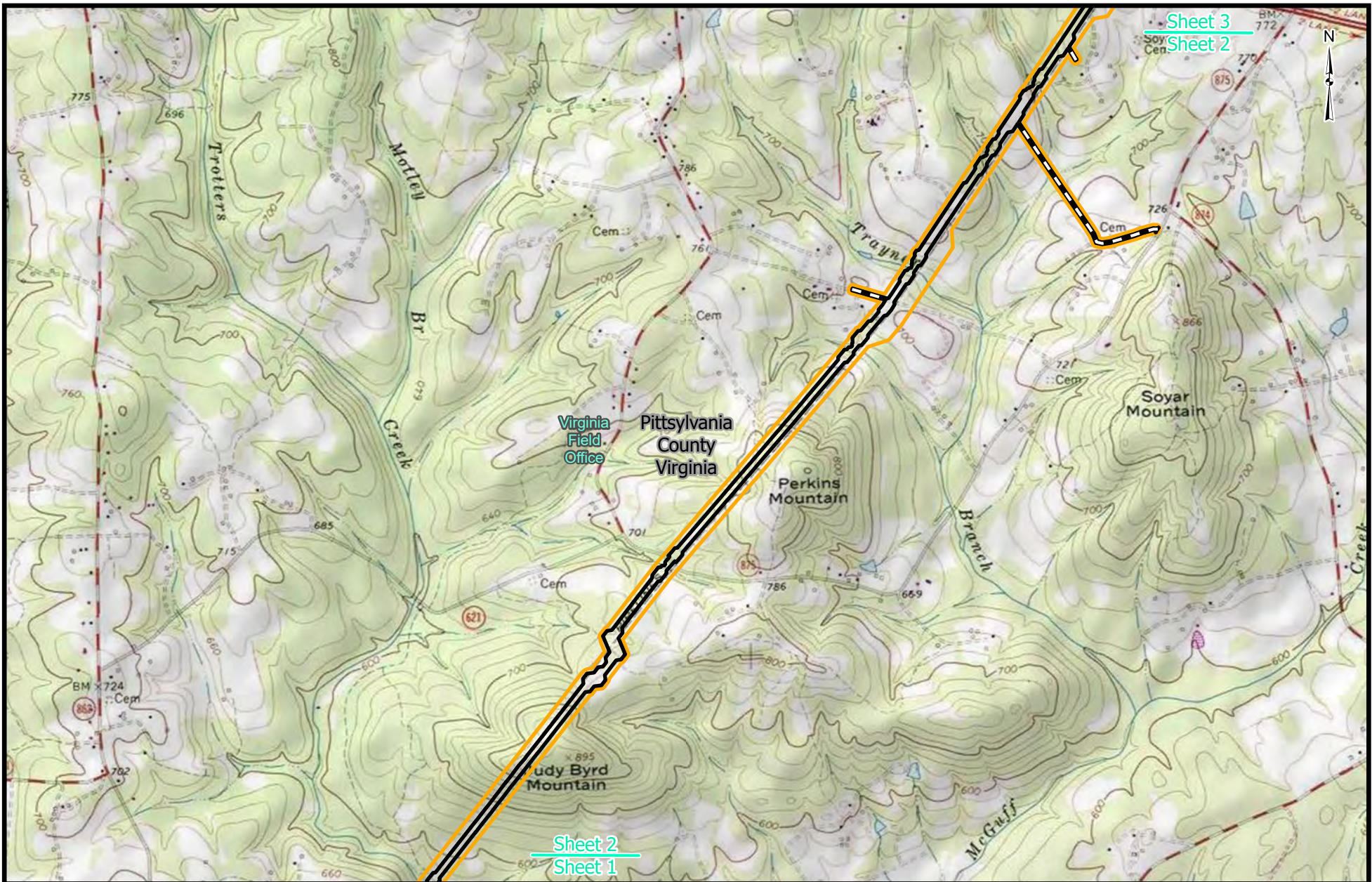
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SHEET 1 OF 9



Legend

- Access Road
- Study Area
- Limit of Disturbance
- County Boundary
- State Boundary

gai consultants

SITE LOCATION

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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
TOPOGRAPHIC PROJECT LOCATION MAP
SOUTHEAST SUPPLY ENHANCEMENT
VIRGINIA
EDEN LOOP

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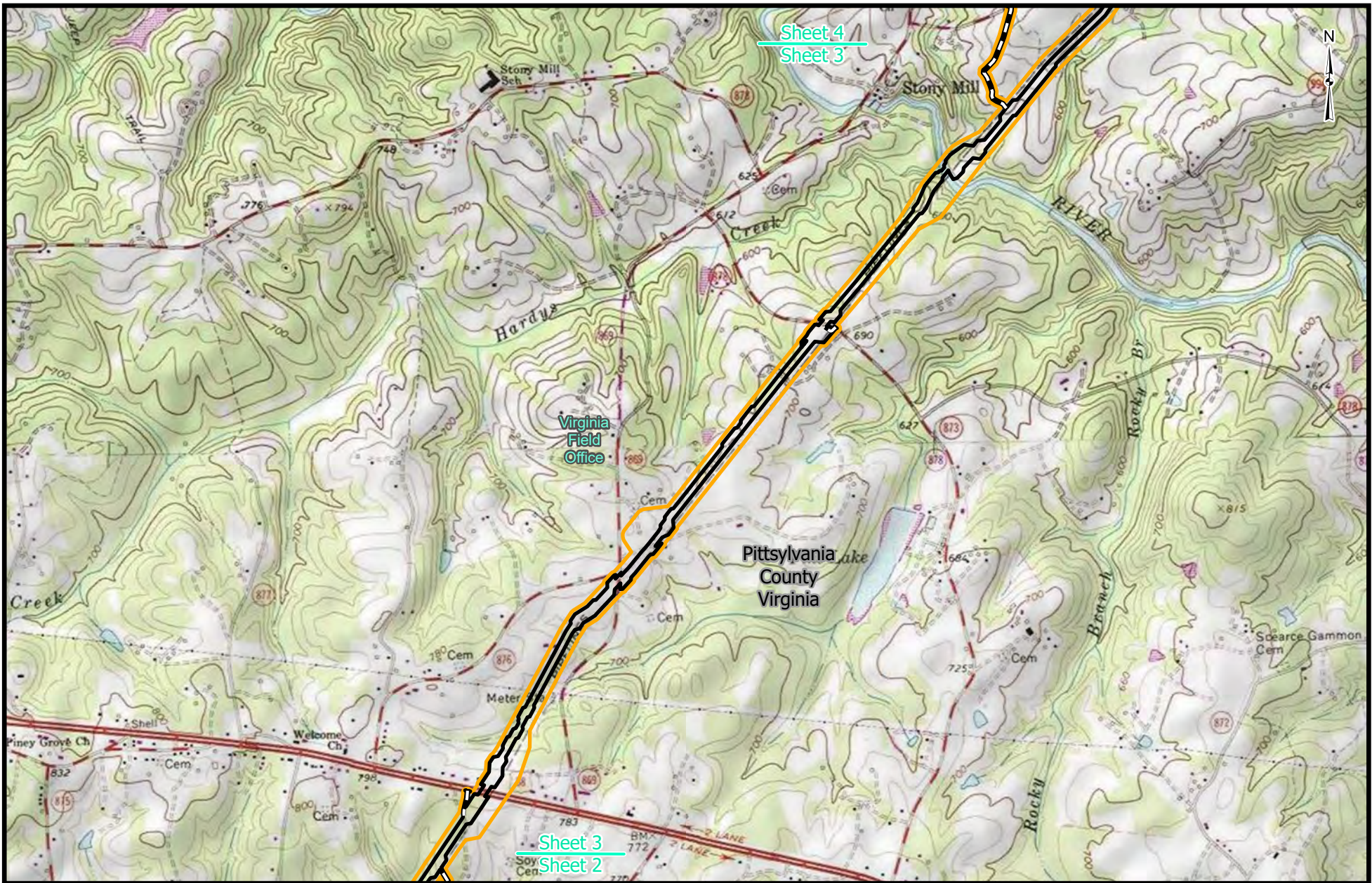
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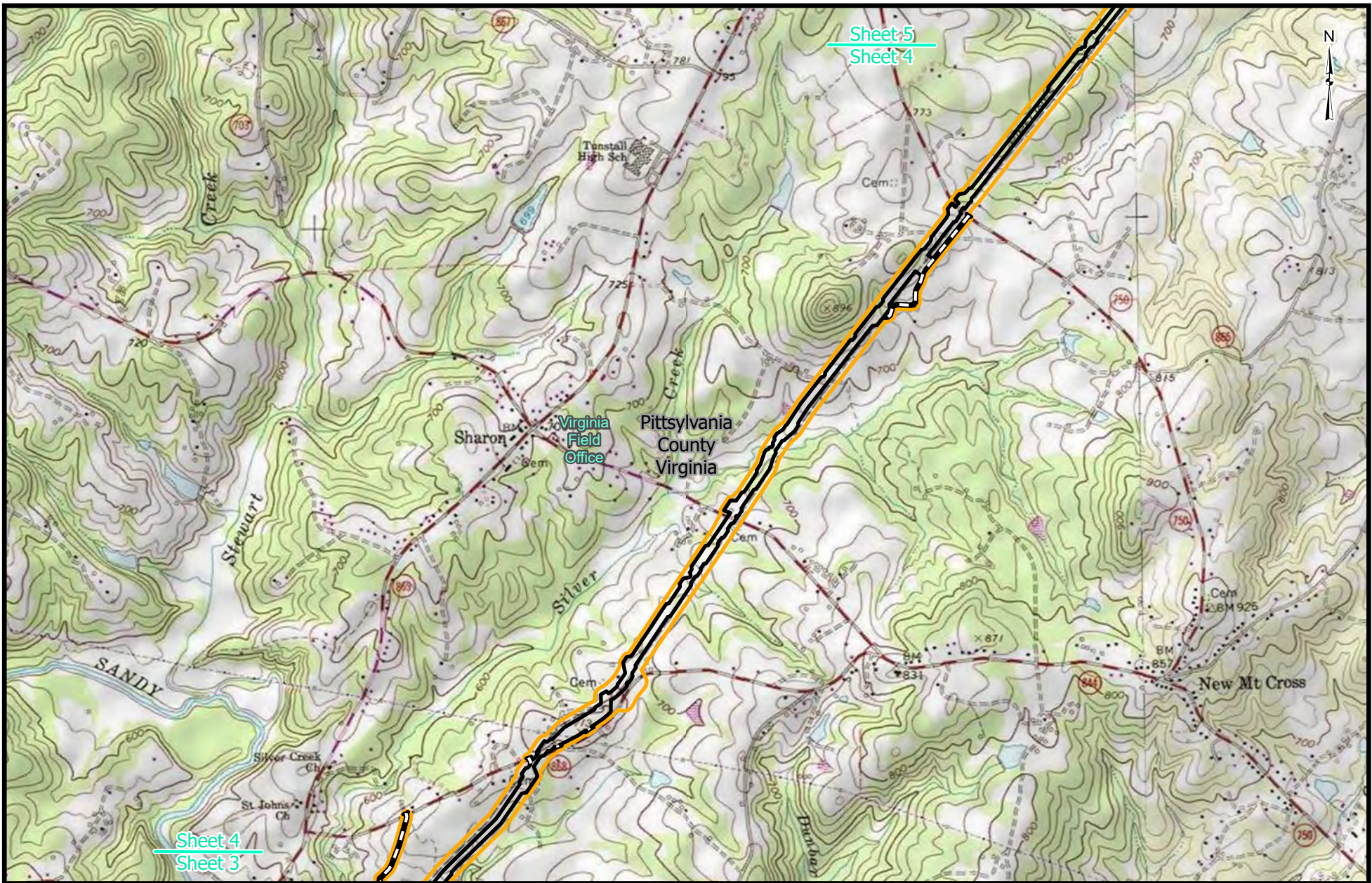
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Sheet 4
Sheet 3

Sheet 3
Sheet 2

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Access Road

Study Area

Limit of Disturbance

County Boundary

State Boundary

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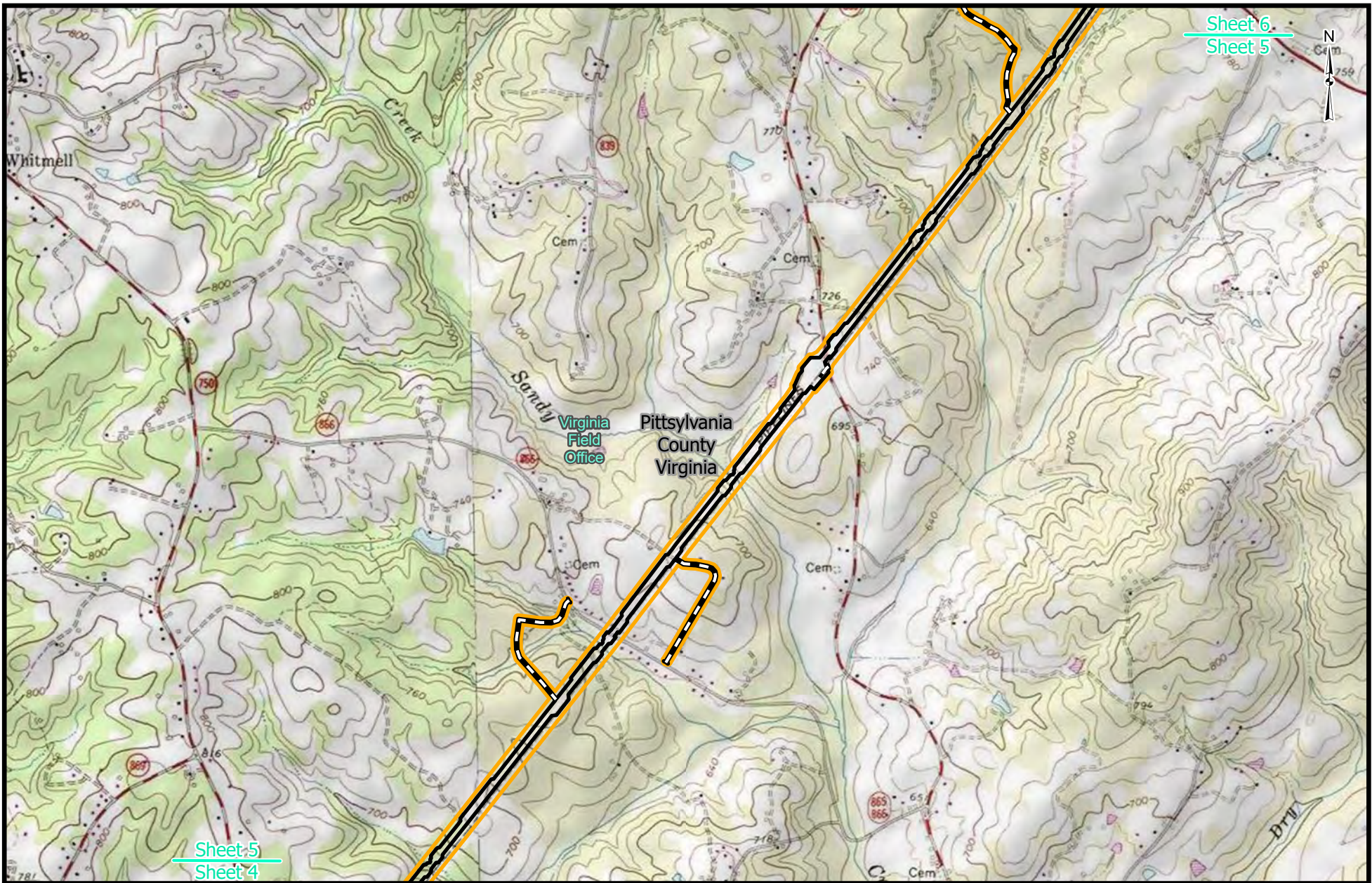
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VIRGINIA
EDEN LOOP

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Sheet 5
Sheet 4

- Access Road
- Study Area
- Limit of Disturbance
- County Boundary
- State Boundary



SITE LOCATION



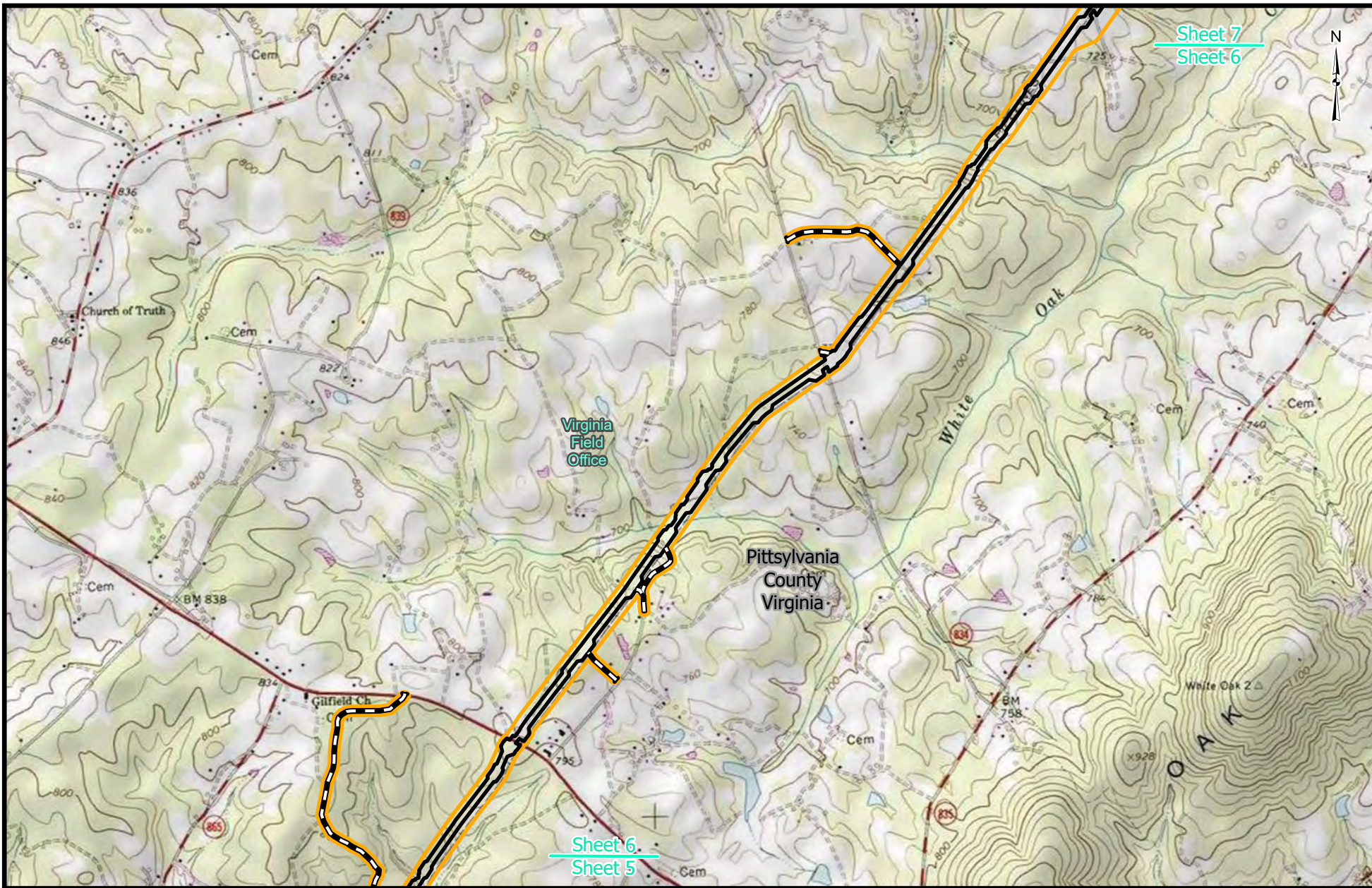
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
TOPOGRAPHIC PROJECT LOCATION MAP
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VIRGINIA
EDEN LOOP



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Access Road
 Study Area
 Limit of Disturbance

County Boundary
 State Boundary

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 SCALE IN FEET

SITE LOCATION

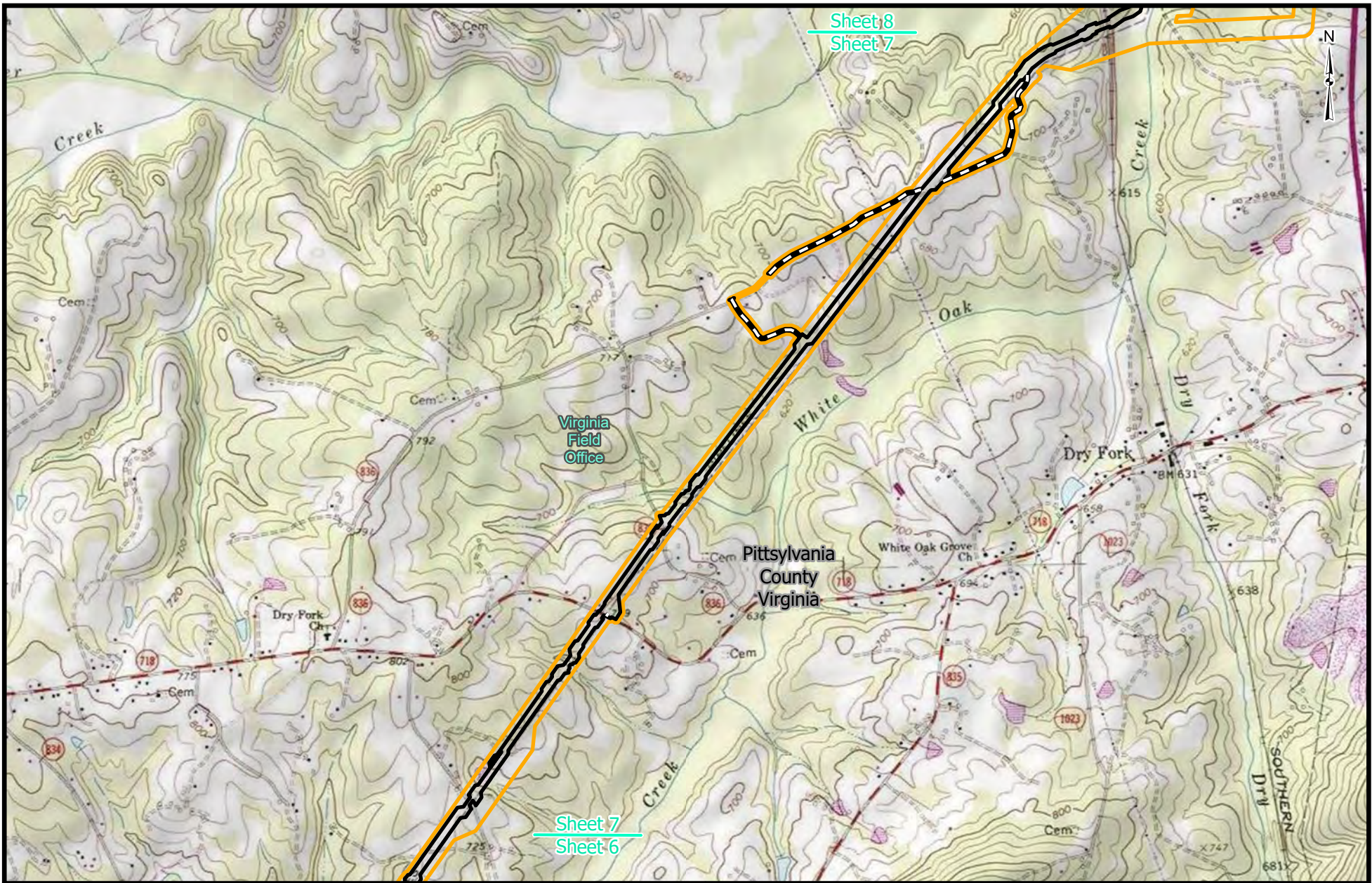
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 VIRGINIA
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Legend

- Access Road
- Study Area
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- County Boundary
- State Boundary

SITE LOCATION

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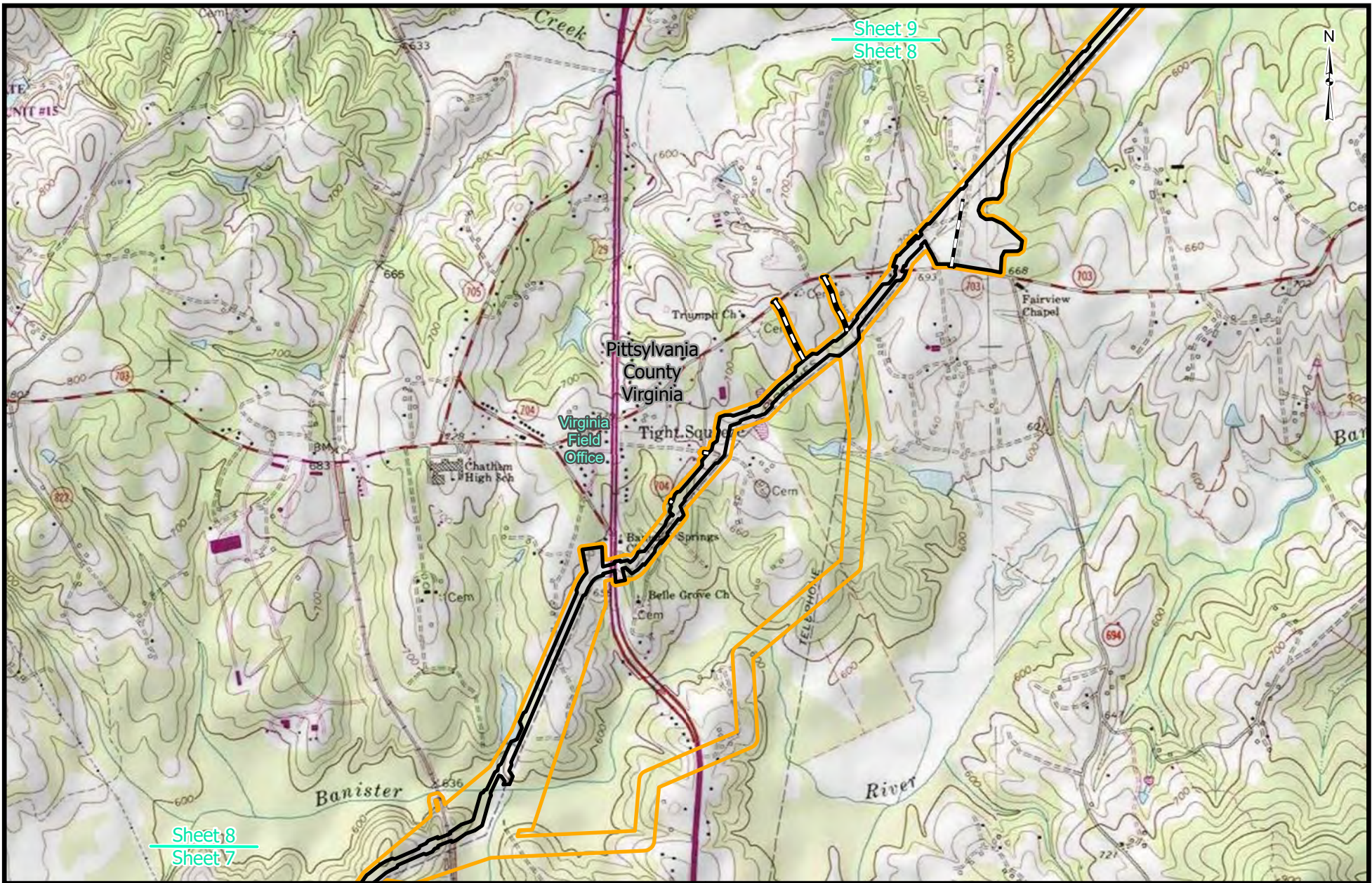
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TOPOGRAPHIC PROJECT LOCATION MAP
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VIRGINIA
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Access Road

Study Area

Limit of Disturbance

County Boundary

State Boundary

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SCALE IN FEET

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TOPOGRAPHIC PROJECT LOCATION MAP
SOUTHEAST SUPPLY ENHANCEMENT
VIRGINIA
EDEN LOOP

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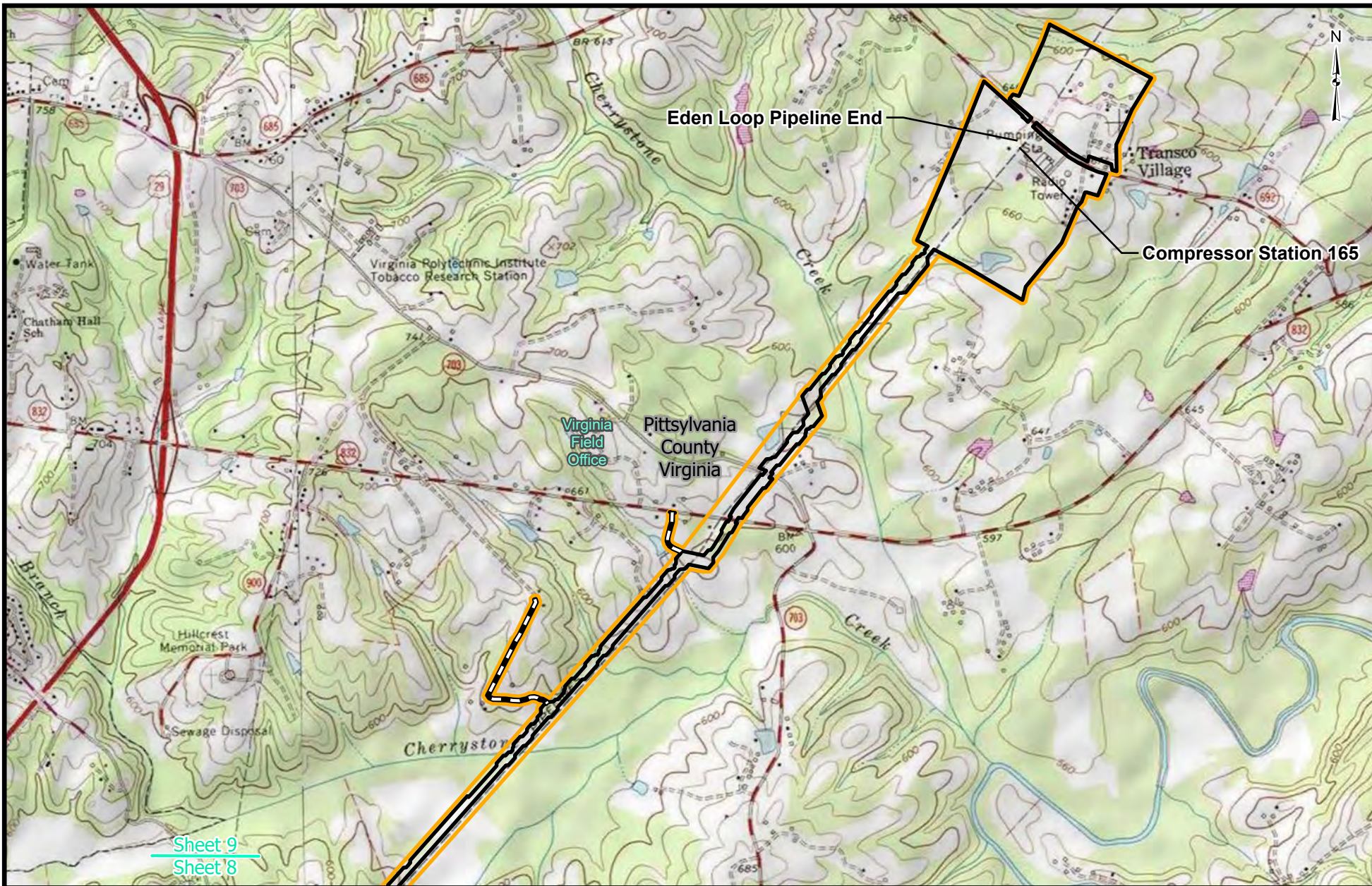
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- Access Road
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SITE LOCATION



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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
TOPOGRAPHIC PROJECT LOCATION MAP
SOUTHEAST SUPPLY ENHANCEMENT
VIRGINIA
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P.O. Box 1396
Houston, Texas 77251-1396
713-215-2000

ATTACHMENT C

VAFWIS Initial Project Assessment Report



Virginia Department of Wildlife Resources

3/8/2024 2:54:50 PM

Fish and Wildlife Information Service

[Help](#)

VaFWIS Search Report Compiled on 3/8/2024, 2:54:50 PM

Known or likely to occur within a **2 mile buffer around polygon; center 36.6962700 -79.4853099**

in **143 Pittsylvania County, 590 Danville City, VA**

[View Map of Site Location](#)

404 Known or Likely Species ordered by Status Concern for Conservation

BOVA Code	Stat us*	Tier*	Common Name	Scientific Name	Confirmed	Database(s)
050022	FEST	Ia	Bat, northern long-eared	Myotis septentrionalis		BOVA
060017	FESTE	Ia	Spinymussel, James	Parvaspina collina	Yes	BOVA,TEWaters
010214	FESTE	IIa	Logperch, Roanoke	Percina rex	Yes	BOVA,TEWaters,Habitat,Sp pObs,HU6
060173	FTST	Ia	Pigtoe, Atlantic	Fusconaia masoni	Yes	TEWaters,SppObs
050020	SE	Ia	Bat, little brown	Myotis lucifugus		BOVA
050027	FPS E	Ia	Bat, tri-colored	Perimyotis subflavus	Yes	BOVA,SppObs
110240	SE	Ia	Supercoil, spirit	Paravitrea hera		BOVA,HU6
040293	ST	Ia	Shrike, loggerhead	Lanius ludovicianus		BOVA
060081	FPS T	IIa	Floater, green	Lasmigona subviridis	Yes	TEWaters,SppObs

010127	ST	IIb	Madtom, orangefin	Noturus gilberti		BOVA
010353	ST	IIc	Darter, Carolina	Etheostoma collis		HU6
040292	ST		Shrike, migrant loggerhead	Lanius ludovicianus migrans		BOVA
030031	CC	IIIc	Kingsnake, scarlet	Lampropeltis elapsoides		BOVA
030012	CC	IVa	Rattlesnake, timber	Crotalus horridus		BOVA,HU6
010174		Ia	Bass, Roanoke	Ambloplites cavifrons	Yes	BOVA,SppObs
020023		IIa	Salamander, mole	Ambystoma talpoideum	Yes	BOVA,SppObs,HU6
040052		IIa	Duck, American black	Anas rubripes		BOVA,HU6
040036		IIa	Night-heron, yellow-crowned	Nyctanassa violacea violacea		BOVA
040320		IIa	Warbler, cerulean	Setophaga cerulea		BOVA,HU6
040140		IIa	Woodcock, American	Scolopax minor	Potential	BOVA,BBA,HU6
060071		IIa	Lampmussel, yellow	Lampsilis cariosa	Yes	SppObs
040105		IIb	Rail, king	Rallus elegans		BOVA
010131		IIIa	Eel, American	Anguilla rostrata		BOVA
030068		IIIa	Turtle, woodland box	Terrapene carolina carolina		BOVA,HU6
040100		IIIa	Bobwhite, northern	Colinus virginianus	Yes	BOVA,BBA,SppObs,HU6
040202		IIIa	Cuckoo, yellow-billed	Coccyzus americanus	Yes	BOVA,BBA,SppObs,HU6
040099		IIIa	Grouse, ruffed	Bonasa umbellus		BOVA

040094		IIIa	Harrier, northern	Circus hudsonius		BOVA
040035		IIIa	Night-heron, black-crowned	Nycticorax nycticorax hoactii		BOVA
040204		IIIa	Owl, barn	Tyto alba pratincola		BOVA,HU6
040333		IIIa	Warbler, Kentucky	Geothlypis formosa		BOVA,HU6
040215		IIIa	Whip-poor-will, Eastern	Antrostomus vociferus	Potential	BOVA,BBA,HU6
060145		IIIa	Rainbow, Notched	Venustaconcha constricta	Yes	BOVA,SppObs,HU6
040220		IIIb	Kingfisher, belted	Megaceryle alcyon	Potential	BOVA,BBA
010389		IIIc	Bullhead, snail	Ameiurus brunneus	Yes	BOVA,SppObs,HU6
010110		IIIc	Jumprock, bigeye	Moxostoma ariommum	Yes	BOVA,SppObs
010387		IIIc	Redhorse, silver	Moxostoma anisurum		BOVA
010115		IIIc	Sucker, rustyside	Thoburnia hamiltoni		BOVA
010038		IVa	Alewife	Alosa pseudoharengus		BOVA
020069		IVa	Salamander, eastern mud	Pseudotriton montanus montanus		BOVA,HU6
030045		IVa	Ribbonsnake, common	Thamnophis saurita saurita		BOVA
030017		IVa	Scarletsnake, northern	Cemophora coccinea copei		BOVA,HU6
030033		IVa	Snake, queen	Regina septemvittata		BOVA,HU6
040272		IVa	Catbird, gray	Dumetella carolinensis	Potential	BOVA,BBA,HU6
040337		IVa	Chat, yellow-breasted	Icteria virens virens	Yes	BOVA,BBA,SppObs,HU6

040142		IVa	Dowitcher, short-billed	Limnodromus griseus		BOVA
040229		IVa	Kingbird, eastern	Tyrannus tyrannus	Potential	BOVA,BBA,HU6
040344		IVa	Meadowlark, eastern	Sturnella magna	Potential	BOVA,BBA,HU6
040107		IVa	Rail, Virginia	Rallus limicola		BOVA,HU6
040391		IVa	Sparrow, field	Spizella pusilla	Potential	BOVA,BBA,HU6
040378		IVa	Sparrow, grasshopper	Ammodramus savannarum pratensis	Potential	BOVA,BBA,HU6
040273		IVa	Thrasher, brown	Toxostoma rufum	Potential	BOVA,BBA,HU6
040375		IVa	Towhee, eastern	Pipilo erythrophthalmus	Potential	BOVA,BBA,HU6
040302		IVa	Warbler, black-and-white	Mniotilta varia		BOVA,HU6
050029		IVa	Bat, eastern red	Lasiurus borealis	Yes	BOVA,SppObs,HU6
050030		IVa	Bat, hoary	Lasiurus cinereus	Yes	BOVA,SppObs
050025		IVa	Bat, silver-haired	Lasionycteris noctivagans	Yes	BOVA,SppObs
030050		IVb	Turtle, snapping	Chelydra serpentina		BOVA,HU6
040349		IVb	Blackbird, rusty	Euphagus carolinus		BOVA
040221		IVb	Flicker, northern	Colaptes auratus	Potential	BOVA,BBA
040028		IVb	Heron, green	Butorides virescens	Potential	BOVA,BBA,HU6
040217		IVb	Swift, chimney	Chaetura pelagica	Potential	BOVA,BBA,HU6
040277		IVb	Thrush, wood	Hylocichla mustelina	Yes	BOVA,BBA,SppObs,HU6
040340		IVb	Warbler, Canada	Cardellina canadensis		BOVA,HU6

040243		IVb	Wood-Pewee, Eastern	Contopus virens	Potential	BOVA,BBA,HU6
010394		IVc	Killifish, speckled	Fundulus rathbuni		BOVA,HU6
010459		IVc	Redhorse, notchlip	Moxostoma collapsum	Yes	BOVA,SppObs,HU6
010071		IVc	Shiner, highfin	Hudsonius altipinnis	Yes	BOVA,SppObs,HU6
010376		IVc	Shiner, redlip	Hydrophlox chiliticus	Yes	BOVA,SppObs,HU6
010109		IVc	Sucker, Roanoke hog	Hypentelium roanokense	Yes	BOVA,SppObs,HU6
020061		IVc	Spadefoot, eastern	Scaphiopus holbrookii		BOVA,HU6
030024		IVc	Snake, eastern hog-nosed	Heterodon platirhinos		BOVA,HU6
030043		IVc	Snake, southeastern crowned	Tantilla coronata		BOVA,HU6
040248		IVc	Swallow, northern rough-winged	Stelgidopteryx serripennis	Potential	BOVA,BBA,HU6
010049			Anchovy, bay	Anchoa mitchilli		BOVA
010188			Bass, largemouth	Micropterus nigricans	Yes	BOVA,SppObs
010175			Bass, rock	Ambloplites rupestris		BOVA
010186			Bass, smallmouth	Micropterus dolomieu	Yes	BOVA,SppObs
010187			Bass, spotted	Micropterus punctulatus	Yes	BOVA,SppObs
010168			Bass, striped	Morone saxatilis		BOVA
010167			Bass, white	Morone chrysops		BOVA
010183			Bluegill	Lepomis macrochirus	Yes	BOVA,SppObs

010121			Bullhead, black	Ameiurus melas	Yes	BOVA,SppObs
010123			Bullhead, brown	Ameiurus nebulosus	Yes	BOVA,SppObs
010124			Bullhead, flat	Ameiurus platycephalus	Yes	BOVA,SppObs
010122			Bullhead, yellow	Ameiurus natalis	Yes	BOVA,SppObs
010062			Carp, common	Cyprinus carpio	Yes	BOVA,SppObs
010390			Catfish, blue	Ictalurus furcatus		BOVA
010125			Catfish, channel	Ictalurus punctatus	Yes	BOVA,SppObs
010130			Catfish, flathead	Pylodictis olivaris		BOVA
010120			Catfish, white	Ameiurus catus	Yes	BOVA,SppObs
010066			Chub, bluehead	Nocomis leptocephalus	Yes	BOVA,SppObs
010373			Chub, bull	Nocomis raneyi	Yes	BOVA,SppObs
010103			Chub, creek	Semotilus atromaculatus	Yes	BOVA,SppObs
010067			Chub, river	Nocomis micropogon		BOVA
010190			Crappie, black	Pomoxis nigromaculatus	Yes	BOVA,SppObs
010189			Crappie, white	Pomoxis annularis		BOVA
010101			Dace, blacknose	Rhinichthys atratulus	Yes	BOVA,SppObs
010060			Dace, mountain redbelly	Chrosomus oreas	Yes	BOVA,SppObs
010366			Dace, rosyside	Clinostomus funduloides	Yes	BOVA,SppObs
010460			Darter, chainback	Percina nevisense	Yes	BOVA,SppObs

010193			Darter, fantail	Etheostoma flabellare	Yes	BOVA,SppObs
010204			Darter, glassy	Etheostoma vitreum	Yes	BOVA,SppObs
010198			Darter, johnny	Etheostoma nigrum	Yes	BOVA,SppObs
010200			Darter, riverweed	Etheostoma podostemone	Yes	BOVA,SppObs,HU6
010061			Darter, Roanoke	Percina roanoka	Yes	BOVA,SppObs
010213			Darter, shield	Percina peltata	Yes	BOVA,SppObs
010397			Darter, tessellated	Etheostoma olmstedi		BOVA
010106			Eastern Creek Chubsucker	Erimyzon oblongus	Yes	BOVA,SppObs
010112			Jumprock, black	Moxostoma cervinum	Yes	BOVA,SppObs
010129			Madtom, margined	Noturus insignis	Yes	BOVA,SppObs
010432			Madtom, spotted-margin	Noturus insignis ssp 1		BOVA
010099			Minnow, bluntnose	Pimephales notatus		BOVA
010100			Minnow, fathead	Pimephales promelas		BOVA
010148			Mosquitofish, eastern	Gambusia holbrooki	Yes	BOVA,SppObs
010365			Muskellunge	Esox masquinongy		BOVA
010166			Perch, white	Morone americana		BOVA
010206			Perch, yellow	Perca flavescens		BOVA
010056			Pickerel, chain	Esox niger	Yes	BOVA,SppObs
010055			Pickerel, redfin	Esox americanus americanus	Yes	BOVA,SppObs

010182		Pumpkinseed	Lepomis gibbosus	Yes	BOVA,SppObs
010374		Quillback	Cariodes cyprinus	Yes	BOVA,SppObs
010114		Redhorse, golden	Moxostoma erythrurum	Yes	BOVA,SppObs
010116		Redhorse, shorthead	Moxostoma macrolepidotum	Yes	BOVA,SppObs
010113		Redhorse, v-lip	Moxostoma pappillosum	Yes	BOVA,SppObs
010034		Ruddy Bowfin	Amia calva		BOVA
010284		Sculpin, banded	Cottus carolinae		BOVA
010417		Sculpin, Genus = Cottus	Cottus spp.	Yes	BOVA,SppObs
010041		Shad, gizzard	Dorosoma cepedianum	Yes	BOVA,SppObs
010072		Shiner, comely	Notropis amoenus	Yes	BOVA,SppObs
010078		Shiner, crescent	Luxilus cerasinus	Yes	BOVA,SppObs
010068		Shiner, golden	Notemigonus crysoleucas	Yes	BOVA,SppObs
010094		Shiner, mimic	Paranotropis volucellus		BOVA
010074		Shiner, rosefin	Lythrurus ardens	Yes	BOVA,SppObs
010073		Shiner, satinfin	Cyprinella analostana	Yes	BOVA,SppObs
010082		Shiner, spottail	Hudsonius hudsonius	Yes	BOVA,SppObs
010086		Shiner, swallowtail	Miniellus procne	Yes	BOVA,SppObs
010069		Shiner, white	Luxilus albeolus	Yes	BOVA,SppObs
010058		Stoneroller, central	Camptostoma anomalum	Yes	BOVA,SppObs

010108		Sucker, northern hog	Hypentelium nigricans	Yes	BOVA,SppObs
010118		Sucker, torrent	Thoburnia rathoea		BOVA
010105		Sucker, white	Catostomus commersonii	Yes	BOVA,SppObs
010454		Sunfish, Genus = Lepomis	Lepomis sp.	Yes	BOVA,SppObs
010181		Sunfish, green	Lepomis cyanellus	Yes	BOVA,SppObs
010180		Sunfish, redbreast	Lepomis auritus	Yes	BOVA,SppObs
010185		Sunfish, redear	Lepomis microlophus	Yes	BOVA,SppObs
010216		Walleye	Sander vitreus vitreus		BOVA
010177		Warmouth	Lepomis gulosus		BOVA
020004		Bullfrog, American	Lithobates catesbeianus	Yes	BOVA,SppObs
020016		Frog, Coastal Plains leopard	Lithobates sphenoccephalus utricularius	Yes	BOVA,SppObs
020012		Frog, eastern cricket	Acris crepitans	Yes	BOVA,SppObs
020008		Frog, green	Lithobates clamitans		BOVA
020013		Frog, pickerel	Lithobates palustris		BOVA
020018		Frog, upland chorus	Pseudacris feriarum	Yes	BOVA,SppObs
020019		Frog, wood	Lithobates sylvaticus		BOVA
020065		Newt, red-spotted	Notophthalmus viridescens viridescens		BOVA
020071		Peeper, spring	Pseudacris crucifer		BOVA

020043		Salamander, eastern red-backed	Plethodon cinereus		BOVA
020089		Salamander, flat-headed	Desmognathus planiceps		BOVA
020029		Salamander, four-toed	Hemidactylium scutatum		BOVA
020035		Salamander, marbled	Ambystoma opacum	Yes	BOVA,SppObs
020038		Salamander, northern dusky	Desmognathus fuscus	Yes	BOVA,SppObs
020070		Salamander, northern red	Pseudotriton ruber ruber		BOVA
020077		Salamander, northern spring	Gyrinophilus porphyriticus porphyriticus		BOVA
020075		Salamander, seal	Desmognathus monticola		BOVA
020050		Salamander, southern two-lined	Eurycea cirrigera		BOVA
020049		Salamander, spotted	Ambystoma maculatum	Yes	BOVA,SppObs
020051		Salamander, three-lined	Eurycea guttolineata		BOVA
020080		Salamander, white-spotted slimy	Plethodon cylindraceus		BOVA
020059		Toad, eastern American	Anaxyrus americanus americanus	Yes	BOVA,SppObs
020060		Toad, eastern narrow-mouthed	Gastrophryne carolinensis	Yes	BOVA,SppObs
020062		Toad, Fowler's	Anaxyrus fowleri	Yes	BOVA,SppObs
020006		Treefrog, Cope's gray	Hyla chrysoscelis	Yes	BOVA,SppObs

020007			Treefrog, gray	Hyla versicolor		BOVA
030041			Brownsnake, Dekay's	Storeria dekayi	Yes	BOVA,SppObs
030059			Cooter, eastern river	Pseudemys concinna concinna		BOVA
030016			Copperhead, eastern	Agkistrodon contortrix		BOVA
030022			Cornsake, red	Pantherophis guttatus		BOVA
030049			Earthsake, eastern smooth	Virginia valeriae valeriae		BOVA
030044			Gartersake, eastern	Thamnophis sirtalis sirtalis	Yes	BOVA,SppObs
030038			Greensake, northern rough	Opheodrys aestivus aestivus		BOVA
030026			Kingsake, eastern	Lampropeltis getula	Yes	BOVA,SppObs
030027			Kingsake, northern mole	Lampropeltis rhombomaculata		BOVA
030002			Lizard, eastern fence	Sceloporus undulatus	Yes	BOVA,SppObs
030029			Milksake, eastern	Lampropeltis triangulum		BOVA
030018			Racer, northern black	Coluber constrictor constrictor	Yes	BOVA,SppObs
030008			Racerunner, eastern six-lined	Aspidoscelis sexlineata sexlineata		BOVA
030023			Ratsake, eastern	Pantherophis alleghaniensis	Yes	BOVA,SppObs
030006			Skink, broad-headed	Plestiodon laticeps	Yes	BOVA,SppObs

030004			Skink, common five-lined	Plestiodon fasciatus		BOVA
030007			Skink, little brown	Scincella lateralis		BOVA
030005			Skink, southeastern five-lined	Plestiodon inexpectatus		BOVA
030077			Slider, red-eared	Trachemys scripta elegans		BOVA
030042			Snake, northern red-bellied	Storeria occipitomaculata occipitomaculata		BOVA
030020			Snake, northern ring-necked	Diadophis punctatus edwardsii		BOVA
030052			Turtle, eastern musk	Sternotherus odoratus		BOVA
030060			Turtle, eastern painted	Chrysemys picta picta		BOVA
030051			Turtle, southeastern mud	Kinosternon subrubrum subrubrum		BOVA
030034			Watersnake, northern	Nerodia sipedon sipedon		BOVA
030019			Wormsnake, eastern	Carphophis amoenus amoenus		BOVA
040346			Blackbird, red-winged	Agelaius phoeniceus	Potential	BOVA,BBA
040282			Bluebird, eastern	Sialia sialis	Potential	BOVA,BBA
040361			Bunting, indigo	Passerina cyanea	Potential	BOVA,BBA
040357			Cardinal, northern	Cardinalis cardinalis	Yes	BOVA,BBA,SppObs

040258		Chickadee, Carolina	Poecile carolinensis	Potential	BOVA,BBA
040214		Chuck-will's-widow	Antrostomus carolinensis		BOVA,HU6
040113		Coot, American	Fulica americana		BOVA
040024		Cormorant, double-crested	Phalacrocorax auritus	Potential	BOVA,BBA
040353		Cowbird, brown-headed	Molothrus ater	Potential	BOVA,BBA
040264		Creeper, brown	Certhia americana		BOVA,HU6
040373		Crossbill, white-winged	Loxia leucoptera		BOVA
040255		Crow, American	Corvus brachyrhynchos	Yes	BOVA,BBA,SppObs
040256		Crow, fish	Corvus ossifragus		BOVA
040364		Dickcissel	Spiza americana		BOVA
040198		Dove, mourning	Zenaida macroura carolinensis	Potential	BOVA,BBA
040061		Duck, wood	Aix sponsa	Potential	BOVA,BBA
040093		Eagle, bald	Haliaeetus leucocephalus		BOVA,HU6
040030		Egret, cattle	Bubulcus ibis		BOVA
040032		Egret, great	Ardea alba egretta		BOVA
040367		Finch, house	Haemorhous mexicanus	Potential	BOVA,BBA
040366		Finch, purple	Haemorhous purpureus		BOVA
040239		Flycatcher, Acadian	Empidonax vireescens	Yes	BOVA,BBA,SppObs

040234		Flycatcher, great crested	Myiarchus crinitus	Potential	BOVA,BBA
040240		Flycatcher, willow	Empidonax traillii		HU6
040284		Gnatcatcher, blue-gray	Poliophtila caerulea	Yes	BOVA,BBA,SppObs
040371		Goldfinch, American	Spinus tristis	Yes	BOVA,BBA,SppObs
040045		Goose, Canada	Branta canadensis	Potential	BOVA,BBA
040352		Grackle, common	Quiscalus quiscula	Potential	BOVA,BBA
040008		Grebe, pied-billed	Podilymbus podiceps	Potential	BOVA,BBA
040360		Grosbeak, blue	Passerina caerulea	Potential	BOVA,BBA
040365		Grosbeak, evening	Coccothraustes vespertinus		BOVA
040358		Grosbeak, rose-breasted	Pheucticus ludovicianus	Yes	BOVA,SppObs
040165		Gull, great black-backed	Larus marinus		BOVA
040167		Gull, herring	Larus argentatus		BOVA
040089		Hawk, broad-winged	Buteo platypterus	Potential	BOVA,BBA
040086		Hawk, Cooper's	Accipiter cooperii	Potential	BOVA,BBA
040088		Hawk, red-shouldered	Buteo lineatus lineatus	Potential	BOVA,BBA
040087		Hawk, red-tailed	Buteo jamaicensis	Potential	BOVA,BBA
040090		Hawk, rough-legged	Buteo lagopus johannis		BOVA
040085		Hawk, sharp-shinned	Accipiter striatus velox	Potential	BOVA,BBA

040027		Heron, great blue	Ardea herodias herodias	Yes	BOVA,BBA,SppObs
040218		Hummingbird, ruby-throated	Archilochus colubris	Potential	BOVA,BBA
040252		Jay, blue	Cyanocitta cristata	Potential	BOVA,BBA
040387		Junco, dark-eyed	Junco hyemalis		BOVA
040098		Kestrel, American	Falco sparverius sparverius	Potential	BOVA,BBA
040119		Killdeer	Charadrius vociferus	Potential	BOVA,BBA
040285		Kinglet, golden-crowned	Regulus satrapa		BOVA
040286		Kinglet, ruby-crowned	Regulus calendula		BOVA
040245		Lark, horned	Eremophila alpestris		BOVA
040051		Mallard	Anas platyrhynchos	Potential	BOVA,BBA
040251		Martin, purple	Progne subis	Potential	BOVA,BBA
040271		Mockingbird, northern	Mimus polyglottos	Potential	BOVA,BBA
040112		Moorhen, common	Gallinula chloropus cachinnans		BOVA
040216		Nighthawk, common	Chordeiles minor	Potential	BOVA,BBA
040263		Nuthatch, brown-headed	Sitta pusilla	Potential	BOVA,BBA,HU6
040262		Nuthatch, red-breasted	Sitta canadensis		BOVA
040261		Nuthatch, white-breasted	Sitta carolinensis	Yes	BOVA,BBA,SppObs

040348		Oriole, Baltimore	Icterus galbula		BOVA
040347		Oriole, orchard	Icterus spurius	Potential	BOVA,BBA
040095		Osprey	Pandion haliaetus carolinensis		BOVA
040330		Ovenbird	Seiurus aurocapilla	Yes	BOVA,BBA,SppObs,HU6
040209		Owl, barred	Strix varia	Potential	BOVA,BBA
040206		Owl, great horned	Bubo virginianus	Potential	BOVA,BBA
040211		Owl, short-eared	Asio flammeus		BOVA
040312		Parula, northern	Setophaga americana	Potential	BOVA,BBA,HU6
040101		Pheasant, ring-necked	Phasianus colchicus		BOVA
040236		Phoebe, eastern	Sayornis phoebe	Potential	BOVA,BBA
040197		Pigeon, rock	Columba livia	Potential	BOVA,BBA
040254		Raven, common	Corvus corax		BOVA
040341		Redstart, American	Setophaga ruticilla	Potential	BOVA,BBA
040275		Robin, American	Turdus migratorius	Potential	BOVA,BBA
040132		Sandpiper, solitary	Tringa solitaria		BOVA
040134		Sandpiper, spotted	Actitis macularia		BOVA
040129		Sandpiper, upland	Bartramia longicauda		BOVA
040225		Sapsucker, yellow-bellied	Sphyrapicus varius		BOVA
040205		Screech-owl, eastern	Megascops asio	Potential	BOVA,BBA
040370		Siskin, pine	Spinus pinus		BOVA

040141			Snipe, Wilson's	Gallinago delicata		BOVA
040389			Sparrow, chipping	Spizella passerina	Potential	BOVA,BBA
040395			Sparrow, fox	Passerella iliaca		BOVA
040342			Sparrow, house	Passer domesticus	Potential	BOVA,BBA
040377			Sparrow, savannah	Passerculus sandwichensis		BOVA
040398			Sparrow, song	Melospiza melodia	Potential	BOVA,BBA
040397			Sparrow, swamp	Melospiza georgiana		BOVA
040383			Sparrow, vesper	Poocetes gramineus		BOVA
040393			Sparrow, white-crowned	Zonotrichia leucophrys		BOVA
040394			Sparrow, white-throated	Zonotrichia albicollis		BOVA
040294			Starling, European	Sturnus vulgaris	Potential	BOVA,BBA
040249			Swallow, barn	Hirundo rustica	Potential	BOVA,BBA
040355			Tanager, scarlet	Piranga olivacea	Yes	BOVA,BBA,SppObs,HU6
040356			Tanager, summer	Piranga rubra	Potential	BOVA,BBA
040056			Teal, green-winged	Anas crecca carolinensis		BOVA
040189			Tern, Caspian	Hydroprogne caspia		BOVA
040278			Thrush, hermit	Catharus guttatus		BOVA
040260			Titmouse, tufted	Baeolophus bicolor	Yes	BOVA,BBA,SppObs
040102			Turkey, wild	Meleagris gallopavo silvestris	Potential	BOVA,BBA

040298		Vireo, blue-headed	Vireo solitarius	Yes	BOVA,SppObs
040299		Vireo, red-eyed	Vireo olivaceus	Yes	BOVA,BBA,SppObs
040301		Vireo, warbling	Vireo gilvus gilvus		BOVA
040295		Vireo, white-eyed	Vireo griseus	Potential	BOVA,BBA
040297		Vireo, yellow-throated	Vireo flavifrons	Potential	BOVA,BBA,HU6
040081		Vulture, black	Coragyps atratus	Potential	BOVA,BBA
040080		Vulture, turkey	Cathartes aura	Potential	BOVA,BBA
040316		Warbler, black-throated blue	Setophaga caerulescens		BOVA
040319		Warbler, black-throated green	Setophaga virens		BOVA
040325		Warbler, blackpoll	Setophaga striata		BOVA
040307		Warbler, blue-winged	Vermivora cyanoptera		BOVA
040323		Warbler, chestnut-sided	Setophaga pensylvanica		BOVA
040338		Warbler, hooded	Setophaga citrina	Potential	BOVA,BBA
040314		Warbler, magnolia	Setophaga magnolia		BOVA
040311		Warbler, Nashville	Leiothlypis ruficapilla		BOVA
040329		Warbler, palm	Setophaga palmarum		BOVA
040326		Warbler, pine	Setophaga pinus	Yes	BOVA,BBA,SppObs

040328		Warbler, prairie	Setophaga discolor	Potential	BOVA,BBA,HU6
040303		Warbler, prothonotary	Protonotaria citrea		BOVA,HU6
040305		Warbler, worm-eating	Helmitheros vermivorus		BOVA,HU6
040313		Warbler, yellow	Setophaga petechia	Potential	BOVA,BBA,HU6
040317		Warbler, yellow-rumped	Setophaga coronata		BOVA
040322		Warbler, yellow-throated	Setophaga dominica		BOVA
040332		Waterthrush, Louisiana	Parkesia motacilla	Potential	BOVA,BBA,HU6
040331		Waterthrush, northern	Parkesia noveboracensis		BOVA
040290		Waxwing, cedar	Bombycilla cedrorum	Potential	BOVA,BBA
040227		Woodpecker, downy	Dryobates pubescens	Yes	BOVA,BBA,SppObs
040226		Woodpecker, hairy	Dryobates villosus	Potential	BOVA,BBA
040222		Woodpecker, pileated	Dryocopus pileatus	Yes	BOVA,BBA,SppObs
040223		Woodpecker, red-bellied	Melanerpes carolinus	Yes	BOVA,BBA,SppObs
040224		Woodpecker, red-headed	Melanerpes erythrocephalus		BOVA
040268		Wren, Carolina	Thryothorus ludovicianus	Yes	BOVA,BBA,SppObs
040265		Wren, house	Troglodytes aedon	Potential	BOVA,BBA
040266		Wren, winter	Troglodytes troglodytes		BOVA
040130		Yellowlegs, greater	Tringa melanoleuca		BOVA

040336			Yellowthroat, common	Geothlypis trichas	Potential	BOVA,BBA
050028			Bat, big brown	Eptesicus fuscus	Yes	BOVA,SppObs
050033			Bat, evening	Nycticeius humeralis	Yes	BOVA,SppObs
050037			Bear, American black	Ursus americanus		BOVA
050069			Beaver, American	Castor canadensis		BOVA
050116			Beaver, Carolina	Castor canadensis carolinensis		BOVA
050051			Bobcat	Lynx rufus rufus		BOVA
050055			Chipmunk, Fisher's eastern	Tamias striatus fisheri		BOVA
050103			Cottontail, eastern	Sylvilagus floridanus mallurus		BOVA
050125			Coyote	Canis latrans		BOVA
050108			Deer, white-tailed	Odocoileus virginianus		BOVA
050050			Fox, common gray	Urocyon cinereoargenteus cinereoargenteus		BOVA
050049			Fox, red	Vulpes vulpes fulva		BOVA
050042			Mink, common	Neogale vison mink		BOVA
050017			Mole, eastern	Scalopus aquaticus aquaticus		BOVA
050074			Mouse, common white-footed	Peromyscus leucopus leucopus		BOVA

050070			Mouse, eastern harvest	Reithrodontomys humulis humulis		BOVA
050098			Mouse, house	Mus musculus musculus		BOVA
050076			Mouse, Lewis' golden	Ochrotomys nuttalli nuttalli		BOVA
050099			Mouse, meadow jumping	Zapus hudsonius americanus		BOVA
050073			Mouse, northern white-footed	Peromyscus leucopus noveboracensis		BOVA
050093			Muskrat, large-toothed	Ondatra zibethicus macrodon		BOVA
050001			Opossum, Virginia	Didelphis virginiana virginiana		BOVA
050045			Otter, northern river	Lontra canadensis lataxina		BOVA
050038			Raccoon	Procyon lotor lotor		BOVA
050079			Rat, hispid cotton	Sigmodon hispidus virginianus		BOVA
050095			Rat, Norway	Rattus norvegicus norvegicus		BOVA
050010			Shrew, American pygmy	Sorex hoyi		BOVA
050015			Shrew, least	Cryptotis parva		BOVA
050013			Shrew, northern short-tailed	Blarina brevicauda kirtlandi		BOVA
050007			Shrew, southeastern	Sorex longirostris longirostris		BOVA

050048			Skunk, striped	Mephitis mephitis mephitis		BOVA
050063			Squirrel, eastern fox	Sciurus niger vulpinus		BOVA
050057			Squirrel, eastern gray	Sciurus carolinensis carolinensis		BOVA
050065			Squirrel, southern flying	Glaucomys volans volans		BOVA
050090			Vole, common pine	Microtus pinetorum pinetorum		BOVA
050082			Vole, meadow	Microtus pennsylvanicu s pennsylvanicu s		BOVA
050087			Vole, southern red-backed	Myodes gapperi		BOVA
050040			Weasel, least	Mustela nivalis allegheniensis		BOVA
050041			Weasel, long-tailed	Neogale frenata noveboracensi s		BOVA
050054			Woodchuck	Marmota monax monax		BOVA
060016			Campeloma, pointed	Campeloma decisum	Yes	SppObs
060177			Clam, Asian	Corbicula fluminea	Yes	BOVA,SppObs
060012			Floater, eastern	Pyganodon cataracta		BOVA
060025			Mussel, eastern elliptio	Elliptio complanata	Yes	BOVA,SppObs
060077			Mussel, plain pocketbook	Lampsilis cardium		BOVA

060228			Physa, Unknown - Genus = Physella	Physella sp.		BOVA
060095			Physa, Wandering	Physella acuta		BOVA
060134			Snail, crested mudalia	Leptoxis carinata	Yes	BOVA,SppObs
060198			Snail, sprite elimia	Elimia proxima		BOVA
060200			Snail, symmetrical elimia	Elimia symmetrica		BOVA
060064			Snail, two- ridge rams- horn	Helisoma anceps		BOVA
070095			Crawfish, Devil	Lacunicambar us diogenes		BOVA
070130			CRAYFISH	Orconectes c. f. spinosus		BOVA
070102			Crayfish, Common	Cambarus bartonii bartonii		BOVA
070093			Crayfish, no common name	Cambarus longulus		BOVA
070094			Crayfish, no common name	Cambarus acuminatus	Yes	BOVA,SppObs
100043			Armyworm	Pseudaletia unipuncta		BOVA
100041			Borer, European corn	Ostrinia nubilatis		BOVA
100167			Butterfly, carus skipper	Polites carus		BOVA
100211			Butterfly, orange sulphur	Colias eurytheme		BOVA

100359			Butterfly, Peck's skipper	Polites peckius		BOVA
100082			Butterfly, silver-spotted skipper	Epargyreus clarus		BOVA
100153			Butterfly, wild indigo duskywing	Erynnis baptisiae		BOVA
100151			Butterfly, Zarucco duskywing	Erynnis zarucco		BOVA
100042			Earworm, corn	Heliathis zea		BOVA
100040			Moth, codling	Cydia pomonella		BOVA
100310			Moth, small-eyed sphinx	Paonias myops		BOVA
110230			Tick, American dog	Dermacentor variabilis		BOVA
110232			Tick, brown dog	Rhipicephalus sanguineus		BOVA
110228			Tick, lone star	Amblyomma americanum		BOVA
110231			Tick, rabbit	Haemaphysalis leporispalustris		BOVA
110229			Tick, winter	Dermacentor albipictus		BOVA

*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate; CC=Collection Concern

**I=VA Wildlife Action Plan - Tier I - Critical Conservation Need; II=VA Wildlife Action Plan - Tier II - Very High Conservation Need; III=VA Wildlife Action Plan - Tier III - High Conservation Need; IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need

Virginia Wildlife Action Plan Conservation Opportunity Ranking:

a - On the ground management strategies/actions exist and can be feasibly implemented.; b - On the ground actions or research needs have been identified but cannot feasibly be implemented at this time.; c - No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted.

Compiled on 3/8/2024, 2:54:50 PM 11820099.0 report=1 searchType= P dist= 3218 poi= 36.6962700 -79.4853099

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Transcontinental Gas Pipe Line Company, LLC
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Houston, Texas 77251-1396
713-215-2000

ATTACHMENT D

Table 1: List of Federal and State Listed Species within the Project Action Area



Transcontinental Gas Pipe Line Company, LLC
 2800 Post Oak Boulevard (77056)
 P.O. Box 1396
 Houston, Texas 77251-1396
 713-215-2000

Table 1: List of Federal and State Listed Species within the Project Action Area¹

Species	Federal Listing/ State Status	Results Source	Project Assessment
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	FE/ST	VAFWIS Results (Unconfirmed)	<p>Tree felling is proposed within the Project action areas. Where tree felling would be required for construction activities, Transco proposes to complete the tree felling during the appropriate time of year to minimize impacts to the Northern Long Eared Bat.</p> <p>Please respond if there are any additional considerations or field studies/surveys recommended for the DWR to make its determination for this Project.</p>
Tricolored Bat (<i>Perimyotis subflavus</i>)	FP/SE	VAFWIS Results; WERMS	<p>Tree felling is proposed within the Project action areas. Where tree felling would be required for construction activities, Transco proposes to complete the tree felling during the appropriate time of year to minimize impacts to the Tri-colored Bat.</p> <p>Please respond if there are any additional considerations or field studies/surveys recommended for the DWR to make its determination for this Project.</p>
Little Brown Bat (<i>Myotis lucifugus</i>)	SE	VAFWIS Results (Unconfirmed)	<p>Tree felling is proposed within the Project action areas. Where tree felling would be required for construction activities, Transco proposes to complete the tree felling during the appropriate time of year to minimize impacts to the Little Brown Bat.</p> <p>Please respond if there are any additional considerations or field studies/surveys recommended for the DWR to make its determination for this Project.</p>
James Spinemussel (<i>Parvaspina collina</i>)	FE/SE	VAFWIS Results	<p>Based on desktop review, the Project action area may contain suitable habitat for the James spineymussel. Transco is evaluating the potential impacts to this species.</p> <p>Please respond if there are any additional considerations or field studies/surveys recommended for the DWR to make its determination for this Project.</p>
Roanoke Logperch (<i>Percina rex</i>)	FE/SE	VAFWIS Results	<p>Based on desktop review, potential Roanoke logperch suitable habitat may occur within the Project action area such as: usually large sized, warm streams containing areas of riffles, run, and pool complexes with sand, gravel, or boulder substrates. Transco is evaluating the potential impacts to this species.</p> <p>Please respond if there are any additional considerations or field studies/surveys recommended for the DWR to make its determination for this Project.</p>



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Species	Federal Listing/ State Status	Results Source	Project Assessment
Atlantic Pigtoe (<i>Fusconaia masoni</i>)	FT/ST	VAFWIS Results	Based on IPaC and desktop review, Project action area does not overlap the final critical habitat for the Atlantic pigtoe but may contain suitable habitat. Transco is evaluating the potential impacts to this species. Please respond if there are any additional considerations or field studies/surveys recommended for the DWR to make its determination for this Project.
Spirit Supercoil (<i>Paravitrea hera</i>)	None/SE	VAFWIS Results (Unconfirmed)	The Project is located in Pittsylvania County, but south of the Staunton River, outside of the reported occurrences of the spirit supercoil. Please respond if there are any additional considerations or field studies/surveys recommended for the DWR to make its determination for this Project.
Loggerhead Shrike (<i>Lanius ludovicianus</i>)	None/ST	VAFWIS Results (Unconfirmed)	Where tree felling would be required for construction activities, Transco proposes to complete the tree felling during the appropriate time of year to minimize impacts. Transco has designed the Project in a manner so as to minimize potential effects to bird species. Please respond if there are any additional considerations or field studies/surveys recommended for the DWR to make its determination for this Project.
Green Floater (<i>Lasmigona subviridis</i>)	FP/ST	VAFWIS Results	Based on IPaC results, the Project action area does overlap with the green floater proposed critical habitat. Based on desktop review, the Project action area may contain suitable habitat for the green floater. Transco is evaluating the potential impacts to this species. Please respond if there are any additional considerations or field studies/surveys recommended for the DWR to make its determination for this Project.
Orange-fin Madtom (<i>Noturus gilberti</i>)	None/ST	VAFWIS Results (Unconfirmed)	The Project action area appears to be east of the range for orange-fin madtom. Please respond if there are any additional considerations or field studies/surveys recommended for the DWR to make its determination for this Project.
Carolina Darter (<i>Etheostoma collis</i>)	None/ST	VAFWIS Results (Unconfirmed)	Please respond if there are any additional considerations or field studies/surveys recommended for the DWR to make its determination for this Project.
Migrant Loggerhead Shrike (<i>Lanius</i>)	None/ST	VAFWIS Results (Unconfirmed)	Please respond if there are any additional considerations or field studies/surveys recommended for the DWR to make its determination for this Project.



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Species	Federal Listing/ State Status	Results Source	Project Assessment
<i>ludovicianus migrans</i>)			
Scarlet Kingsnake (<i>Lampropeltis elapsoides</i>)	None/CC	VAFWIS Results (Unconfirmed)	Please respond if there are any additional considerations or field studies/surveys recommended for the DWR to make its determination for this Project.
Timber Rattlesnake (<i>Crotalus horridus</i>)	None/CC	VAFWIS Results (Unconfirmed)	Please respond if there are any additional considerations or field studies/surveys recommended for the DWR to make its determination for this Project.

Notes:

- ¹ Species known to occur within 2-miles of the Project area as indicated VAFWIS Initial Project Assessment Report (Attachment C).

Sarah L. Turton

Subject: RE: Sanders Environmental - Endangered Species Permit Application

From: Amanda Brumbaugh <amanda@batgate.com>

Sent: Thursday, March 28, 2024 1:54 PM

To: CollectionPermits@dwr.virginia.gov

Cc: Chris Sanders <chris@batgate.com>; Josh.Henry@williams.com; j.broush@gaiconsultants.com; kevinc@whmgroup.com

Subject: Sanders Environmental - Endangered Species Permit Application

Good Afternoon,

Please find our Endangered Species Permit application attached for your review. Additionally, I have included a copy of the proposed Project Study Plan, federal permits and resumes for requested qualified surveyors, and a KML file with the proposed site locations for the Project.

Payment has been mailed to the provided address.

Please let us know if you have any questions.

Thank you,

Amanda Brumbaugh

--

Amanda Brumbaugh
570-419-3327



Virginia Department of Conservation and Recreation



Transcontinental Gas Pipe Line Company, LLC
2800 Post Oak Boulevard (77056)
P.O. Box 1396
Houston, Texas 77251-1396
713-215-2000

April 5, 2024

Ms. Rene Hypes
Environmental Review Coordinator
Department of Conservation and Recreation's Division of Natural Heritage
600 East Main Street, 24th Floor
Richmond, VA 23219

Re: Threatened and Endangered Species Project Review
Transcontinental Gas Pipe Line Company, LLC
Southeast Supply Enhancement Project – Eden Loop Pipeline and Compressor Station 165
Pittsylvania County, VA

Transcontinental Gas Pipe Line Company, LLC. (Transco), indirectly owned by The Williams Companies, Inc. (Williams), is in the initial planning stages of the Southeast Supply Enhancement Project (Project). Transco is seeking authorization from the Federal Energy Regulatory Commission (FERC) under Section 7(c) of the Natural Gas Act to construct, own, operate, and maintain the proposed Project facilities. The Project is an expansion of Transco's existing natural gas transmission system that will enable Transco to provide 1,586,900 dekatherms per day of incremental firm transportation capacity to meet growing natural gas-fired power generation, commercial, residential, and industrial demand in the mid-Atlantic and southeast United States.

Transco is initiating consultation with the Virginia Department of Conservation and Recreation's Division of Natural Heritage (DCR) based on results of natural heritage resources occurrence data provided by its Biotics Data System for the proposed Southeast Supply Enhancement Project (Project). The enclosed information for the proposed Project, provides Project specific information to DCR and requests coordination with DCR's office regarding the presence of natural heritage resources occurring along or in the vicinity of the proposed Project. The Project will consist of the following components (bolded components are located in Virginia):

Pipeline Facilities

- **Approximately 26.4 miles of 42-inch-diameter pipeline in Pittsylvania County, Virginia (VA)** and approximately 4.4-miles of 42-inch-diameter pipeline in Rockingham County, North Carolina (NC), designated as the Eden Loop;
 - Regulator installation in Rockingham County, NC near mile post (MP) 1382.53;
 - Regulator installation in Rockingham County, NC near MP 1382.70; and
- Approximately 24.0 miles of 42-inch-diameter pipeline in Guilford, Forsyth, and Davidson Counties, NC, designated as the Salem Loop.

Compression Facilities

- **The addition of two [22,500 horsepower (HP) each] compressor units at Transco's existing Compressor Station 165 located in Pittsylvania County, VA;**
- The addition of one [23,465 International Organization Standardization (ISO) HP] Solar Titan 130 Turbine and two (31,871 ISO HP each) Solar Titan 250 Turbine compressor units at Transco's existing Compressor Station 155 located in Davidson County, NC;
- The addition of one (15,900 ISO HP) Solar Mars 100 Turbine compressor unit at Transco's existing Compressor Station 150 in Iredell County, NC; and
- Demolition and removal of three (12,500 HP each) existing electric motor-driven (EMD) compressor units and replacement with three (33,000 HP each) EMD compressor units at Transco's existing Compressor Station 145 in Cleveland County, NC.

Facility Modifications



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- Piping modifications at Transco's existing Compressor Station 135 in Anderson County, South Carolina (SC);
- Piping modifications at Transco's existing Compressor Station 125 in Walton County, Georgia (GA);
- Regulator installation and piping modifications at Transco's existing Compressor Station 120 in Henry County, GA; and
- Piping modifications at Transco's existing Compressor Station 105 in Coosa County, Alabama (AL).

The use of existing, improved, and new access roads and contractor yards/staging areas would also be required for the Project. Additional ancillary facilities and piping, such as mainline valves (MLVs), cathodic protection, communication facilities, and internal inspection devices (e.g., pig) launchers and receivers would be necessary to support the Project.

Subject to FERC's certification of the Project and receipt of other necessary permits and authorizations, Transco anticipates that construction of the Project would commence in the first quarter of 2026 to meet a proposed in-service date of November 1, 2027.

Project Setting for Project Components within Virginia

Construction activities associated with Transco's Eden Loop Pipeline will consist of the installation of approximately 26.4-miles of 42-inch-diameter pipeline in Pittsylvania County, VA, while construction activities at Compressor Station 165, also located within Pittsylvania County, VA, will consist of the addition of two new compressor units. Tree felling is anticipated for construction activities associated with the Compressor Station 165 and the Eden Loop Pipeline. Where tree felling would be required, Transco proposes to perform the required species surveys following USFWS and state agency guidance.

Based on desktop review, mapped National Wetland Inventory wetlands and deepwater habitats, National Hydrography Dataset streams, and hydric soils occur within the Eden Loop and Compressor Station 165 Project action areas. Transco is conducting environmental field reviews within Project action areas to identify existing streams and wetland resources. Transco will design the Project to avoid or minimize impacts to environmental resources to the extent practicable.

A Project Overview Map is in **Attachment A**. United States Geological Survey Mapping depicting the preliminary limits of disturbance for the Project facilities within VA is shown on the Project Location Map (**Attachment B**).

Preliminary State-Agency Threatened and Endangered Species Consultation

Based on the information provided in the VA DCR Response Letter, dated February 21, 2024, records of natural heritage resources occur within the proposed Project boundary (**Attachment C**). VA natural heritage resources as identified by the VA DCR Response Letter and additional details are included in Table 1 (**Attachment D**).

Summary

Project facilities will be located within or adjacent to the existing Transco pipeline right-of-way and existing Transco aboveground facilities, to the extent practicable. Stream and wetland field surveys within the study area shown on the Project Location Map (**Attachment B**) will continue through spring and summer of 2024. Transco would be committed to avoiding and minimizing impacts to streams, wetlands, forested areas, and habitats favorable to natural heritage resources presented in the DCR Response Letter to the extent practicable.



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Transco proposes to adhere to VA Department of Environmental Quality erosion and sediment control and stormwater management laws and regulations where applicable. If the Project proposes drilling of any resources, a trenchless construction contingency plan will be developed. Transco will also develop and implement emergency spill plan, best management practices for hydrostatic testing and dewatering which will be included in Transco's Plan and Procedures. Transco will minimize or avoid impact to Ecological Cores to the extent practical. Since the Project is collocated with existing Transco facilities, the majority of tree felling associated with the Project will occur on the edges of existing forest habitat, where necessary. An invasive species plan is being developed and will include language concerning Transco's revegetation and restoration plan.

Transco is requesting information regarding state listed species, time of year restrictions, and any required surveys for rare, threatened, or endangered species.

Transco is coordinating with the United States Fish and Wildlife Service's VA Ecological Services Field Office concerning federally listed species and the VA Department of Wildlife Resources regarding fish and wildlife resources.

If you have questions regarding this correspondence and information request, or if you require additional information, please do not hesitate to call me at 412-713-0485 or email Josh.Henry@williams.com. Alternatively, you can contact Jennifer Broush of GAI Consultants, Inc., at 724-516-1155 or via e-mail at j.broush@gaiconsultants.com. We appreciate your assistance and thank you for your attention to this request.

Respectfully submitted,

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC

A handwritten signature in blue ink, appearing to read "Josh Henry".

Josh Henry
Environmental Specialist

Attachments: Attachment A (Project Overview), Attachment B (Project Location Map), Attachment C (VA DCR's Division of Natural Heritage Letter), Attachment D (List of Virginia Natural Heritage Resource Occurrences within the Project Area)

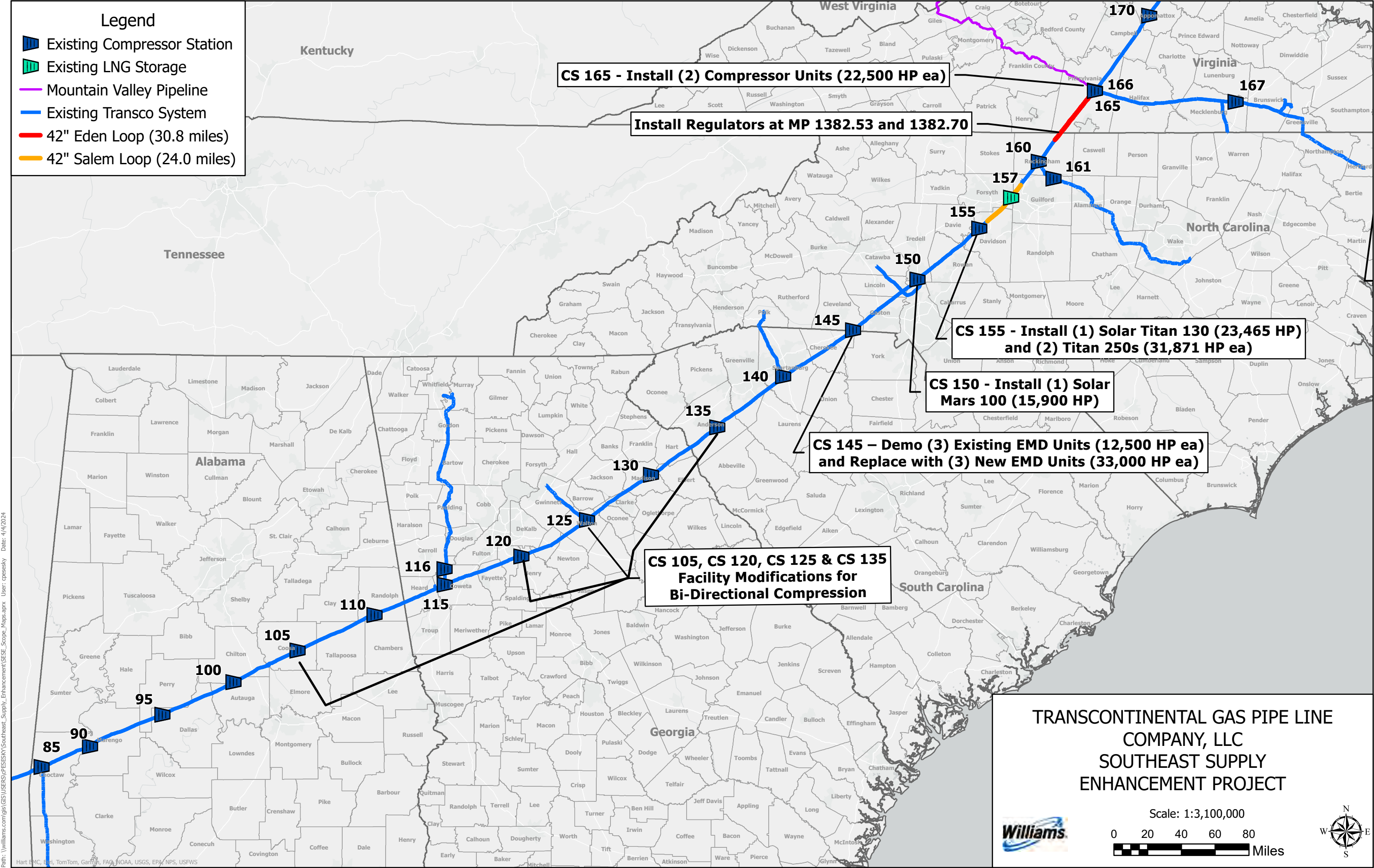
cc: Jennifer Broush, GAI Consultants, Inc.



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ATTACHMENT A

Project Overview Map

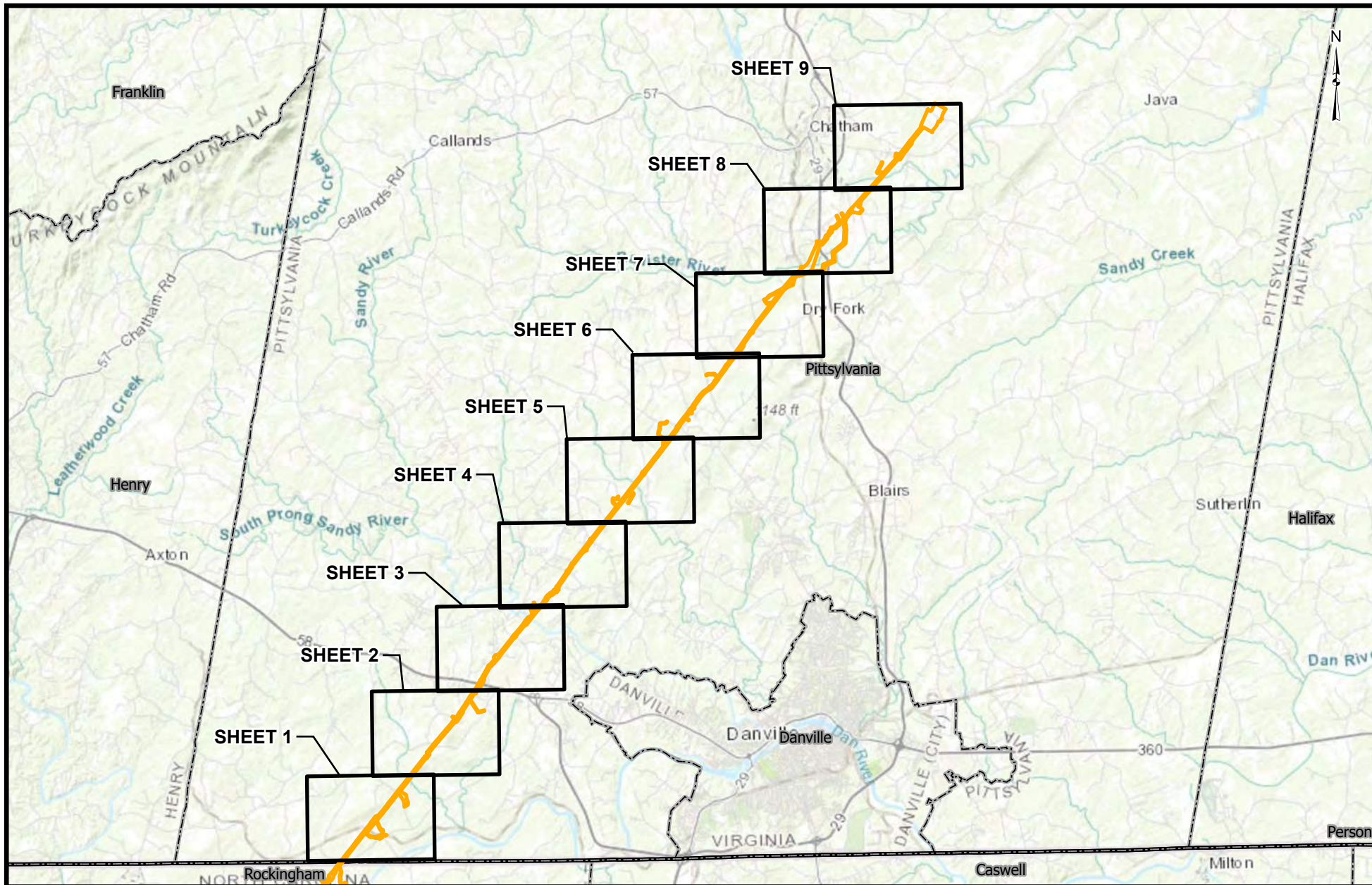








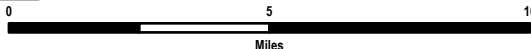
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ATTACHMENT B

Project Location Map



-  Sheet Index
-  Study Area
-  State Boundary
-  County Boundary



SITE LOCATION



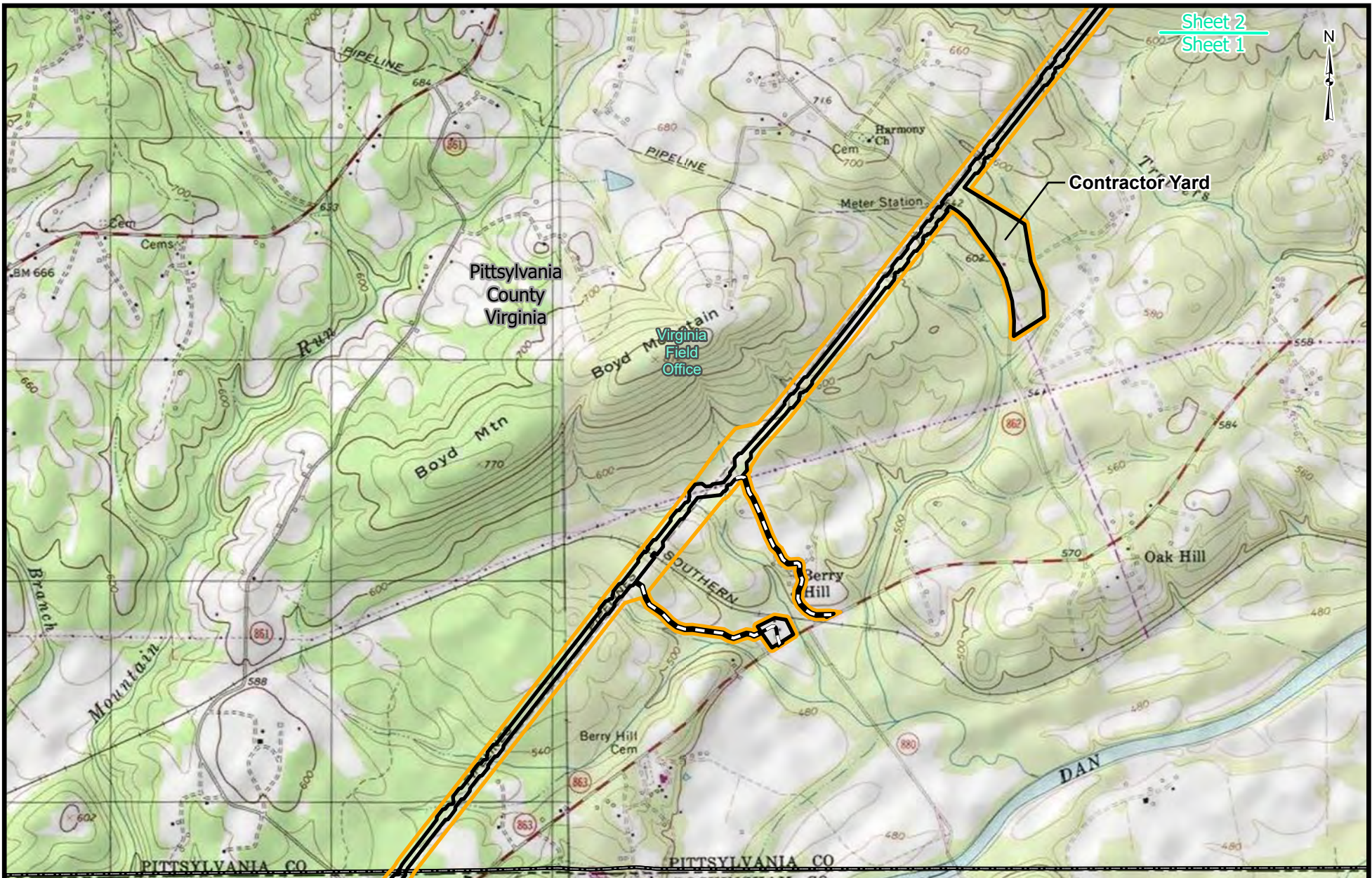
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TOPOGRAPHIC PROJECT LOCATION MAP
SOUTHEAST SUPPLY ENHANCEMENT
VIRGINIA SHEET INDEX
EDEN LOOP



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Access Road

Study Area

Limit of Disturbance

County Boundary

State Boundary

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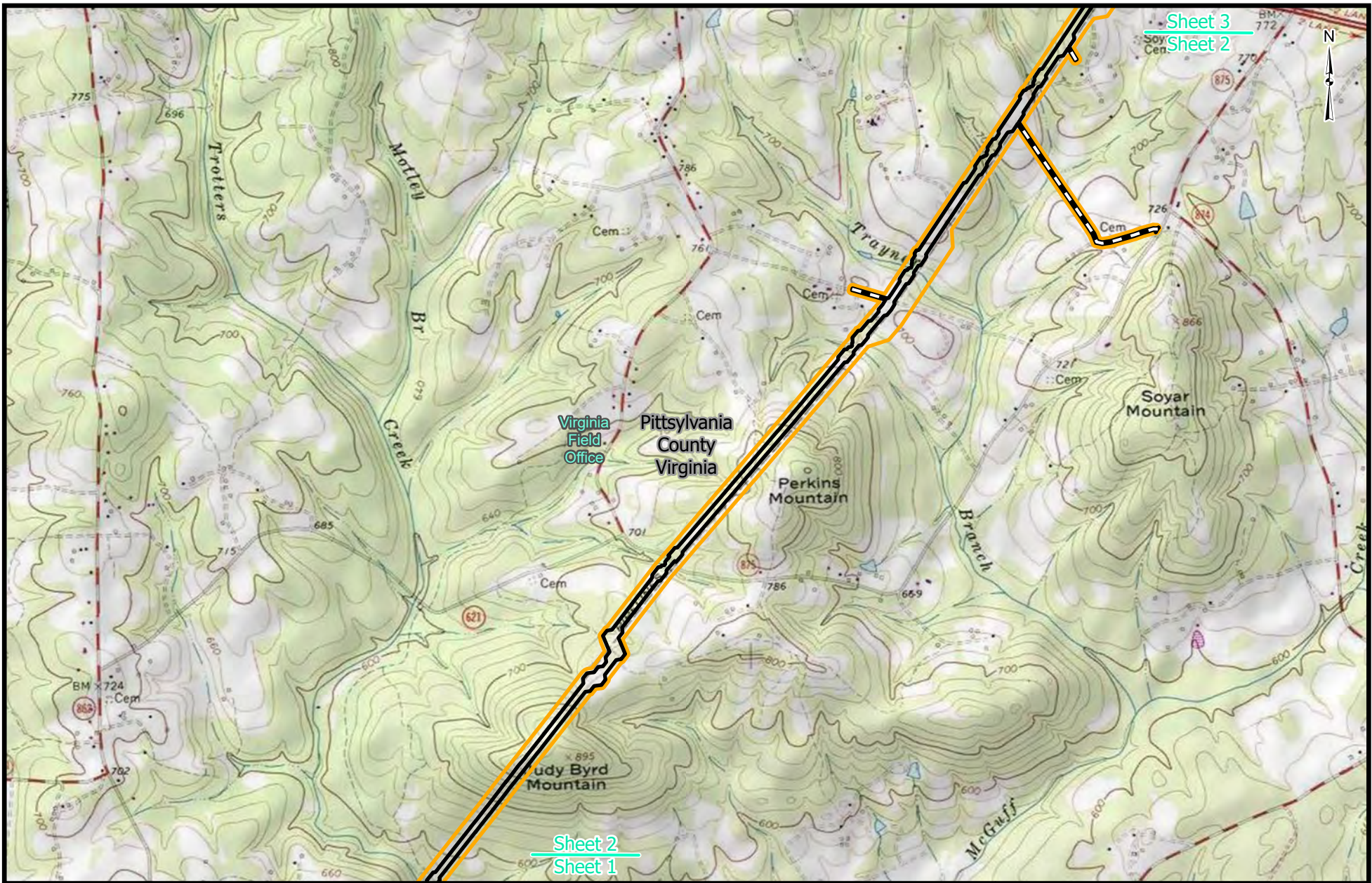
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Legend

- Access Road
- Study Area
- Limit of Disturbance
- County Boundary
- State Boundary

gai consultants

SITE LOCATION

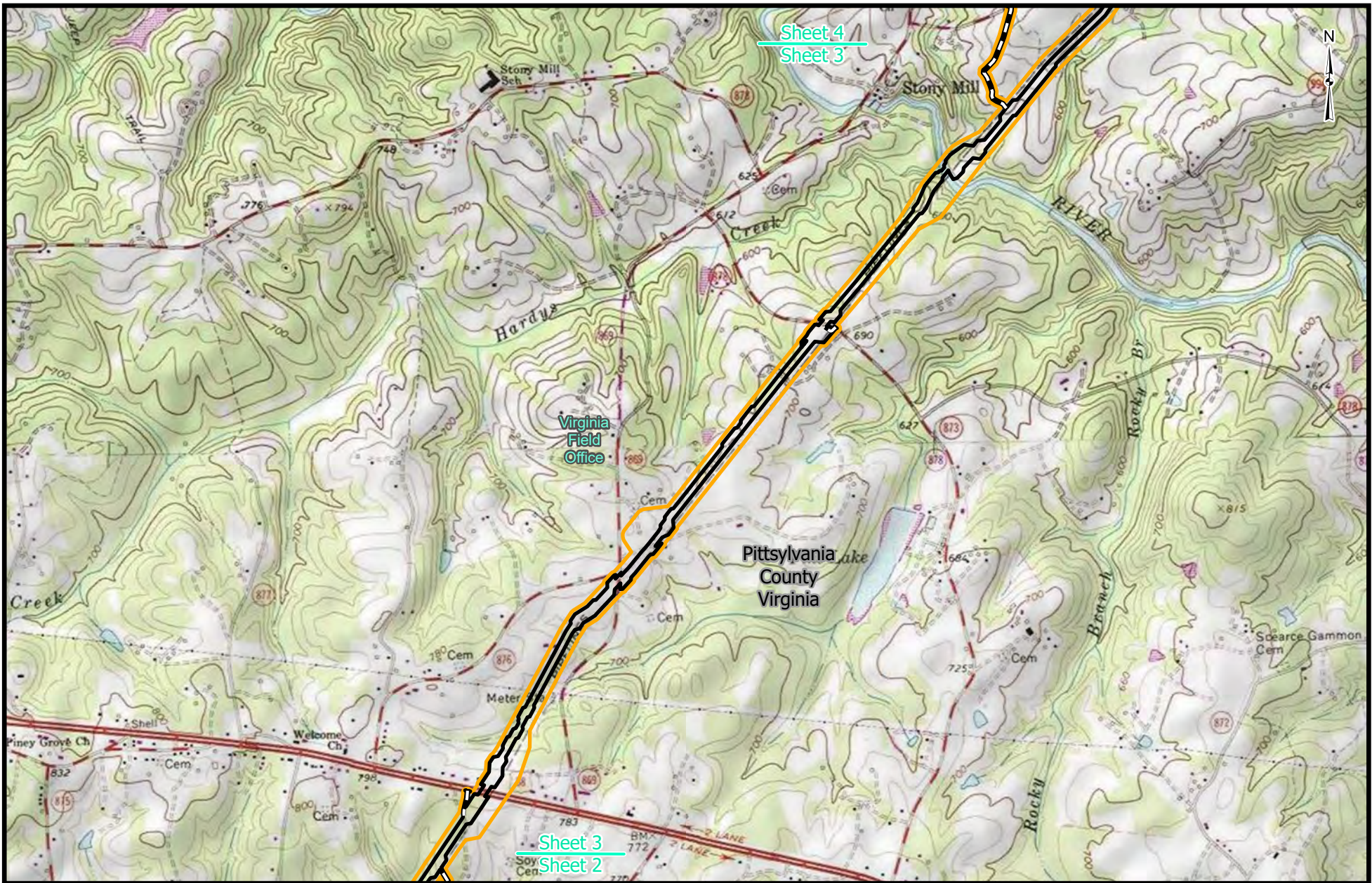
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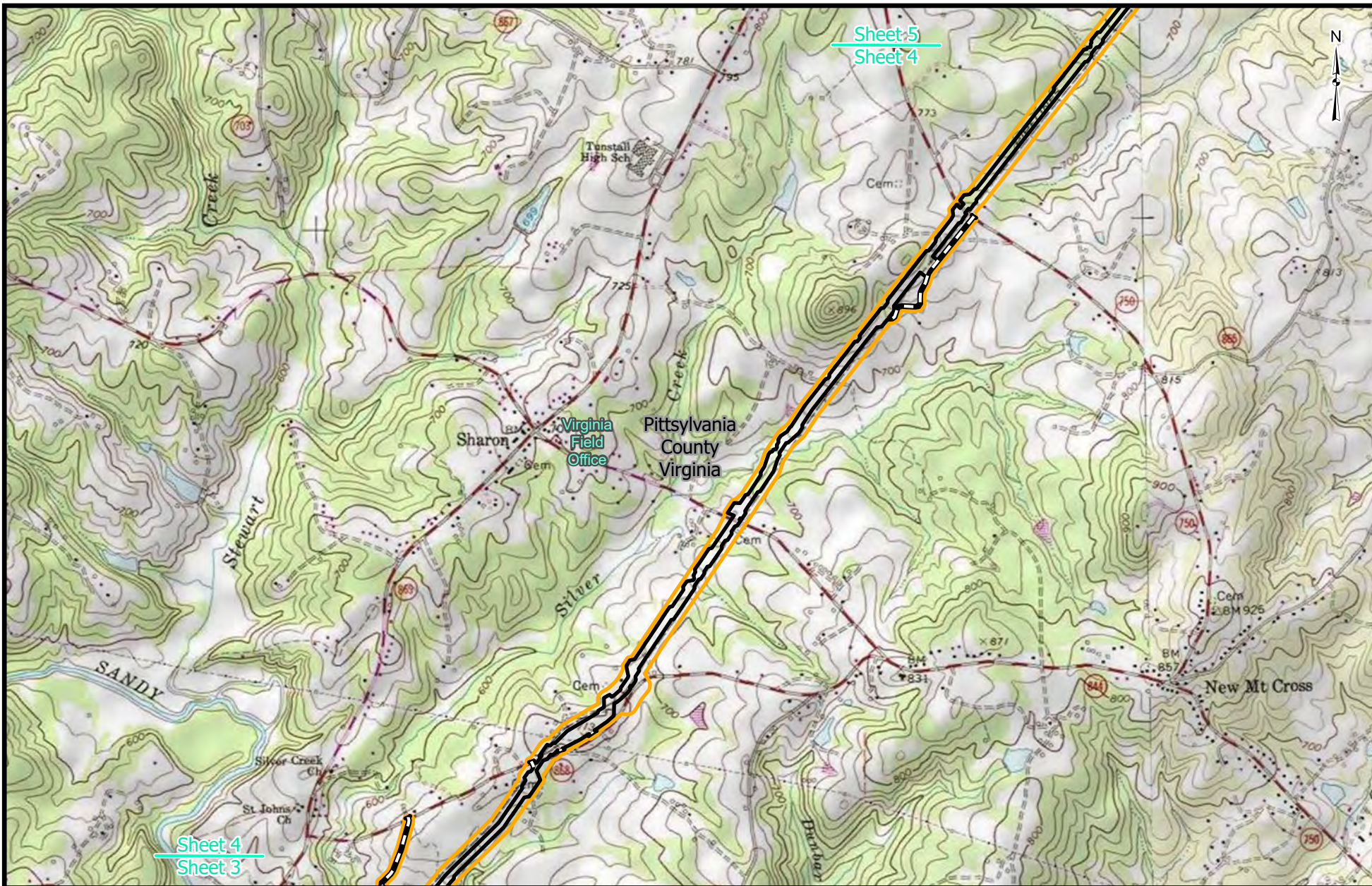
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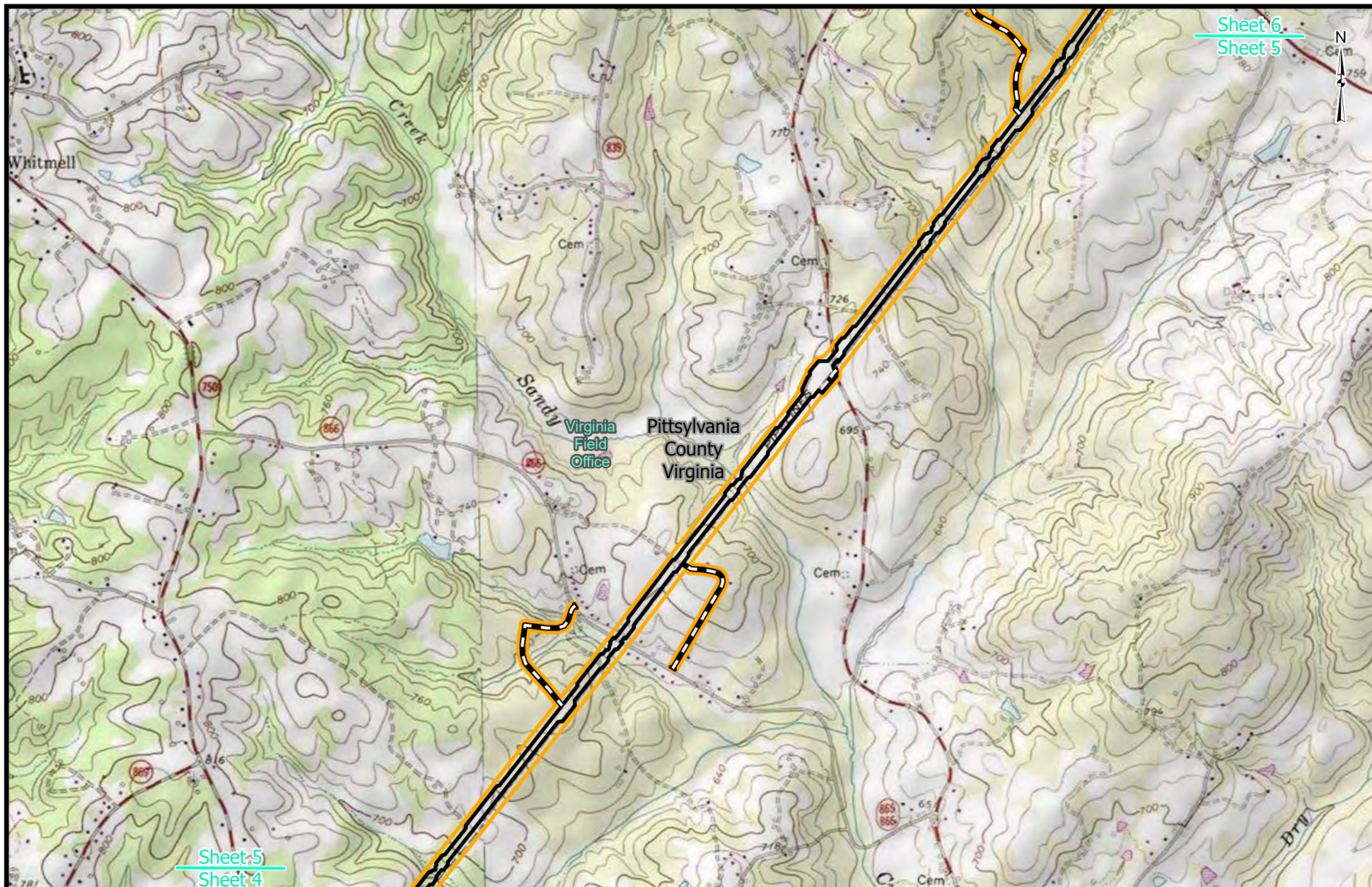
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- Access Road
- Study Area
- Limit of Disturbance
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- State Boundary



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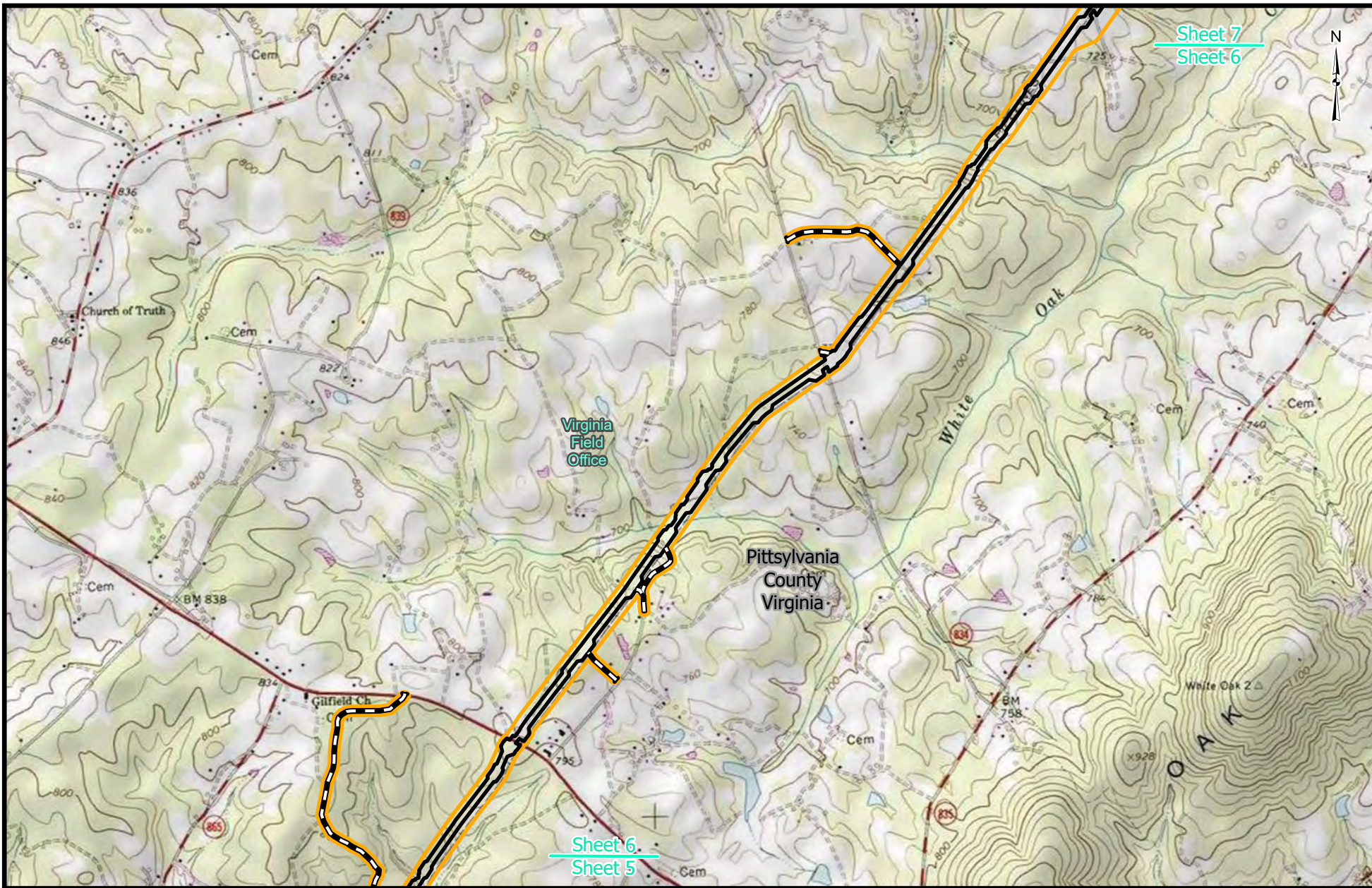
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Access Road

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Limit of Disturbance

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State Boundary

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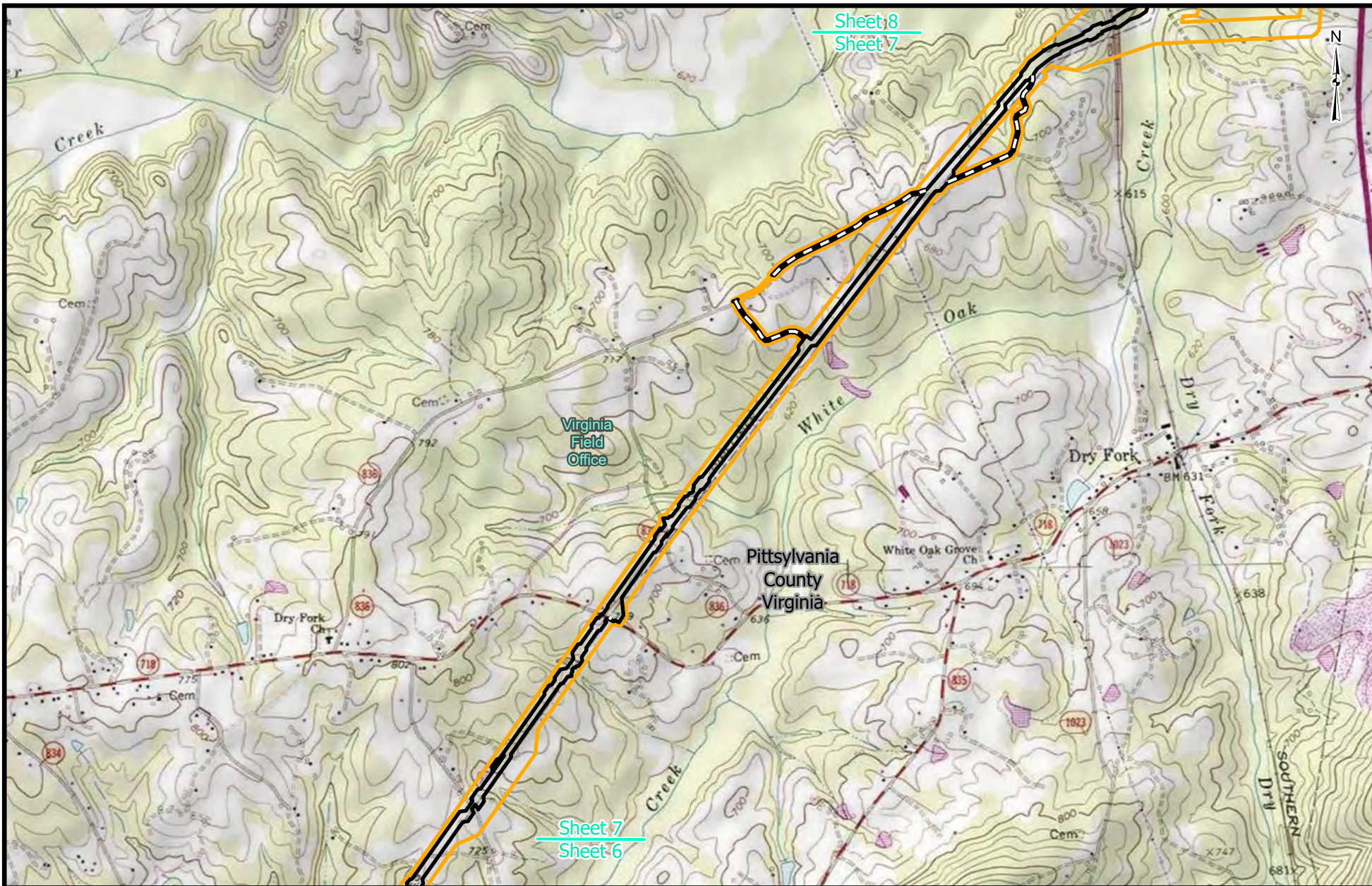
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Access Road

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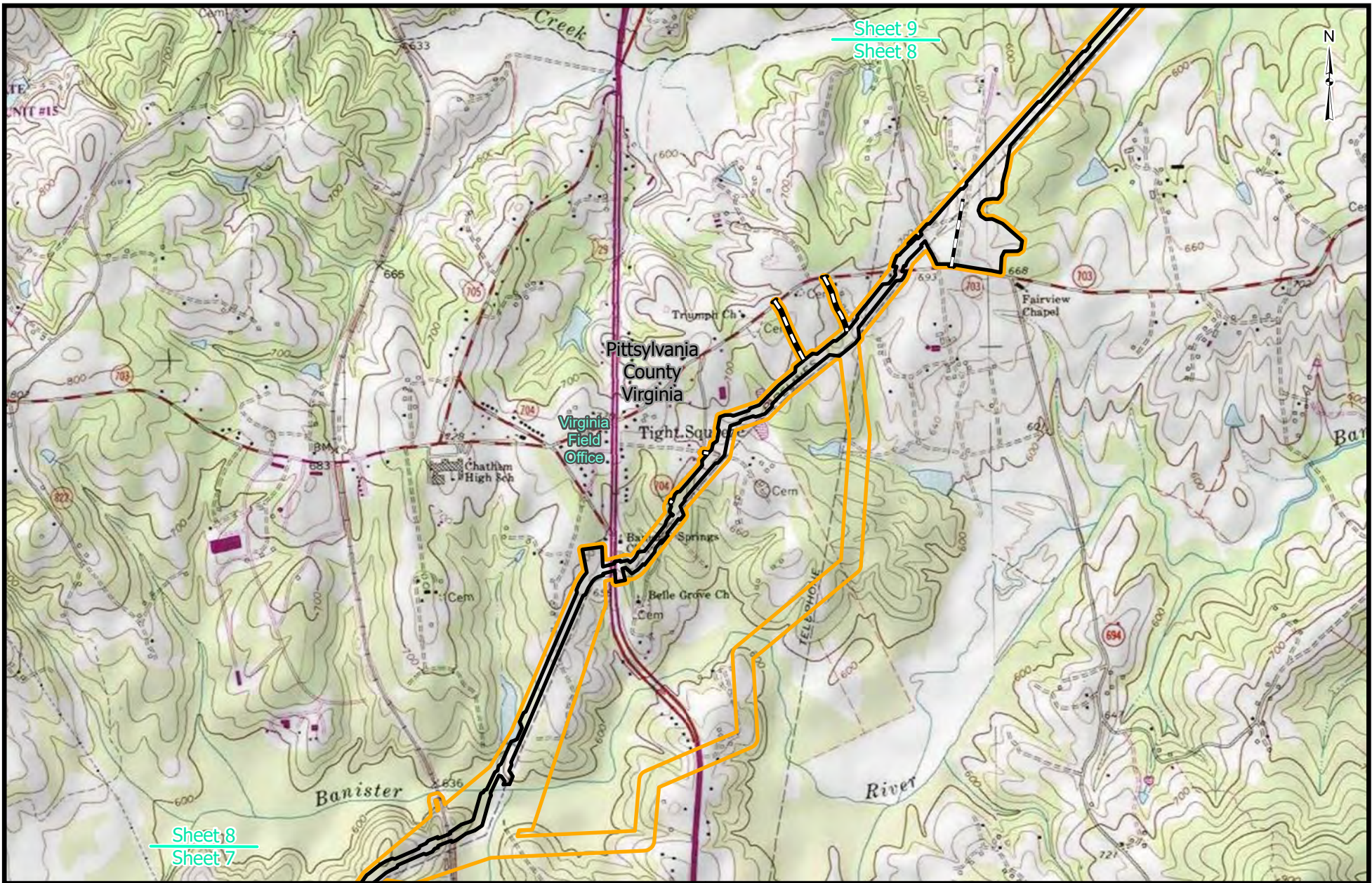
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Legend

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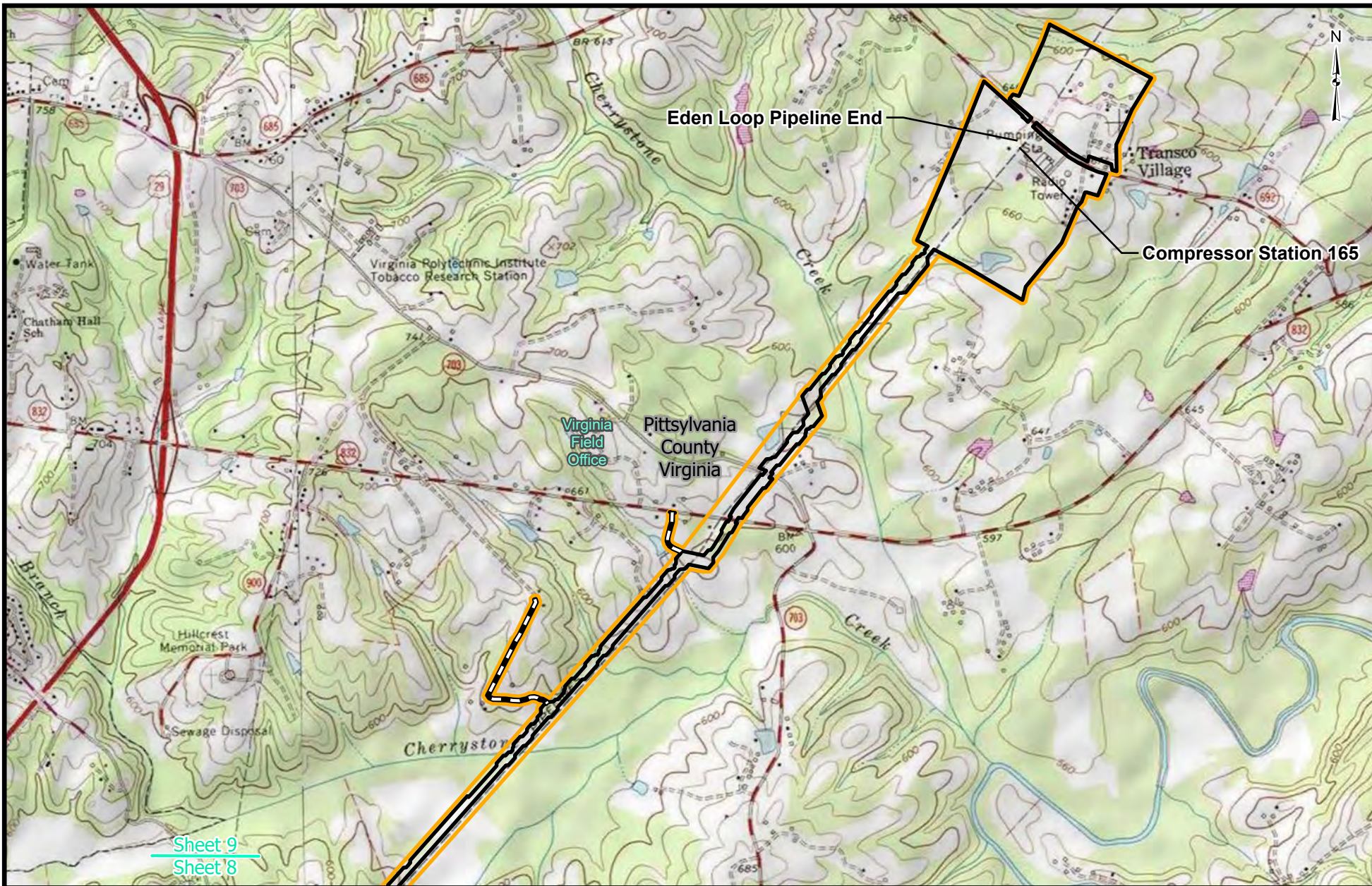
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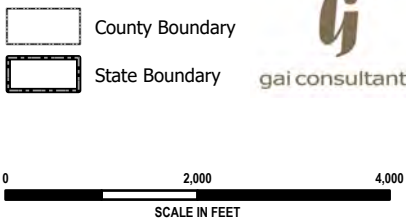
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Sheet 8

- Access Road
- Study Area
- Limit of Disturbance



- County Boundary
- State Boundary



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SHEET 9 OF 9



Transcontinental Gas Pipe Line Company, LLC
2800 Post Oak Boulevard (77056)
P.O. Box 1396
Houston, Texas 77251-1396
713-215-2000

ATTACHMENT C

VA DCR's Division of Natural Heritage Response Letter



COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

February 21, 2024

Jeffery J. Polonoli
GAI Consultants
600 Town Center Blvd., Suite 300 East
Canonsburg, PA 15317

Re: Southeast Supply Enhancement Project- Eden Loop Pipeline

Dear Mr. Polonoli:

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

Spring Garden Quad

According to the information in our files, the Transco Road Net Conservation Site and the MVP Southgate Net VA-SB01CA Conservation Site are both located within the project area (Figure 1). Conservation sites are tools for representing key areas of the landscape that warrant further review for possible conservation action because of the natural heritage resources and habitat they support. Conservation sites are polygons built around one or more rare plant, animal, or natural community designed to include the element and, where possible, its associated habitat, and buffer or other adjacent land thought necessary for the element's conservation. Conservation sites are given a biodiversity significance ranking (B-rank) based on the rarity, quality, and number of element occurrences they contain; on a scale of 1-5, 1 being most significant. The Transco Road Net Conservation Site and the MVP Southgate Net VA-SB01CA have both been assigned a B-rank of B4, which represents a site of moderate significance. The natural heritage resource associated with both sites is:

<i>Perimyotis subflavus</i>	Tricolored bat (=Eastern pipistrelle)	G3G4/S1S3/PE/LE
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The Tricolored bat is a very small bat distinguished from other *Myotis* species by tricolored individual back hairs and inhabits open woods near water, rock cliffs, buildings, and caves in the summer. Since 2008, there has been a significant decline in population numbers (greater than 90%) for the Tricolored bat due to white nose syndrome. Please note, the Tricolored bat is currently listed as endangered by Virginia Department of Wildlife Resources (VDWR).

When working in these conservation sites DCR recommends adhering to time-of-year-restrictions (TOYR) for tree removal for the protection of tri-colored bats. Due to the legal status of the tri-colored bat, DCR recommends coordination with the VDWR, Virginia's regulatory authority for the management and protection of this species to ensure compliance with the Virginia Endangered Species Act (VA ST §§ 29.1-563 – 570).

Chatham Quad

According to DCR's predicted suitable habitat modeling and review by a DCR biologist, there is a potential for rare freshwater mussels to occur in the section of the Banister River that is crossed by the project area.

Considered good indicators of the health of aquatic ecosystems, freshwater mussels are dependent on good water quality, good physical habitat conditions, and an environment that will support populations of host fish species (Williams et al., 1993). Because mussels are sedentary organisms, they are sensitive to water quality degradation related to increased sedimentation and pollution. They are also sensitive to habitat destruction through dam construction, channelization, and dredging, and the invasion of exotic mollusk species.

To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment control/storm water management laws and regulations.

Whitmel Quad

According to DCR's predicted suitable habitat modeling and review by a DCR biologist, there is a potential for Roanoke Logperch (*Percina rex*, G1G2/S1S2/LE/LE) to occur where the project crosses the Sandy River if suitable habitat exists on site (Figure 1). The Roanoke Logperch is endemic to the Roanoke and Chowan River drainages in Virginia (Burkhead and Jenkins, 1991) and inhabits medium and large, warm, and usually clear rivers with sandy to boulder spotted bottoms (NatureServe, 2009). Please note that this species is classified as endangered by the United States Fish and Wildlife Service (USFWS) and the Virginia Department of Wildlife Resources (VDWR).

The Roanoke logperch is threatened by channelization, siltation, impoundment, pollution, and de-watering activities (Burkhead & Jenkins, 1991).

To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment control/storm water management laws and regulations.

Due to the legal status of the Roanoke Logperch, DCR recommends coordination with the US Fish and Wildlife Service (USFWS) and the VDWR, Virginia's regulatory authority for the management and protection of this species to ensure compliance with protected species legislation.

Brosville Quad

According to the information currently in our files, Piedmont Barbara's-buttons (*Marshallia obovata* var. *obovata*, G4G5TNR/S1/NL/NL), Downy phlox (*Phlox pilosa*, G5/S2/NL/NL) and American Bluehearts (*Buchnera americana*, G5/S1S2/NL/NL) have been historically documented within the study area.

Piedmont Barbara's-buttons, a state rare perennial herb, typically inhabits clay flats, open grassy areas, forest edges, and wooded areas with open canopies (Radford et. al., 1968; Weakley, in prep.). It has also been documented in such disturbed areas as powerline rights-of-way (TNC, 1996). Piedmont Barbara's-buttons blooms from late April through early June and ranges from south central Virginia through southwest Georgia (Weakley, in prep.). The Virginia Natural Heritage Program has documented 15 occurrences of this state rare plant, 7 of these were historic and 8 are considered extant.

Downy phlox, a state rare plant species, inhabits dry to mesic woodlands and forests and has also been found in such disturbed areas as roadbanks and powerline right-of-ways. This perennial blooms in May and June

(Weakley, in prep.). Downy phlox is currently known from two locations in Virginia and has 9 documented historical occurrences.

American bluehearts is a perennial herb with spikes of deep purple flowers blooming from July to early September terminate the stem. The plant occurs in seasonally moist to dry soils of barrens, clearings, old fields, meadows, and roadsides; it occurs on calcareous or mafic substrates in the mountains and Piedmont and on acidic, sandy or clayey soils in the Coastal Plain (Weakley et al., 2012). The Virginia Natural Heritage Program has documented 19 occurrences of this state rare plant, 11 of these were historic and 8 are considered extant. Threats include loss of habitat due to conversion and succession as well as competition from non-native invasive species.

All Quads

Due to the potential for this site to support populations of natural heritage resources, DCR recommends an inventory for rare Piedmont plants and rare freshwater mussels. DCR recommends that the entire project area be surveyed for these rare plants particularly Piedmont Barbara's-buttons, Downy phlox and American Bluehearts. DCR also recommends the Banister River and Sandy River crossings be inventoried for rare mussels, particularly if open trench crossings are proposed. With the survey results we can more accurately evaluate potential impacts to natural heritage resources and offer specific protection recommendations for minimizing impacts to the documented resources.

DCR-Division of Natural Heritage biologists are qualified to conduct inventories for rare, threatened, and endangered species. Please contact Anne Chazal, Natural Heritage Chief Biologist, at anne.chazal@dcr.virginia.gov or 804-786-9014 to discuss availability and rates for field work. For a list of USFWS-approved surveyors in Virginia visit <https://www.fws.gov/media/collection-approved-surveyor-lists-project-review-process-virginia>.

Additionally, if a conventional bore or horizontal directional drill crossing of the Sandy River, Banister River, or other streams, DCR recommends an emergency frac-out plan be developed for the project. DCR also recommends the development and implementation of an emergency spill plan and the utilization of industry best management practices for hydrostatic testing and dewatering of the proposed force main.

If tree removal outside of the existing right-of-way (ROW) is anticipated, the proposed project will impact multiple Ecological Cores (**C4 and C5**) as identified in the Virginia Natural Landscape Assessment (<https://www.dcr.virginia.gov/natural-heritage/vaconvisvnl>). Mapped cores in the project area can be viewed via the Virginia Natural Heritage Data Explorer, available here: <http://vanhde.org/content/map>.

Ecological Cores are areas of at least 100 acres of continuous interior, natural cover that provide habitat for a wide range of species, from interior-dependent forest species to habitat generalists, as well as species that utilize marsh, dune, and beach habitats. Interior core areas begin 100 meters inside core edges and continue to the deepest parts of cores. Cores also provide the natural, economic, and quality of life benefits of open space, recreation, thermal moderation, water quality (including drinking water recharge and protection, and erosion prevention), and air quality (including sequestration of carbon, absorption of gaseous pollutants, and production of oxygen). Cores are ranked from C1 to C5 (C5 being the least significant) using nine prioritization criteria, including the habitats of natural heritage resources they contain.

Impacts to cores occur when their natural cover is partially or completely converted permanently to developed land uses. Habitat conversion to development causes reductions in ecosystem processes, native biodiversity, and habitat quality due to habitat loss; less viable plant and animal populations; increased predation; and increased introduction and establishment of invasive species.

DCR recommends avoidance of impacts to cores. When avoidance cannot be achieved, DCR recommends minimizing the area of impacts overall and concentrating the impacted area at the edges of cores, so that the most interior remains intact.

Furthermore, DCR recommends the development and implementation of an invasive species plan to be included as part of the maintenance practices for the right-of-way (ROW). The invasive species plan should include an invasive species inventory for the project area based on the current DCR Invasive Species List (<http://www.dcr.virginia.gov/natural-heritage/document/nh-invasive-plant-list-2014.pdf>) and methods for treating the invasives. DCR also recommends the ROW restoration and maintenance practices planned include appropriate revegetation using native species in a mix of grasses and forbs, robust monitoring, and an adaptive management plan to provide guidance if initial revegetation efforts are unsuccessful or if invasive species outbreaks occur.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species.

There are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

New and updated information is continually added to Biotics. Please re-submit a completed order form and project map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

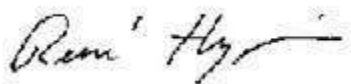
A fee of \$750.00 has been assessed for the service of providing this information. Please find attached an invoice for that amount. Please return one copy of the invoice along with your remittance made payable to the Treasurer of Virginia, DCR Finance, 600 East Main Street, 24th Floor, Richmond, VA 23219. Payment is due within thirty days of the invoice date. Please note late payment may result in the suspension of project review service for future projects.

The U.S. Fish and Wildlife Service (USFWS) utilizes an online project review process (<https://www.fws.gov/office/virginia-ecological-services/virginia-field-office-online-review-process>) to facilitate compliance with the Endangered Species Act (16 U.S.C. 1531-1544, 87 Stat. 884) (ESA), as amended. The process enables users to 1) follow step-by-step guidance; 2) access information that will allow them to identify threatened and endangered species, designated critical habitat, and other Federal trust resources that may be affected by their project; and 3) accurately reach determinations regarding the potential effects of their project on these resources as required under the ESA. If you have questions regarding the online review process, please contact Rachel Case at rachel_case@fws.gov.

The Virginia Department of Wildlife Resources (VDWR) maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed <https://services.dwr.virginia.gov/fwis/> or contact Amy Martin at 804-367-2211 or amy.martin@dwr.virginia.gov.

Should you have any questions or concerns, feel free to contact me at 804-371-2708. Thank you for the opportunity to comment on this project.

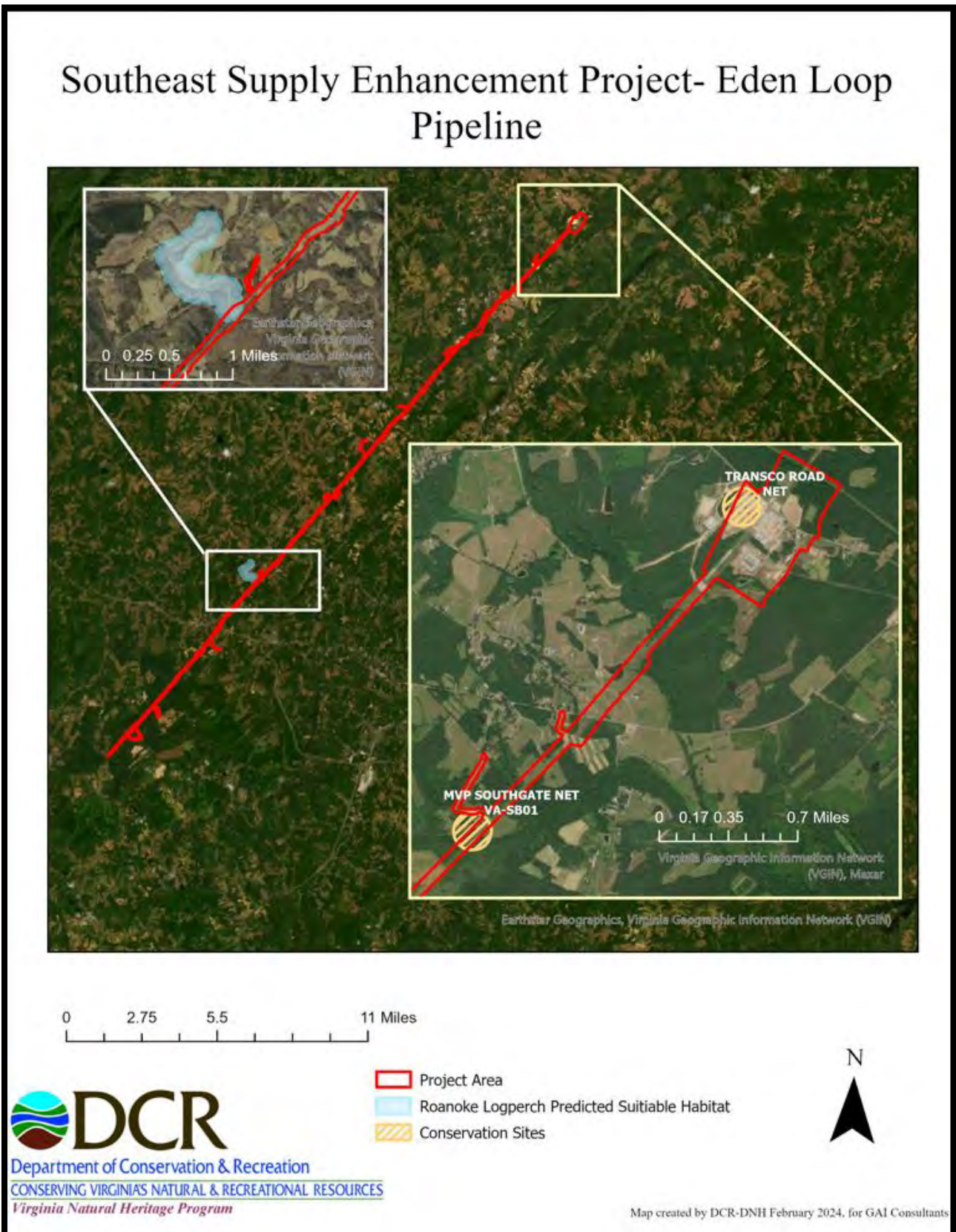
Sincerely,



S. René Hypes
Natural Heritage Project Review Coordinator

Cc: Amy Martin, VDWR

Figure 1. Conservation sites and predicted suitable habitat within the project area.



Literature Cited

Burkhead, N.M. and R.E. Jenkins. 1991. Roanoke logperch. In Virginia's Endangered Species: Proceedings of a Symposium. K. Terwilliger ed. The McDonald and Woodward Publishing Company, Blacksburg, Virginia. p. 395-397.

NatureServe. 2009. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: June 21, 2010).

NatureServe, 2015. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe. Arlington, Virginia. Available <http://explorer.natureserve.org> (Accessed: April 21, 2016).

Williams, J.D., M.L. Warren, Jr., K.S. Cummings, J.L. Harris, and R.J. Neves. 1993. Conservation status of freshwater mussels of the United States and Canada. Fisheries 18: 6-9.



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ATTACHMENT D

Table 1: List of Virginia Natural Heritage Resource Occurrences within the Project Area



Transcontinental Gas Pipe Line Company, LLC
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Table 1: List of Virginia Natural Heritage Resource Occurrences within the Project Area^{1,2}

Resource Occurrence	Federal Listing/ State Status	Quad / Conservation Site	Suitable Habitat ²	Project Assessment
Tricolored Bat (<i>Perimyotis subflavus</i>)	PE/LE	Spring Garden / Transco Road Net Conservation Site (B4 moderate significant) and MVP Southgate Net VA-SB01CA Conservation Site (B4 moderate significant)	Inhabits open woods near water, rock cliffs, buildings, and caves in summer.	Tree felling is proposed within the Project action areas. Where tree felling would be required for construction activities, Transco proposes to complete the tree felling during the appropriate time of year to minimize impacts to the Tri-colored Bat. Please respond if there are any additional considerations or field studies/surveys recommended for the DCR to make its determination for this Project.
Rare freshwater mussels	Not Applicable / Not Applicable	Chatham / Banister River	Higher quality waterbodies that contain physical habitat conditions and support populations of host fish species.	Based on desktop review, the Project action area may contain suitable habitat for rare freshwater mussels. Transco is evaluating potential impacts to rare freshwater mussels. Please respond if there are any additional considerations or field studies/surveys recommended for the DCR to make its determination for this Project.
Roanoke Logperch (<i>Percina rex</i>)	LE/LE	Whitmel	Inhabits medium and large, warm, and usually clear rivers with sandy to boulder spotted bottoms.	Based on desktop review, potential Roanoke logperch suitable habitat may occur within the Project action area such as: usually large sized, warm streams containing areas of riffles, run, and pool complexes with sand, gravel, or boulder substrates. Please respond if there are any additional considerations or field studies/surveys recommended for the DCR to make its determination for this Project.
Piedmont Barbara's- buttons (<i>Marshallia obovata</i> var. <i>obovate</i>)	NL/NL	Brosville	Usually inhabits clay flats, open grassy areas, forest edges, and wooded areas with open canopies.	As recommended in DCR Response Letter, dated February 21, 2024, Transco will complete an inventory for Piedmont Barbara's-button to determine presence. Please respond if there are any additional considerations or field studies/surveys recommended for the DCR to make its determination for this Project.
Downy Phlox (<i>Phlox pilosa</i>)	NL/NL	Brosville	Inhabits dry to mesic woodlands and forests and has also been	As recommended in DCR Response Letter, dated February 21, 2024, Transco will



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Resource Occurrence	Federal Listing/ State Status	Quad / Conservation Site	Suitable Habitat ²	Project Assessment
			found in such disturbed areas as roadbanks and powerline right-of-way.	complete an inventory for Downy Phlox to determine presence. Please respond if there are any additional considerations or field studies/surveys recommended for the DCR to make its determination for this Project.
American bluehearts (<i>Buchnera americana</i>)	NL/NL	Brosville	Plants can occur in seasonally moist to dry soils of barrens, clearings, old fields, meadows, and roadsides. This plant occurs on calcareous or mafic substrates in the mountains and Piedmont and on acid, sandy or clayey soils in the Coastal Plain.	As recommended in DCR Response Letter, dated February 21, 2024, Transco will complete an inventory for American bluehearts to determine presence. Please respond if there are any additional considerations or field studies/surveys recommended for the DCR to make its determination for this Project.

Notes:

- ¹ Species known to occur within the Project area as indicated on the DCR's Division of Natural Heritage Response Letter (Attachment C).
- ² Suitable habitat descriptions provided in DCR's Division of Natural Heritage Response Letter (Attachment C).