

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-20
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-1
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 2-4%
Subregion (LRR or MLRA): P 136 Lat: 36.54423642 Long: -79.63109566 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

Only one (i.e., hydrophytic vegetation) of the three wetland parameters was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Only one secondary wetland hydrology indicator (i.e., geomorphic position) was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-1

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Liquidambar styraciflua</u>	<u>35</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.66</u> (A/B)														
2. <u>Pinus taeda</u>	<u>35</u>	☒	<u>FAC</u>															
3. <u>Carpinus caroliniana</u>	<u>25</u>	☒	<u>FAC</u>															
4. <u>Fagus grandifolia</u>	<u>10</u>		<u>FACU</u>															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>99</u></td> <td>x 3 = <u>297</u></td> </tr> <tr> <td>FACU species <u>26</u></td> <td>x 4 = <u>104</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>125</u> (A)</td> <td><u>401</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.20</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>99</u>	x 3 = <u>297</u>	FACU species <u>26</u>	x 4 = <u>104</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>125</u> (A)	<u>401</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>99</u>	x 3 = <u>297</u>																	
FACU species <u>26</u>	x 4 = <u>104</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>125</u> (A)	<u>401</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
105 = Total Cover 50% of total cover: <u>52.50</u> 20% of total cover: <u>21.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
1. <u>Fagus grandifolia</u>	<u>8</u>	☒	<u>FACU</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
8 = Total Cover 50% of total cover: <u>4.00</u> 20% of total cover: <u>1.60</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
1. <u>Lonicera japonica</u>	<u>8</u>	☒	<u>FACU</u>															
2. <u>Smilax rotundifolia</u>	<u>4</u>	☒	<u>FAC</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
12 = Total Cover 50% of total cover: <u>6.00</u> 20% of total cover: <u>2.40</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)				Hydrophytic Vegetation Present? Yes ☒ No _____														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																		

SOIL

Sampling Point: DP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 4	10YR 5/3	100					Sandy Loam	
4 - 18	10YR 5/3	70					Sandy Loam	
4 - 18	2.5Y 7/6	30					Sandy Loam	Secondary matrix color
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-20
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-2
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 2%
Subregion (LRR or MLRA): P 136 Lat: 36.54430287 Long: -79.63112237 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☒ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-2

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Liquidambar styraciflua</u>	<u>25</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80.00</u> (A/B)														
2. <u>Acer rubrum</u>	<u>20</u>	☒	<u>FAC</u>															
3. <u>Pinus taeda</u>	<u>20</u>	☒	<u>FAC</u>															
4. <u>Carpinus caroliniana</u>	<u>8</u>		<u>FAC</u>															
5. _____	_____			Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>88</u></td> <td>x 3 = <u>264</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>93</u> (A)</td> <td><u>284</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.05</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>88</u>	x 3 = <u>264</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>93</u> (A)	<u>284</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>88</u>	x 3 = <u>264</u>																	
FACU species <u>5</u>	x 4 = <u>20</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>93</u> (A)	<u>284</u> (B)																	
6. _____	_____																	
7. _____	_____																	
_____	<u>73</u> = Total Cover																	
50% of total cover: <u>36.50</u> 20% of total cover: <u>14.60</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Acer rubrum</u>	<u>15</u>	☒	<u>FAC</u>															
2. _____	_____																	
3. _____	_____			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. _____	_____																	
5. _____	_____																	
6. _____	_____																	
7. _____	_____			Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____	_____																	
9. _____	_____																	
10. _____	_____																	
50% of total cover: <u>7.50</u> 20% of total cover: <u>3.00</u>				Hydrophytic Vegetation Present? Yes ☒ No _____														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Lonicera japonica</u>	<u>5</u>	☒	<u>FACU</u>															
2. _____	_____																	
3. _____	_____			Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
4. _____	_____																	
5. _____	_____																	
6. _____	_____																	
7. _____	_____			50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>														
8. _____	_____																	
9. _____	_____																	
10. _____	_____																	
50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>				Hydrophytic Vegetation Present? Yes ☒ No _____														
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____																	
2. _____	_____																	
3. _____	_____			50% of total cover: _____ 20% of total cover: _____														
4. _____	_____																	
5. _____	_____																	
6. _____	_____																	

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL

Sampling Point: DP-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 5/3	100					Sandy Loam	
2 - 8	10YR 6/2	95	10YR 6/6	5	C	PL	Sandy Loam	
8 - 18	10YR 6/6	95	10YR 6/2	5	D	M	Sandy Loam	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-20
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-3
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 2%
Subregion (LRR or MLRA): P 136 Lat: 36.54271765 Long: -79.63213591 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-3

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>88</u></td> <td>x 4 = <u>352</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>93</u> (A)</td> <td><u>377</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.05</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>88</u>	x 4 = <u>352</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>93</u> (A)	<u>377</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>88</u>	x 4 = <u>352</u>																	
UPL species <u>5</u>	x 5 = <u>25</u>																	
Column Totals: <u>93</u> (A)	<u>377</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Poa pratensis</u>	<u>85</u>	<u>✓</u>	<u>FACU</u>															
2. <u>Plantago lanceolata</u>	<u>5</u>		<u>UPL</u>															
3. <u>Alliaria petiolata</u>	<u>3</u>		<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>93</u> = Total Cover																		
50% of total cover: <u>46.50</u> 20% of total cover: <u>18.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ✓

SOIL

Sampling Point: DP-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 5/4	100					Clay Loam	
3 - 10	2.5Y 5/3	95	7.5YR 5/6	5	C	M	Clay Loam	
10 - 18	2.5YR 5/3	70	7.5YR 5/8	5	C	M	Clay Loam	
10 - 18	7.5YR 4/6	20	2.5Y 5/2	5	D	M	Clay Loam	Secondary matrix and redox color
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (LRR N)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (MLRA 147, 148)
- ☐ Thin Dark Surface (S9) (MLRA 147, 148)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ☐ Umbric Surface (F13) (MLRA 136, 122)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 148)
- ☐ Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (MLRA 147)
- ☐ Coast Prairie Redox (A16) (MLRA 147, 148)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-20
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-4
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 2%
Subregion (LRR or MLRA): P 136 Lat: 36.54272584 Long: -79.63213408 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-4

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>35</u></td> <td>x 2 = <u>70</u></td> </tr> <tr> <td>FAC species <u>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>3</u></td> <td>x 4 = <u>12</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>78</u> (A)</td> <td><u>202</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.58</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>35</u>	x 2 = <u>70</u>	FAC species <u>40</u>	x 3 = <u>120</u>	FACU species <u>3</u>	x 4 = <u>12</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>78</u> (A)	<u>202</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>35</u>	x 2 = <u>70</u>																	
FAC species <u>40</u>	x 3 = <u>120</u>																	
FACU species <u>3</u>	x 4 = <u>12</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>78</u> (A)	<u>202</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>35</u>	☒	<u>FACW</u>															
2. <u>Holcus lanatus</u>	<u>30</u>	☒	<u>FAC</u>															
3. <u>Dichanthelium clandestinum</u>	<u>10</u>		<u>FAC</u>															
4. <u>Lonicera japonica</u>	<u>3</u>		<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>78</u> = Total Cover																		
50% of total cover: <u>39.00</u> 20% of total cover: <u>15.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 5/4	100					Clay Loam	
2 - 7	2.5Y 5/2	50	7.5YR 5/6	30	C	PL	Clay	
2 - 7	2.5Y 5/3	10	2.5Y 6/2	10	D	M	Clay	Secondary matrix and redox color
7 - 18	2.5Y 5/2	40	7.5YR 5/8	30	C	PL	Clay	
7 - 18	10YR 4/2	20	10YR 6/2	10	D	M	Clay	Secondary matrix and redox color
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-20
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-5
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Concave Slope (%): 0-2%
Subregion (LRR or MLRA): P 136 Lat: 36.54271689 Long: -79.63244504 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☒ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>3</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-5

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. <u>Acer rubrum</u>	<u>70</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)																
2. <u>Liquidambar styraciflua</u>	<u>10</u>		<u>FAC</u>	Total Number of Dominant Species Across All Strata: <u>6</u> (B)																
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83.33</u> (A/B)																
4. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>7</u></td> <td>x 1 = <u>7</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>120</u></td> <td>x 3 = <u>360</u></td> </tr> <tr> <td>FACU species <u>3</u></td> <td>x 4 = <u>12</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>135</u> (A)</td> <td><u>389</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.88</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>7</u>	x 1 = <u>7</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>120</u>	x 3 = <u>360</u>	FACU species <u>3</u>	x 4 = <u>12</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>135</u> (A)	<u>389</u> (B)	Prevalence Index = B/A = <u>2.88</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>7</u>	x 1 = <u>7</u>																			
FACW species <u>5</u>	x 2 = <u>10</u>																			
FAC species <u>120</u>	x 3 = <u>360</u>																			
FACU species <u>3</u>	x 4 = <u>12</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>135</u> (A)	<u>389</u> (B)																			
Prevalence Index = B/A = <u>2.88</u>																				
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)																
50% of total cover: <u>40.00</u> 20% of total cover: <u>16.00</u> <u>80</u> = Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																				
1. <u>Acer rubrum</u>	<u>25</u>	☒	<u>FAC</u>																	
2. <u>Carpinus caroliniana</u>	<u>15</u>	☒	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.																
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____																
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
50% of total cover: <u>20.00</u> 20% of total cover: <u>8.00</u> <u>40</u> = Total Cover																				
Herb Stratum (Plot size: <u>5 ft r</u>)																				
1. <u>Dulichium arundinaceum</u>	<u>7</u>	☒	<u>OBL</u>	Hydrophytic Vegetation Present? Yes ☒ No _____																
2. <u>Juncus effusus</u>	<u>5</u>	☒	<u>FACW</u>																	
3. <u>Lonicera japonica</u>	<u>3</u>	☒	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
50% of total cover: <u>7.50</u> 20% of total cover: <u>3.00</u> <u>15</u> = Total Cover																				
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
50% of total cover: _____ 20% of total cover: _____ _____ = Total Cover																				
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																				

SOIL

Sampling Point: DP-5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 4/2	90	10YR 4/6	10	C	PL	Clay Loam	
2 - 5	2.5Y 6/2	95	10YR 6/8	5	C	M	Clay Loam	
5 - 18	2.5Y 6/2	80	10YR 6/8	20	C	M	Clay Loam	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-20
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-6
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 2%
Subregion (LRR or MLRA): P 136 Lat: 36.54357852 Long: -79.63201244 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☒ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-6

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Quercus bicolor</u>	<u>15</u>	☒	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>7</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>87.50</u> (A/B)														
2. <u>Carpinus caroliniana</u>	<u>6</u>	☒	<u>FAC</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
21 = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>10</u></td> <td>x 1 = <u>10</u></td> </tr> <tr> <td>FACW species <u>53</u></td> <td>x 2 = <u>106</u></td> </tr> <tr> <td>FAC species <u>42</u></td> <td>x 3 = <u>126</u></td> </tr> <tr> <td>FACU species <u>15</u></td> <td>x 4 = <u>60</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>120</u> (A)</td> <td><u>302</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.51</u>	Total % Cover of:	Multiply by:	OBL species <u>10</u>	x 1 = <u>10</u>	FACW species <u>53</u>	x 2 = <u>106</u>	FAC species <u>42</u>	x 3 = <u>126</u>	FACU species <u>15</u>	x 4 = <u>60</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>120</u> (A)	<u>302</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>10</u>	x 1 = <u>10</u>																	
FACW species <u>53</u>	x 2 = <u>106</u>																	
FAC species <u>42</u>	x 3 = <u>126</u>																	
FACU species <u>15</u>	x 4 = <u>60</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>120</u> (A)	<u>302</u> (B)																	
50% of total cover: <u>10.50</u> 20% of total cover: <u>4.20</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Liquidambar styraciflua</u>	<u>10</u>	☒	<u>FAC</u>															
2. <u>Quercus alba</u>	<u>10</u>	☒	<u>FACU</u>															
3. <u>Acer rubrum</u>	<u>8</u>	☒	<u>FAC</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
28 = Total Cover																		
50% of total cover: <u>14.00</u> 20% of total cover: <u>5.60</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>20</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Dichanthelium scoparium</u>	<u>15</u>	☒	<u>FACW</u>															
3. <u>Carex lurida</u>	<u>10</u>	☒	<u>OBL</u>															
4. <u>Rubus pensilvanicus</u>	<u>8</u>	_____	<u>FAC</u>															
5. <u>Lonicera japonica</u>	<u>5</u>	_____	<u>FACU</u>															
6. <u>Microstegium vimineum</u>	<u>5</u>	_____	<u>FAC</u>															
7. <u>Smilax rotundifolia</u>	<u>5</u>	_____	<u>FAC</u>															
8. <u>Scirpus cyperinus</u>	<u>3</u>	_____	<u>FACW</u>															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
71 = Total Cover																		
50% of total cover: <u>35.50</u> 20% of total cover: <u>14.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																		

SOIL

Sampling Point: DP-6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 1	10YR 3/3	100					Silt Loam	
1 - 4	2.5Y 6/3	90	7.5YR 5/6	10	C	M	Clay Loam	
4 - 10	2.5Y 7/2	85	10YR 5/8	10	C	M	Clay Loam	
4 - 10			2.5Y 7/1	5	D	M	Clay Loam	Secondary redox color
10 - 18	2.5Y 7/2	60	7.5YR 5/8	30	C	M	Clay	
10 - 18			2.5Y 8/2	10	D	M	Clay	Secondary redox color
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-21
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-7
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 4-6
Subregion (LRR or MLRA): P 136 Lat: 36.54625421 Long: -79.62860467 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:	
Surface Water Present? Yes _____ No ☒ Depth (inches): _____	Wetland Hydrology Present? Yes _____ No ☒
Water Table Present? Yes _____ No ☒ Depth (inches): _____	
Saturation Present? Yes _____ No ☒ Depth (inches): _____ (includes capillary fringe)	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-7

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>30</u></td> <td>x 3 = <u>90</u></td> </tr> <tr> <td>FACU species <u>18</u></td> <td>x 4 = <u>72</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>53</u> (A)</td> <td><u>187</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.52</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>30</u>	x 3 = <u>90</u>	FACU species <u>18</u>	x 4 = <u>72</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>53</u> (A)	<u>187</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>30</u>	x 3 = <u>90</u>																	
FACU species <u>18</u>	x 4 = <u>72</u>																	
UPL species <u>5</u>	x 5 = <u>25</u>																	
Column Totals: <u>53</u> (A)	<u>187</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Holcus lanatus</u>	<u>30</u>	<u>✓</u>	<u>FAC</u>															
2. <u>Dactylis glomerata</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>															
3. <u>Daucus carota</u>	<u>5</u>		<u>UPL</u>															
4. <u>Trifolium pratense</u>	<u>3</u>		<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>53</u> = Total Cover																		
50% of total cover: <u>26.50</u> 20% of total cover: <u>10.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ✓

SOIL

Sampling Point: DP-7**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 5	10YR 5/3	97	10YR 6/8	3	C	M	Loamy Sand	
5 - 18	10YR 5/3	65	10YR 6/8	25	C	M	Loamy Sand	
5 - 18			2.5Y 6/8	10	C	M	Loamy Sand	Secondary redox color
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-21
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-8
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR or MLRA): P 136 Lat: 36.54630532 Long: -79.62855821 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-8

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.66</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>15</u></td> <td>x 2 = <u>30</u></td> </tr> <tr> <td>FAC species <u>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>18</u></td> <td>x 4 = <u>72</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>73</u> (A)</td> <td><u>222</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.04</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>15</u>	x 2 = <u>30</u>	FAC species <u>40</u>	x 3 = <u>120</u>	FACU species <u>18</u>	x 4 = <u>72</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>73</u> (A)	<u>222</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>15</u>	x 2 = <u>30</u>																	
FAC species <u>40</u>	x 3 = <u>120</u>																	
FACU species <u>18</u>	x 4 = <u>72</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>73</u> (A)	<u>222</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Holcus lanatus</u>	<u>40</u>	☒	<u>FAC</u>															
2. <u>Dactylis glomerata</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Juncus effusus</u>	<u>15</u>	☒	<u>FACW</u>															
4. <u>Lonicera japonica</u>	<u>3</u>		<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>73</u> = Total Cover																		
50% of total cover: <u>36.50</u> 20% of total cover: <u>14.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.				Hydrophytic Vegetation Present? Yes ☒ No _____														

SOIL

Sampling Point: DP-8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 4	10YR 4/2	90	10YR 5/8	10	C	M	Clay	
4 - 12	10YR 5/2	85	10YR 5/8	10	C	M	Clay Loam	
4 - 12			10YR 7/2	5	D	M	Clay Loam	Secondary redox color
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Gravel
 Depth (inches): 12

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-9
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Seep Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR or MLRA): P 136 Lat: 36.55122641 Long: -79.61812965 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes ☒ No _____ Depth (inches): 1
Water Table Present? Yes ☒ No _____ Depth (inches): 8
Saturation Present? Yes ☒ No _____ Depth (inches): 7
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-9

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Acer rubrum</u>	<u>35</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.66</u> (A/B)														
2. <u>Betula nigra</u>	<u>20</u>	☒	<u>FACW</u>															
3. <u>Liriodendron tulipifera</u>	<u>20</u>	☒	<u>FACU</u>															
4. <u>Ulmus americana</u>	<u>8</u>		<u>FACW</u>															
5. _____	_____			Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>4</u></td> <td>x 1 = <u>4</u></td> </tr> <tr> <td>FACW species <u>33</u></td> <td>x 2 = <u>66</u></td> </tr> <tr> <td>FAC species <u>100</u></td> <td>x 3 = <u>300</u></td> </tr> <tr> <td>FACU species <u>30</u></td> <td>x 4 = <u>120</u></td> </tr> <tr> <td>UPL species <u>8</u></td> <td>x 5 = <u>40</u></td> </tr> <tr> <td>Column Totals: <u>175</u> (A)</td> <td><u>530</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.02</u>	Total % Cover of:	Multiply by:	OBL species <u>4</u>	x 1 = <u>4</u>	FACW species <u>33</u>	x 2 = <u>66</u>	FAC species <u>100</u>	x 3 = <u>300</u>	FACU species <u>30</u>	x 4 = <u>120</u>	UPL species <u>8</u>	x 5 = <u>40</u>	Column Totals: <u>175</u> (A)	<u>530</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>4</u>	x 1 = <u>4</u>																	
FACW species <u>33</u>	x 2 = <u>66</u>																	
FAC species <u>100</u>	x 3 = <u>300</u>																	
FACU species <u>30</u>	x 4 = <u>120</u>																	
UPL species <u>8</u>	x 5 = <u>40</u>																	
Column Totals: <u>175</u> (A)	<u>530</u> (B)																	
6. _____	_____																	
7. _____	_____																	
_____	<u>83</u> = Total Cover																	
50% of total cover: <u>41.50</u> 20% of total cover: <u>16.60</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Lindera benzoin</u>	<u>40</u>	☒	<u>FAC</u>															
2. <u>Carpinus caroliniana</u>	<u>10</u>		<u>FAC</u>															
3. <u>Ulmus americana</u>	<u>5</u>		<u>FACW</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. _____	_____																	
5. _____	_____																	
6. _____	_____																	
7. _____	_____			Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____	_____																	
9. _____	_____																	
_____	<u>55</u> = Total Cover																	
50% of total cover: <u>27.50</u> 20% of total cover: <u>11.00</u>				Hydrophytic Vegetation Present? Yes ☒ No _____														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Lindera benzoin</u>	<u>12</u>	☒	<u>FAC</u>															
2. <u>Elaeagnus umbellata</u>	<u>8</u>	☒	<u>UPL</u>															
3. <u>Lonicera japonica</u>	<u>5</u>		<u>FACU</u>	Remarks: (Include photo numbers here or on a separate sheet.) <u>No woody vine stratum was observed at this data point.</u>														
4. <u>Rosa multiflora</u>	<u>5</u>		<u>FACU</u>															
5. <u>Carex lurida</u>	<u>4</u>		<u>OBL</u>															
6. <u>Smilax rotundifolia</u>	<u>3</u>		<u>FAC</u>															
7. _____	_____			Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
8. _____	_____																	
9. _____	_____																	
10. _____	_____																	
11. _____	_____			_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____														
_____	_____																	
_____	_____																	
_____	_____																	

SOIL

Sampling Point: DP-9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 6	10YR 4/2	90	10YR 5/6	2	C	M	Sandy Clay Loam	
0 - 6			10YR 6/2	8	D	M	Sandy Clay Loam	Secondary redox color
6 - 18	7.5YR 4/2	100					Sandy Loam	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-10
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 4-6
Subregion (LRR or MLRA): P 136 Lat: 36.5512012 Long: -79.61821319 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-10

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Liriodendron tulipifera</u>	<u>60</u>	☒	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.33</u> (A/B)														
2. <u>Acer rubrum</u>	<u>20</u>		<u>FAC</u>															
3. <u>Fagus grandifolia</u>	<u>15</u>		<u>FACU</u>															
4. <u>Ulmus americana</u>	<u>10</u>		<u>FACW</u>															
5. <u>Betula nigra</u>	<u>5</u>		<u>FACW</u>															
6. _____																		
7. _____																		
<u>110</u> = Total Cover 50% of total cover: <u>55.00</u> 20% of total cover: <u>22.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>15</u></td> <td>x 2 = <u>30</u></td> </tr> <tr> <td>FAC species <u>28</u></td> <td>x 3 = <u>84</u></td> </tr> <tr> <td>FACU species <u>80</u></td> <td>x 4 = <u>320</u></td> </tr> <tr> <td>UPL species <u>40</u></td> <td>x 5 = <u>200</u></td> </tr> <tr> <td>Column Totals: <u>163</u> (A)</td> <td><u>634</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.88</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>15</u>	x 2 = <u>30</u>	FAC species <u>28</u>	x 3 = <u>84</u>	FACU species <u>80</u>	x 4 = <u>320</u>	UPL species <u>40</u>	x 5 = <u>200</u>	Column Totals: <u>163</u> (A)	<u>634</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>15</u>	x 2 = <u>30</u>																	
FAC species <u>28</u>	x 3 = <u>84</u>																	
FACU species <u>80</u>	x 4 = <u>320</u>																	
UPL species <u>40</u>	x 5 = <u>200</u>																	
Column Totals: <u>163</u> (A)	<u>634</u> (B)																	
<u>5</u> = Total Cover 50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Acer rubrum</u>	<u>5</u>	☒	<u>FAC</u>															
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
<u>5</u> = Total Cover 50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Elaeagnus umbellata</u>	<u>40</u>	☒	<u>UPL</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Lonicera japonica</u>	<u>5</u>		<u>FACU</u>															
3. <u>Smilax rotundifolia</u>	<u>3</u>		<u>FAC</u>															
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
<u>48</u> = Total Cover 50% of total cover: <u>24.00</u> 20% of total cover: <u>9.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																		

SOIL

Sampling Point: DP-10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 8	10YR 4/3	100					Loam	
8 - 18	10YR 4/2	100					Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-11
Investigator(s): KZ Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1-2
Subregion (LRR or MLRA): P 136 Lat: 36.55113269 Long: -79.61381645 Datum: WGS 84
Soil Map Unit Name: 3B - Delanco fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☒ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-11

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Liquidambar styraciflua</u>	<u>70</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
<u>70</u> = Total Cover 50% of total cover: <u>35.00</u> 20% of total cover: <u>14.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>50</u></td> <td>x 2 = <u>100</u></td> </tr> <tr> <td>FAC species <u>70</u></td> <td>x 3 = <u>210</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>125</u> (A)</td> <td><u>330</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.64</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>50</u>	x 2 = <u>100</u>	FAC species <u>70</u>	x 3 = <u>210</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>125</u> (A)	<u>330</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>50</u>	x 2 = <u>100</u>																	
FAC species <u>70</u>	x 3 = <u>210</u>																	
FACU species <u>5</u>	x 4 = <u>20</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>125</u> (A)	<u>330</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>40</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Cyperus esculentus</u>	<u>10</u>		<u>FACW</u>															
3. <u>Lonicera japonica</u>	<u>5</u>		<u>FACU</u>															
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
<u>55</u> = Total Cover 50% of total cover: <u>27.50</u> 20% of total cover: <u>11.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No sapling/shrub or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-11

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-12
Investigator(s): KZ Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1-2
Subregion (LRR or MLRA): P 136 Lat: 36.55106596 Long: -79.61376139 Datum: WGS 84
Soil Map Unit Name: 3B - Delanco fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-12

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Liquidambar styraciflua</u>	<u>40</u>	<u>✓</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
<u>40</u> = Total Cover 50% of total cover: <u>20.00</u> 20% of total cover: <u>8.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>15</u></td> <td>x 4 = <u>60</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>55</u> (A)</td> <td><u>180</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.27</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>40</u>	x 3 = <u>120</u>	FACU species <u>15</u>	x 4 = <u>60</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>55</u> (A)	<u>180</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>40</u>	x 3 = <u>120</u>																	
FACU species <u>15</u>	x 4 = <u>60</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>55</u> (A)	<u>180</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Lonicera japonica</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
<u>15</u> = Total Cover 50% of total cover: <u>7.50</u> 20% of total cover: <u>3.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>																		
Remarks: (Include photo numbers here or on a separate sheet.) No sapling/shrub or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-12

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-13
Investigator(s): KZ Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): None Slope (%): 2-3
Subregion (LRR or MLRA): P 136 Lat: 36.5508291 Long: -79.61386535 Datum: WGS 84
Soil Map Unit Name: 3B - Delanco fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-13

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>45</u></td> <td>x 2 = <u>90</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>13</u></td> <td>x 4 = <u>52</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>58</u> (A)</td> <td><u>142</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.44</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>45</u>	x 2 = <u>90</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>13</u>	x 4 = <u>52</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>58</u> (A)	<u>142</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>45</u>	x 2 = <u>90</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>13</u>	x 4 = <u>52</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>58</u> (A)	<u>142</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Scirpus cyperinus</u>	<u>25</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Juncus effusus</u>	<u>20</u>	☒	<u>FACW</u>															
3. <u>Andropogon virginicus</u>	<u>10</u>		<u>FACU</u>															
4. <u>Lonicera japonica</u>	<u>3</u>		<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>58</u> = Total Cover																		
50% of total cover: <u>29.00</u> 20% of total cover: <u>11.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.)																		
No tree, sapling/shrub or woody vine strata were observed at this data point. Vegetation confined to the delineated PEM wetland.																		

SOIL

Sampling Point: DP-13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0 - 18	2.5Y 5/1	60	10YR 5/6	15	C	PL / M	Sandy Clay Loam
0 - 18	2.5YR 4/8	25					Sandy Clay Loam Secondary Matrix Color
-							
-							
-							
-							
-							
-							
-							
-							
-							
-							
-							
-							
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.						² Location: PL=Pore Lining, M=Matrix.	
Hydric Soil Indicators:				Indicators for Problematic Hydric Soils³:			
☐ Histosol (A1)				☐ Dark Surface (S7)			
☐ Histic Epipedon (A2)				☐ Polyvalue Below Surface (S8) (MLRA 147, 148)			
☐ Black Histic (A3)				☐ Thin Dark Surface (S9) (MLRA 147, 148)			
☐ Hydrogen Sulfide (A4)				☐ Loamy Gleyed Matrix (F2)			
☐ Stratified Layers (A5)				☒ Depleted Matrix (F3)			
☐ 2 cm Muck (A10) (LRR N)				☐ Redox Dark Surface (F6)			
☐ Depleted Below Dark Surface (A11)				☐ Depleted Dark Surface (F7)			
☐ Thick Dark Surface (A12)				☐ Redox Depressions (F8)			
☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)				☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)			
☐ Sandy Gleyed Matrix (S4)				☐ Umbric Surface (F13) (MLRA 136, 122)			
☐ Sandy Redox (S5)				☐ Piedmont Floodplain Soils (F19) (MLRA 148)			
☐ Stripped Matrix (S6)				☐ Red Parent Material (F21) (MLRA 127, 147)			
				³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.			
Restrictive Layer (if observed):							
Type: _____							
Depth (inches): _____						Hydric Soil Present? Yes ☒ No _____	
Remarks: In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.							

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-14
Investigator(s): KZ Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1-2
Subregion (LRR or MLRA): P 136 Lat: 36.55078959 Long: -79.61416446 Datum: WGS 84
Soil Map Unit Name: 3B - Delanco fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this sampling location.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☒ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-14

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Liquidambar styraciflua</u>	<u>60</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. <u>Platanus occidentalis</u>	<u>10</u>		<u>FACW</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
70 = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>63</u></td> <td>x 3 = <u>189</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>88</u> (A)</td> <td><u>239</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.71</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>63</u>	x 3 = <u>189</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>88</u> (A)	<u>239</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>25</u>	x 2 = <u>50</u>																	
FAC species <u>63</u>	x 3 = <u>189</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>88</u> (A)	<u>239</u> (B)																	
50% of total cover: <u>35.00</u> 20% of total cover: <u>14.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Liquidambar styraciflua</u>	<u>3</u>		<u>FAC</u>															
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
3 = Total Cover																		
50% of total cover: <u>1.50</u> 20% of total cover: <u>0.60</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Scirpus cyperinus</u>	<u>10</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Juncus effusus</u>	<u>5</u>	☒	<u>FACW</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
15 = Total Cover																		
50% of total cover: <u>7.50</u> 20% of total cover: <u>3.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																		

SOIL

Sampling Point: DP-14

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-15
Investigator(s): KZ Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1-2
Subregion (LRR or MLRA): P 136 Lat: 36.55098351 Long: -79.61435219 Datum: WGS 84
Soil Map Unit Name: 3B - Delanco fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-15

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.66</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>25</u></td> <td>x 3 = <u>75</u></td> </tr> <tr> <td>FACU species <u>11</u></td> <td>x 4 = <u>44</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>36</u> (A)</td> <td><u>119</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.30</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>25</u>	x 3 = <u>75</u>	FACU species <u>11</u>	x 4 = <u>44</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>36</u> (A)	<u>119</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>25</u>	x 3 = <u>75</u>																	
FACU species <u>11</u>	x 4 = <u>44</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>36</u> (A)	<u>119</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Solidago rugosa</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>															
2. <u>Andropogon gerardii</u>	<u>10</u>	<u>✓</u>	<u>FAC</u>															
3. <u>Andropogon virginicus</u>	<u>8</u>	<u>✓</u>	<u>FACU</u>															
4. <u>Rubus argutus</u>	<u>3</u>		<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>36</u> = Total Cover																		
50% of total cover: <u>18.00</u> 20% of total cover: <u>7.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-15

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-16
Investigator(s): KZ Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1-2
Subregion (LRR or MLRA): P 136 Lat: 36.55107299 Long: -79.61461377 Datum: WGS 84
Soil Map Unit Name: 3B - Delanco fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-16

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)																
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>4</u> (B)																
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25.00</u> (A/B)																
6. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>8</u></td> <td>x 3 = <u>24</u></td> </tr> <tr> <td>FACU species <u>40</u></td> <td>x 4 = <u>160</u></td> </tr> <tr> <td>UPL species <u>3</u></td> <td>x 5 = <u>15</u></td> </tr> <tr> <td>Column Totals: <u>51</u> (A)</td> <td><u>199</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.90</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>8</u>	x 3 = <u>24</u>	FACU species <u>40</u>	x 4 = <u>160</u>	UPL species <u>3</u>	x 5 = <u>15</u>	Column Totals: <u>51</u> (A)	<u>199</u> (B)	Prevalence Index = B/A = <u>3.90</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>8</u>	x 3 = <u>24</u>																			
FACU species <u>40</u>	x 4 = <u>160</u>																			
UPL species <u>3</u>	x 5 = <u>15</u>																			
Column Totals: <u>51</u> (A)	<u>199</u> (B)																			
Prevalence Index = B/A = <u>3.90</u>																				
7. _____	_____	_____	_____																	
_____ = Total Cover																				
50% of total cover: _____ 20% of total cover: _____																				
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																				
1. <u>Liquidambar styraciflua</u>	<u>3</u>	<u>✓</u>	<u>FAC</u>																	
2. <u>Oxydendrum arboreum</u>	<u>3</u>	<u>✓</u>	<u>UPL</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
<u>6</u> = Total Cover																				
50% of total cover: <u>3.00</u> 20% of total cover: <u>1.20</u>																				
Herb Stratum (Plot size: <u>5 ft r</u>)																				
1. <u>Rubus argutus</u>	<u>25</u>	<u>✓</u>	<u>FACU</u>																	
2. <u>Andropogon virginicus</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>																	
3. <u>Dichanthelium clandestinum</u>	<u>5</u>	_____	<u>FAC</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
<u>45</u> = Total Cover																				
50% of total cover: <u>22.50</u> 20% of total cover: <u>9.00</u>																				
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
_____ = Total Cover																				
50% of total cover: _____ 20% of total cover: _____																				
Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)																				
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																				
Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.																				
Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>																				
Remarks: (Include photo numbers here or on a separate sheet.) No tree or woody vine strata were observed at this data point.																				

SOIL

Sampling Point: DP-16

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-17
Investigator(s): MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR or MLRA): P 136 Lat: 36.55090997 Long: -79.61527448 Datum: WGS 84
Soil Map Unit Name: 3B - Delanco fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		_____ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes ☒ No _____ Depth (inches): <u>2</u>	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>4</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-17

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Acer rubrum</u>	<u>45</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>71.42</u> (A/B)														
2. <u>Celtis occidentalis</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Liquidambar styraciflua</u>	<u>10</u>		<u>FAC</u>															
4. <u>Quercus phellos</u>	<u>5</u>		<u>FAC</u>															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>45</u></td> <td>x 1 = <u>45</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>95</u></td> <td>x 3 = <u>285</u></td> </tr> <tr> <td>FACU species <u>23</u></td> <td>x 4 = <u>92</u></td> </tr> <tr> <td>UPL species <u>8</u></td> <td>x 5 = <u>40</u></td> </tr> <tr> <td>Column Totals: <u>171</u> (A)</td> <td><u>462</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.70</u>	Total % Cover of:	Multiply by:	OBL species <u>45</u>	x 1 = <u>45</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>95</u>	x 3 = <u>285</u>	FACU species <u>23</u>	x 4 = <u>92</u>	UPL species <u>8</u>	x 5 = <u>40</u>	Column Totals: <u>171</u> (A)	<u>462</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>45</u>	x 1 = <u>45</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>95</u>	x 3 = <u>285</u>																	
FACU species <u>23</u>	x 4 = <u>92</u>																	
UPL species <u>8</u>	x 5 = <u>40</u>																	
Column Totals: <u>171</u> (A)	<u>462</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____	<u>75</u>	= Total Cover	_____															
50% of total cover: <u>37.50</u> 20% of total cover: <u>15.00</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Viburnum nudum</u>	<u>40</u>	☒	<u>OBL</u>															
2. <u>Lindera benzoin</u>	<u>25</u>	☒	<u>FAC</u>															
3. <u>Elaeagnus umbellata</u>	<u>8</u>		<u>UPL</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. <u>Acer rubrum</u>	<u>5</u>		<u>FAC</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____	<u>78</u>	= Total Cover	_____															
50% of total cover: <u>39.00</u> 20% of total cover: <u>15.60</u>				Hydrophytic Vegetation Present? Yes ☒ No _____														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Dulichium arundinaceum</u>	<u>5</u>	☒	<u>OBL</u>															
2. <u>Ligustrum sinense</u>	<u>5</u>	☒	<u>FACU</u>															
3. <u>Smilax rotundifolia</u>	<u>5</u>	☒	<u>FAC</u>	Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
4. <u>Lonicera japonica</u>	<u>3</u>		<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	1. _____ 2. _____ 3. _____ 4. _____ 5. _____														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____	_____ = Total Cover 50% of total cover: <u>9.00</u> 20% of total cover: <u>3.60</u>														
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____	_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____	_____	_____	_____															

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL

Sampling Point: DP-17

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-22
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-18
Investigator(s): MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.55092058 Long: -79.61520527 Datum: WGS 84
Soil Map Unit Name: 3B - Delanco fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-18

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Quercus falcata</u>	<u>45</u>	☒	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25.00</u> (A/B)														
2. <u>Liriodendron tulipifera</u>	<u>20</u>	☒	<u>FACU</u>															
3. <u>Acer rubrum</u>	<u>10</u>		<u>FAC</u>															
4. <u>Betula nigra</u>	<u>10</u>		<u>FACW</u>															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>29</u></td> <td>x 3 = <u>87</u></td> </tr> <tr> <td>FACU species <u>83</u></td> <td>x 4 = <u>332</u></td> </tr> <tr> <td>UPL species <u>20</u></td> <td>x 5 = <u>100</u></td> </tr> <tr> <td>Column Totals: <u>142</u> (A)</td> <td><u>539</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.79</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>29</u>	x 3 = <u>87</u>	FACU species <u>83</u>	x 4 = <u>332</u>	UPL species <u>20</u>	x 5 = <u>100</u>	Column Totals: <u>142</u> (A)	<u>539</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>10</u>	x 2 = <u>20</u>																	
FAC species <u>29</u>	x 3 = <u>87</u>																	
FACU species <u>83</u>	x 4 = <u>332</u>																	
UPL species <u>20</u>	x 5 = <u>100</u>																	
Column Totals: <u>142</u> (A)	<u>539</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<table style="width: 100%;"> <tr> <td style="text-align: right;"><u>85</u> = Total Cover</td> </tr> <tr> <td>50% of total cover: <u>42.50</u> 20% of total cover: <u>17.00</u></td> </tr> </table>				<u>85</u> = Total Cover	50% of total cover: <u>42.50</u> 20% of total cover: <u>17.00</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)												
<u>85</u> = Total Cover																		
50% of total cover: <u>42.50</u> 20% of total cover: <u>17.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Elaeagnus umbellata</u>	<u>20</u>	☒	<u>UPL</u>															
2. <u>Fagus grandifolia</u>	<u>8</u>	☒	<u>FACU</u>															
3. <u>Liquidambar styraciflua</u>	<u>8</u>	☒	<u>FAC</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. <u>Acer rubrum</u>	<u>3</u>		<u>FAC</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
<table style="width: 100%;"> <tr> <td style="text-align: right;"><u>39</u> = Total Cover</td> </tr> <tr> <td>50% of total cover: <u>19.50</u> 20% of total cover: <u>7.80</u></td> </tr> </table>				<u>39</u> = Total Cover	50% of total cover: <u>19.50</u> 20% of total cover: <u>7.80</u>	Hydrophytic Vegetation Present? Yes _____ No ☒												
<u>39</u> = Total Cover																		
50% of total cover: <u>19.50</u> 20% of total cover: <u>7.80</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Ligustrum sinense</u>	<u>5</u>	☒	<u>FACU</u>															
2. <u>Lonicera japonica</u>	<u>5</u>	☒	<u>FACU</u>															
3. <u>Smilax rotundifolia</u>	<u>5</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Present? Yes _____ No ☒														
4. <u>Viola sp.</u>	<u>5</u>	☒	_____															
5. <u>Lindera benzoin</u>	<u>3</u>		<u>FAC</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
<table style="width: 100%;"> <tr> <td style="text-align: right;"><u>23</u> = Total Cover</td> </tr> <tr> <td>50% of total cover: <u>11.50</u> 20% of total cover: <u>4.60</u></td> </tr> </table>				<u>23</u> = Total Cover	50% of total cover: <u>11.50</u> 20% of total cover: <u>4.60</u>	Remarks: (Include photo numbers here or on a separate sheet.) <u>No woody vine stratum was observed at this data point.</u>												
<u>23</u> = Total Cover																		
50% of total cover: <u>11.50</u> 20% of total cover: <u>4.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____	Remarks: (Include photo numbers here or on a separate sheet.) <u>No woody vine stratum was observed at this data point.</u>														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
<table style="width: 100%;"> <tr> <td style="text-align: right;">_____ = Total Cover</td> </tr> <tr> <td>50% of total cover: _____ 20% of total cover: _____</td> </tr> </table>				_____ = Total Cover	50% of total cover: _____ 20% of total cover: _____	Remarks: (Include photo numbers here or on a separate sheet.) <u>No woody vine stratum was observed at this data point.</u>												
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____	Remarks: (Include photo numbers here or on a separate sheet.) <u>No woody vine stratum was observed at this data point.</u>														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															

SOIL

Sampling Point: DP-18

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 4/2	100					Loam	
2 - 8	10YR 4/4	100					Silt Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Gravel

Depth (inches): 8

Hydric Soil Present? Yes ☐ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-25
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-19
Investigator(s): MS, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR or MLRA): P 136 Lat: 36.66324793 Long: -79.5127934 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☒ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☒ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes ☒ No _____ Depth (inches): <u>0.5</u>	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>3</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-19

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Acer rubrum</u>	<u>90</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. <u>Prunus serotina</u>	<u>2</u>		<u>FACU</u>															
3. _____	_____		_____															
4. _____	_____		_____															
5. _____	_____		_____															
6. _____	_____		_____															
7. _____	_____		_____															
<u>92</u> = Total Cover 50% of total cover: <u>46.00</u> 20% of total cover: <u>18.40</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Nyssa sylvatica</u>	<u>15</u>	☒	<u>FAC</u>	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>6</u></td> <td>x 1 = <u>6</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>116</u></td> <td>x 3 = <u>348</u></td> </tr> <tr> <td>FACU species <u>3</u></td> <td>x 4 = <u>12</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>125</u> (A)</td> <td><u>366</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.92</u>	Total % Cover of:	Multiply by:	OBL species <u>6</u>	x 1 = <u>6</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>116</u>	x 3 = <u>348</u>	FACU species <u>3</u>	x 4 = <u>12</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>125</u> (A)	<u>366</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>6</u>	x 1 = <u>6</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>116</u>	x 3 = <u>348</u>																	
FACU species <u>3</u>	x 4 = <u>12</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>125</u> (A)	<u>366</u> (B)																	
2. <u>Liquidambar styraciflua</u>	<u>5</u>	☒	<u>FAC</u>															
3. _____	_____		_____															
4. _____	_____		_____															
5. _____	_____		_____															
6. _____	_____		_____															
7. _____	_____		_____															
<u>20</u> = Total Cover 50% of total cover: <u>10.00</u> 20% of total cover: <u>4.00</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Smilax rotundifolia</u>	<u>6</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☒ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Carex crinita</u>	<u>4</u>	☒	<u>OBL</u>															
3. <u>Carex pedunculata</u>	<u>2</u>		<u>OBL</u>															
4. <u>Lonicera japonica</u>	<u>1</u>		<u>FACU</u>															
5. _____	_____		_____															
6. _____	_____		_____															
7. _____	_____		_____															
8. _____	_____		_____															
9. _____	_____		_____															
10. _____	_____		_____															
11. _____	_____		_____															
<u>13</u> = Total Cover 50% of total cover: <u>6.50</u> 20% of total cover: <u>2.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Vitis sp.</u>	<u>10</u>	☒		Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. _____	_____		_____															
3. _____	_____		_____															
4. _____	_____		_____															
5. _____	_____		_____															
6. _____	_____		_____															
<u>10</u> = Total Cover 50% of total cover: <u>5.00</u> 20% of total cover: <u>2.00</u>																		
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes ☒ No _____														

SOIL

Sampling Point: DP-19

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 2/2	100					Loam	
2 - 6	10YR 5/2	85	7.5YR 4/6	10	C	PL / M	Clay Loam	
2 - 6			10YR 7/2	5	D	M	Clay Loam	Secondary Redox feature
6 - 12	10YR 5/2	70	7.5YR 4/6	25	C	PL / M	Silty Clay Loam	Manganese concretions
6 - 12			10YR 7/2	5	D	PL / M	Silty Clay Loam	Secondary Redox feature
12 - 20	10YR 5/2	50	7.5YR 5/6	40	C	PL / M	Silty Clay	Manganese concretions
12 - 20			10YR 7/1	10	D	PL / M	Silty Clay	Secondary Redox feature
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (LRR N)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (MLRA 147, 148)
- ☐ Thin Dark Surface (S9) (MLRA 147, 148)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ☐ Umbric Surface (F13) (MLRA 136, 122)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 148)
- ☐ Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (MLRA 147)
- ☐ Coast Prairie Redox (A16) (MLRA 147, 148)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-26
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-20 STP
Investigator(s): KZ, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Convex Slope (%): 4-6
Subregion (LRR or MLRA): P 136 Lat: 36.66372361 Long: -79.51121296 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-20 STP

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>80</u></td> <td>x 4 = <u>320</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>80</u> (A)</td> <td><u>320</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.00</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>80</u>	x 4 = <u>320</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>80</u> (A)	<u>320</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>80</u>	x 4 = <u>320</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>80</u> (A)	<u>320</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Schedonorus pratensis</u>	<u>80</u>	<u>✓</u>	<u>FACU</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>80</u> = Total Cover																		
50% of total cover: <u>40.00</u> 20% of total cover: <u>16.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ✓

SOIL

Sampling Point: DP-20 STP

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-25
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-21
Investigator(s): MS, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 4-5
Subregion (LRR or MLRA): P 136 Lat: 36.66337071 Long: -79.51277235 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-21

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Quercus alba</u>	<u>35</u>	☒	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>28.57</u> (A/B)														
2. <u>Liriodendron tulipifera</u>	<u>30</u>	☒	<u>FACU</u>															
3. <u>Acer rubrum</u>	<u>20</u>		<u>FAC</u>															
4. <u>Quercus rubra</u>	<u>10</u>		<u>FACU</u>															
5. <u>Pinus virginiana</u>	<u>5</u>		<u>UPL</u>															
6. <u>Diospyros virginiana</u>	<u>2</u>		<u>FAC</u>															
7. <u>Liquidambar styraciflua</u>	<u>2</u>		<u>FAC</u>															
<u>104</u> = Total Cover 50% of total cover: <u>52.00</u> 20% of total cover: <u>20.80</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>69</u></td> <td>x 3 = <u>207</u></td> </tr> <tr> <td>FACU species <u>106</u></td> <td>x 4 = <u>424</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>190</u> (A)</td> <td><u>706</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.71</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>69</u>	x 3 = <u>207</u>	FACU species <u>106</u>	x 4 = <u>424</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>190</u> (A)	<u>706</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>69</u>	x 3 = <u>207</u>																	
FACU species <u>106</u>	x 4 = <u>424</u>																	
UPL species <u>15</u>	x 5 = <u>75</u>																	
Column Totals: <u>190</u> (A)	<u>706</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Liquidambar styraciflua</u>	<u>15</u>	☒	<u>FAC</u>															
2. <u>Carya tomentosa</u>	<u>10</u>	☒	<u>UPL</u>															
3. <u>Juniperus virginiana</u>	<u>10</u>	☒	<u>FACU</u>															
4. <u>Quercus rubra</u>	<u>1</u>		<u>FACU</u>															
5. _____	_____		_____															
6. _____	_____		_____															
7. _____	_____		_____															
8. _____	_____		_____															
9. _____	_____		_____															
<u>36</u> = Total Cover 50% of total cover: <u>18.00</u> 20% of total cover: <u>7.20</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Smilax rotundifolia</u>	<u>30</u>	☒	<u>FAC</u>															
2. <u>Lonicera japonica</u>	<u>20</u>	☒	<u>FACU</u>															
3. _____	_____		_____															
4. _____	_____		_____															
5. _____	_____		_____															
6. _____	_____		_____															
7. _____	_____		_____															
8. _____	_____		_____															
9. _____	_____		_____															
10. _____	_____		_____															
11. _____	_____		_____															
<u>50</u> = Total Cover 50% of total cover: <u>25.00</u> 20% of total cover: <u>10.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____		_____															
2. _____	_____		_____															
3. _____	_____		_____															
4. _____	_____		_____															
5. _____	_____		_____															
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.				Hydrophytic Vegetation Present? Yes _____ No ☒														

SOIL

Sampling Point: DP-21

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	7.5YR 4/3	100					Silt Loam	
2 - 8	7.5YR 5/6	100					Silty Clay	
8 - 16	7.5YR 5/8	90	7.5YR 5/3	5	D	PL / M	Silty Clay	
8 - 16			10YR 6/6	5	C	PL / M	Silty Clay	Secondary Redox feature
16 - 18	5YR 5/6	85	5YR 5/8	5	C	PL / M	Silty Clay	
16 - 18			10YR 5/6	10	C	PL / M	Silty Clay	Secondary Redox feature
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-25
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-22
Investigator(s): KZ, LS, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.66279069 Long: -79.51215791 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes ☒ No _____ Depth (inches): 0.5
Water Table Present? Yes ☒ No _____ Depth (inches): 12
Saturation Present? Yes ☒ No _____ Depth (inches): 0
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-22

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>45</u></td> <td>x 2 = <u>90</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>18</u></td> <td>x 4 = <u>72</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>73</u> (A)</td> <td><u>192</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.63</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>45</u>	x 2 = <u>90</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>18</u>	x 4 = <u>72</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>73</u> (A)	<u>192</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>45</u>	x 2 = <u>90</u>																	
FAC species <u>10</u>	x 3 = <u>30</u>																	
FACU species <u>18</u>	x 4 = <u>72</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>73</u> (A)	<u>192</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>40</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Rubus argutus</u>	<u>10</u>		<u>FACU</u>															
3. <u>Rumex crispus</u>	<u>10</u>		<u>FAC</u>															
4. <u>Solidago altissima</u>	<u>8</u>		<u>FACU</u>															
5. <u>Cyperus esculentus</u>	<u>5</u>		<u>FACW</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>73</u> = Total Cover																		
50% of total cover: <u>36.50</u> 20% of total cover: <u>14.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-22

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 10	10YR 6/2	60	5YR 5/8	40	C	PL	Loam	
10 - 18	2.5Y 7/2	70	5YR 5/8	20	C	M	Sandy Clay Loam	
10 - 18			10YR 6/8	10	D	M	Sandy Clay Loam	Secondary redox feature
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-25
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-23
Investigator(s): KZ, LS, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5
Subregion (LRR or MLRA): P 136 Lat: 36.6627375 Long: -79.51219059 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-23

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>73</u></td> <td>x 4 = <u>292</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>83</u> (A)</td> <td><u>322</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.87</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>73</u>	x 4 = <u>292</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>83</u> (A)	<u>322</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>10</u>	x 3 = <u>30</u>																	
FACU species <u>73</u>	x 4 = <u>292</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>83</u> (A)	<u>322</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Dactylis glomerata</u>	<u>60</u>	☒	<u>FACU</u>															
2. <u>Rumex crispus</u>	<u>10</u>	☐	<u>FAC</u>															
3. <u>Allium canadense</u>	<u>5</u>	☐	<u>FACU</u>															
4. <u>Lonicera japonica</u>	<u>5</u>	☐	<u>FACU</u>															
5. <u>Taraxacum officinale</u>	<u>3</u>	☐	<u>FACU</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>83</u> = Total Cover																		
50% of total cover: <u>41.50</u> 20% of total cover: <u>16.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ☒

SOIL

Sampling Point: DP-23

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 4/2	100					Loam	
3 - 9	10YR 5/3	100					Loam	
9 - 18	10YR 5/4	95	7.5YR 5/8	5	C	PL	Sandy Clay Loam	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-25
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-24
Investigator(s): KZ, LS, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Seep Local relief (concave, convex, none): Concave Slope (%): 1-3
Subregion (LRR or MLRA): P 136 Lat: 36.66316269 Long: -79.51194734 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes ☒ No _____ Depth (inches): <u>1</u>	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>0</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-24

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Acer rubrum</u>	<u>60</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80.00</u> (A/B)														
2. <u>Oxydendrum arboreum</u>	<u>20</u>	☒	<u>UPL</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>12</u></td> <td>x 1 = <u>12</u></td> </tr> <tr> <td>FACW species <u>29</u></td> <td>x 2 = <u>58</u></td> </tr> <tr> <td>FAC species <u>105</u></td> <td>x 3 = <u>315</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>20</u></td> <td>x 5 = <u>100</u></td> </tr> <tr> <td>Column Totals: <u>186</u> (A)</td> <td><u>565</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.03</u>	Total % Cover of:	Multiply by:	OBL species <u>12</u>	x 1 = <u>12</u>	FACW species <u>29</u>	x 2 = <u>58</u>	FAC species <u>105</u>	x 3 = <u>315</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>20</u>	x 5 = <u>100</u>	Column Totals: <u>186</u> (A)	<u>565</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>12</u>	x 1 = <u>12</u>																	
FACW species <u>29</u>	x 2 = <u>58</u>																	
FAC species <u>105</u>	x 3 = <u>315</u>																	
FACU species <u>20</u>	x 4 = <u>80</u>																	
UPL species <u>20</u>	x 5 = <u>100</u>																	
Column Totals: <u>186</u> (A)	<u>565</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
_____ = Total Cover 50% of total cover: <u>40.00</u> 20% of total cover: <u>16.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Carpinus caroliniana</u>	<u>30</u>	☒	<u>FAC</u>															
2. <u>Liquidambar styraciflua</u>	<u>10</u>	_____	<u>FAC</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
3. <u>Viburnum prunifolium</u>	<u>7</u>	_____	<u>FACU</u>															
4. <u>Juniperus virginiana</u>	<u>5</u>	_____	<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____														
11. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>26.00</u> 20% of total cover: <u>10.40</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Conium maculatum</u>	<u>25</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Present? Yes ☒ No _____														
2. <u>Cicuta maculata</u>	<u>12</u>	☒	<u>OBL</u>															
3. <u>Lonicera japonica</u>	<u>8</u>	_____	<u>FACU</u>															
4. <u>Parathelypteris noveboracensis</u>	<u>5</u>	_____	<u>FAC</u>															
5. <u>Impatiens capensis</u>	<u>4</u>	_____	<u>FACW</u>	Hydrophytic Vegetation Present? Yes ☒ No _____														
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____														
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>27.00</u> 20% of total cover: <u>10.80</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)				Hydrophytic Vegetation Present? Yes ☒ No _____														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____														
5. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) <u>No woody vine stratum was observed at this data point.</u>																		

SOIL

Sampling Point: DP-24

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 4/1	100					Sand	
2 - 8	10YR 4/2	92	7.5YR 4/6	8	C	M	Sand	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☒ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Gravel

Depth (inches): 8

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-25
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-25
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 5
Subregion (LRR or MLRA): P 136 Lat: 36.66318691 Long: -79.51198185 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-25

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Acer rubrum</u>	<u>45</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)														
2. <u>Liquidambar styraciflua</u>	<u>18</u>	☒	<u>FAC</u>															
3. <u>Oxydendrum arboreum</u>	<u>12</u>		<u>UPL</u>															
4. <u>Quercus alba</u>	<u>8</u>		<u>FACU</u>															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>68</u></td> <td>x 3 = <u>204</u></td> </tr> <tr> <td>FACU species <u>17</u></td> <td>x 4 = <u>68</u></td> </tr> <tr> <td>UPL species <u>12</u></td> <td>x 5 = <u>60</u></td> </tr> <tr> <td>Column Totals: <u>97</u> (A)</td> <td><u>332</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.42</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>68</u>	x 3 = <u>204</u>	FACU species <u>17</u>	x 4 = <u>68</u>	UPL species <u>12</u>	x 5 = <u>60</u>	Column Totals: <u>97</u> (A)	<u>332</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>68</u>	x 3 = <u>204</u>																	
FACU species <u>17</u>	x 4 = <u>68</u>																	
UPL species <u>12</u>	x 5 = <u>60</u>																	
Column Totals: <u>97</u> (A)	<u>332</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
50% of total cover: <u>41.50</u> 20% of total cover: <u>16.60</u> <u>83</u> = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Juniperus virginiana</u>	<u>4</u>	☒	<u>FACU</u>															
2. <u>Viburnum prunifolium</u>	<u>2</u>	☒	<u>FACU</u>															
3. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
50% of total cover: <u>3.00</u> 20% of total cover: <u>1.20</u> <u>6</u> = Total Cover				Hydrophytic Vegetation Present? Yes _____ No ☒														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Smilax rotundifolia</u>	<u>5</u>	☒	<u>FAC</u>															
2. <u>Lonicera japonica</u>	<u>3</u>	☒	<u>FACU</u>															
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No ☒														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No ☒														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
50% of total cover: <u>4.00</u> 20% of total cover: <u>1.60</u> <u>8</u> = Total Cover				Hydrophytic Vegetation Present? Yes _____ No ☒														
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No ☒														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
50% of total cover: _____ 20% of total cover: _____ _____ = Total Cover				Hydrophytic Vegetation Present? Yes _____ No ☒														
Remarks: (Include photo numbers here or on a separate sheet.)																		
No woody vine stratum was observed at this data point.																		

SOIL

Sampling Point: DP-25

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 18	5YR 4/6	70					Loam	
0 - 18	5YR 5/8	30					Loam	Secondary Matrix color
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-26
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-26
Investigator(s): MS, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 4-6
Subregion (LRR or MLRA): P 136 Lat: 36.66029705 Long: -79.5157129 Datum: WGS 84
Soil Map Unit Name: 23B - Clover fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☒ Drainage Patterns (B10)	
☐ Water Marks (B1)	☒ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☒ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>2</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-26

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Acer rubrum</u>	<u>65</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60.00</u> (A/B)														
2. <u>Liquidambar styraciflua</u>	<u>20</u>		<u>FAC</u>															
3. <u>Pinus virginiana</u>	<u>15</u>		<u>UPL</u>															
4. <u>Betula lenta</u>	<u>4</u>		<u>FACU</u>															
5. <u>Juniperus virginiana</u>	<u>2</u>		<u>FACU</u>															
6. _____	_____		_____															
7. _____	_____		_____															
<u>106</u> = Total Cover 50% of total cover: <u>53.00</u> 20% of total cover: <u>21.20</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>107</u></td> <td>x 3 = <u>321</u></td> </tr> <tr> <td>FACU species <u>28</u></td> <td>x 4 = <u>112</u></td> </tr> <tr> <td>UPL species <u>18</u></td> <td>x 5 = <u>90</u></td> </tr> <tr> <td>Column Totals: <u>158</u> (A)</td> <td><u>533</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.37</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>107</u>	x 3 = <u>321</u>	FACU species <u>28</u>	x 4 = <u>112</u>	UPL species <u>18</u>	x 5 = <u>90</u>	Column Totals: <u>158</u> (A)	<u>533</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>5</u>	x 2 = <u>10</u>																	
FAC species <u>107</u>	x 3 = <u>321</u>																	
FACU species <u>28</u>	x 4 = <u>112</u>																	
UPL species <u>18</u>	x 5 = <u>90</u>																	
Column Totals: <u>158</u> (A)	<u>533</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Liquidambar styraciflua</u>	<u>20</u>	☒	<u>FAC</u>															
2. <u>Juniperus virginiana</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Acer rubrum</u>	<u>2</u>		<u>FAC</u>															
4. <u>Pinus virginiana</u>	<u>2</u>		<u>UPL</u>															
5. <u>Quercus rubra</u>	<u>1</u>		<u>FACU</u>															
6. _____	_____		_____															
7. _____	_____		_____															
8. _____	_____		_____															
9. _____	_____		_____															
<u>40</u> = Total Cover 50% of total cover: <u>20.00</u> 20% of total cover: <u>8.00</u>				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Anthoxanthum odoratum</u>	<u>5</u>	☒	<u>FACU</u>															
2. <u>Juncus effusus</u>	<u>5</u>	☒	<u>FACW</u>															
3. <u>Allium vineale</u>	<u>1</u>		<u>FACU</u>															
4. <u>Stellaria media ssp. media</u>	<u>1</u>		<u>UPL</u>															
5. _____	_____		_____															
6. _____	_____		_____															
7. _____	_____		_____															
8. _____	_____		_____															
9. _____	_____		_____															
10. _____	_____		_____															
11. _____	_____		_____															
<u>12</u> = Total Cover 50% of total cover: <u>6.00</u> 20% of total cover: <u>2.40</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____		_____															
2. _____	_____		_____															
3. _____	_____		_____															
4. _____	_____		_____															
5. _____	_____		_____															
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.				Hydrophytic Vegetation Present? Yes ☒ No _____														

SOIL

Sampling Point: DP-26

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 5/2	95	10YR 5/6	5	C	PL / M	Sandy Loam	
3 - 18	10YR 6/8	65					Clay Loam	
3 - 18	10YR 7/8	35					Clay Loam	Secondary Matrix color
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-26
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-27
Investigator(s): KZ, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 6-8
Subregion (LRR or MLRA): P 136 Lat: 36.65990772 Long: -79.51639965 Datum: WGS 84
Soil Map Unit Name: 23B - Clover fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes ☒ No _____ Depth (inches): <u>1</u>	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>0</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-27

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>65</u></td> <td>x 2 = <u>130</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>70</u> (A)</td> <td><u>145</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.07</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>65</u>	x 2 = <u>130</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>70</u> (A)	<u>145</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>65</u>	x 2 = <u>130</u>																	
FAC species <u>5</u>	x 3 = <u>15</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>70</u> (A)	<u>145</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover				Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>60</u>	☒	<u>FACW</u>															
2. <u>Rumex crispus</u>	<u>5</u>		<u>FAC</u>															
3. <u>Scirpus cyperinus</u>	<u>5</u>		<u>FACW</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>70</u> = Total Cover																		
50% of total cover: <u>35.00</u> 20% of total cover: <u>14.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover				Hydrophytic Vegetation Present? Yes ☒ No _____														
50% of total cover: _____ 20% of total cover: _____																		

Remarks: (Include photo numbers here or on a separate sheet.)

No tree, sapling/shrub, or woody vine strata were observed at this data point.

SOIL

Sampling Point: DP-27

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-26
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-28
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 1-2
Subregion (LRR or MLRA): P 136 Lat: 36.65991087 Long: -79.51648674 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-28

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>75</u></td> <td>x 4 = <u>300</u></td> </tr> <tr> <td>UPL species <u>8</u></td> <td>x 5 = <u>40</u></td> </tr> <tr> <td>Column Totals: <u>83</u> (A)</td> <td><u>340</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.09</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>75</u>	x 4 = <u>300</u>	UPL species <u>8</u>	x 5 = <u>40</u>	Column Totals: <u>83</u> (A)	<u>340</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>75</u>	x 4 = <u>300</u>																	
UPL species <u>8</u>	x 5 = <u>40</u>																	
Column Totals: <u>83</u> (A)	<u>340</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Dactylis glomerata</u>	<u>75</u>	<u>✓</u>	<u>FACU</u>															
2. <u>Plantago lanceolata</u>	<u>8</u>		<u>UPL</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>83</u> = Total Cover																		
50% of total cover: <u>41.50</u> 20% of total cover: <u>16.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ✓

SOIL

Sampling Point: DP-28

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 14	10YR 5/4	75						
0 - 14	10YR 4/2	25						Secondary Matrix color
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Gravel
 Depth (inches): 14

Hydric Soil Present? Yes ☐ No ☒

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-26
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-29
Investigator(s): MS, KZ Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.6577389 Long: -79.5174554 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
_____ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
_____ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		_____ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes ☒ No _____ Depth (inches): 1
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-29

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>40</u></td> <td>x 2 = <u>80</u></td> </tr> <tr> <td>FAC species <u>15</u></td> <td>x 3 = <u>45</u></td> </tr> <tr> <td>FACU species <u>21</u></td> <td>x 4 = <u>84</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>76</u> (A)</td> <td><u>209</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.75</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>40</u>	x 2 = <u>80</u>	FAC species <u>15</u>	x 3 = <u>45</u>	FACU species <u>21</u>	x 4 = <u>84</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>76</u> (A)	<u>209</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>40</u>	x 2 = <u>80</u>																	
FAC species <u>15</u>	x 3 = <u>45</u>																	
FACU species <u>21</u>	x 4 = <u>84</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>76</u> (A)	<u>209</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>40</u>	☒	<u>FACW</u>															
2. <u>Anthoxanthum odoratum</u>	<u>15</u>		<u>FACU</u>															
3. <u>Centella asiatica</u>	<u>10</u>		<u>FAC</u>															
4. <u>Cyperus rotundus</u>	<u>5</u>		<u>FAC</u>															
5. <u>Cerastium fontanum</u>	<u>4</u>		<u>FACU</u>															
6. <u>Schedonorus pratensis</u>	<u>2</u>		<u>FACU</u>															
7. <u>Solidago sp.</u>	<u>2</u>																	
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>78</u> = Total Cover																		
50% of total cover: <u>39.00</u> 20% of total cover: <u>15.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
☒ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-29

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	2.5Y 5/1	60	10YR 6/8	20	C	PL / M	Loamy Sand	
0 - 2			7.5YR 5/8	20	C	M	Loamy Sand	Secondary Redox feature
2 - 18	10YR 6/2	60	10YR 6/8	15	C	PL / M	Loamy Sand	
2 - 18			2.5Y 5/1	10	D	M	Loamy Sand	Secondary Redox feature
2 - 18			7.5YR 5/8	15	C	PL / M	Sandy Loam	Tertiary Redox feature
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☒ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-26
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-30
Investigator(s): MS, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.65744662 Long: -79.51879851 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☒ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>0</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Sampling Point: DP-30

Tree Stratum (Plot size: <u>30 ft r</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Betula nigra</u>	<u>60</u>	☒	<u>FACW</u>
2.	<u>Liquidambar styraciflua</u>	<u>20</u>		<u>FAC</u>
3.	<u>Carpinus caroliniana</u>	<u>15</u>		<u>FAC</u>
4.	<u>Platanus occidentalis</u>	<u>5</u>		<u>FACW</u>
5.	<u>Liriodendron tulipifera</u>	<u>2</u>		<u>FACU</u>
6.				
7.				
		<u>102</u>	= Total Cover	
50% of total cover: <u>51.00</u>		20% of total cover: <u>20.40</u>		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Carpinus caroliniana</u>	<u>20</u>	☒	<u>FAC</u>
2.	<u>Liquidambar styraciflua</u>	<u>5</u>	☒	<u>FAC</u>
3.				
4.				
5.				
6.				
7.				
8.				
9.				
		<u>25</u>	= Total Cover	
50% of total cover: <u>12.50</u>		20% of total cover: <u>5.00</u>		
Herb Stratum (Plot size: <u>5 ft r</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Lonicera japonica</u>	<u>5</u>	☒	<u>FACU</u>
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
		<u>5</u>	= Total Cover	
50% of total cover: <u>2.50</u>		20% of total cover: <u>1.00</u>		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
			= Total Cover	
50% of total cover: _____		20% of total cover: _____		

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

Dominance Test worksheet:	
Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u>	(A)
Total Number of Dominant Species Across All Strata: <u>4</u>	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.00</u>	(A/B)
Prevalence Index worksheet:	
Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>65</u>	x 2 = <u>130</u>
FAC species <u>60</u>	x 3 = <u>180</u>
FACU species <u>7</u>	x 4 = <u>28</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>132</u>	(A) <u>338</u> (B)
Prevalence Index = B/A = <u>2.56</u>	
Hydrophytic Vegetation Indicators:	
<u> </u> 1 - Rapid Test for Hydrophytic Vegetation	
☒ 2 - Dominance Test is >50%	
☒ 3 - Prevalence Index is ≤3.0 ¹	
<u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)	
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Definitions of Four Vegetation Strata:	
Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.	
Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.	
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.	
Woody vine – All woody vines greater than 3.28 ft in height.	
Hydrophytic Vegetation Present? Yes ☒ No ☐	

SOIL

Sampling Point: DP-30

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 5/2	75	7.5YR 6/8	20	C	PL / M	Silty Clay Loam	
0 - 3			10YR 5/1	5	D	M	Silty Clay Loam	Secondary Redox feature
3 - 18	10YR 5/2	60	7.5YR 6/6	30	C	M	Silty Clay	
3 - 18			10YR 7/1	10	D	M	Silty Clay	Secondary Redox feature
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-28
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-31
Investigator(s): MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope (%): 2-3
Subregion (LRR or MLRA): P 136 Lat: 36.71926514 Long: -79.45726217 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes ☒ No _____ Depth (inches): 3
Water Table Present? Yes ☒ No _____ Depth (inches): 0
Saturation Present? Yes ☒ No _____ Depth (inches): 0
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Surface water, high water table, and saturation indicators are not checked due to a rain event within the past 24 hours.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-31

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.66</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>55</u></td> <td>x 2 = <u>110</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>75</u> (A)</td> <td><u>190</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.53</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>55</u>	x 2 = <u>110</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>75</u> (A)	<u>190</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>55</u>	x 2 = <u>110</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>20</u>	x 4 = <u>80</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>75</u> (A)	<u>190</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>40</u>	☒	<u>FACW</u>															
2. <u>Solidago altissima</u>	<u>20</u>	☒	<u>FACU</u>															
3. <u>Cyperus esculentus</u>	<u>15</u>	☒	<u>FACW</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>75</u> = Total Cover																		
50% of total cover: <u>37.50</u> 20% of total cover: <u>15.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-31

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 12	2.5Y 5/2	70	7.5YR 5/8	30	C	PL / M	Sandy Loam	
12 - 18	2.5Y 5/1	80	7.5YR 5/8	20	D	PL / M	Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-28
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-32
Investigator(s): KZ, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 8-10
Subregion (LRR or MLRA): P 136 Lat: 36.71926094 Long: -79.45726786 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-32

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>85</u></td> <td>x 4 = <u>340</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>365</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.05</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>85</u>	x 4 = <u>340</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>90</u> (A)	<u>365</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>85</u>	x 4 = <u>340</u>																	
UPL species <u>5</u>	x 5 = <u>25</u>																	
Column Totals: <u>90</u> (A)	<u>365</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Solidago altissima</u>	<u>50</u>	<u>✓</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Allium canadense</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>															
3. <u>Lonicera japonica</u>	<u>15</u>		<u>FACU</u>															
4. <u>Daucus carota</u>	<u>5</u>		<u>UPL</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>90</u> = Total Cover																		
50% of total cover: <u>45.00</u> 20% of total cover: <u>18.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) <u>No tree, sapling/shrub, or woody vine strata was observed at this data point.</u>																		

SOIL

Sampling Point: DP-32

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 5	7.5YR 4/4	100					Sandy Loam	
5 - 10	7.5YR 4/4	70					Sandy Loam	
5 - 10	7.5YR 5/8	30					Sandy Loam	Secondary matrix color
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Gravel
 Depth (inches): 10+

Hydric Soil Present? Yes ☐ No ☒

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-28
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-33
Investigator(s): MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR or MLRA): P 136 Lat: 36.71869848 Long: -79.45688811 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☒ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☒ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes ☒ No _____ Depth (inches): <u>0.25</u>	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>0</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Surface water, high water table, and saturation indicators are not checked due to a rain event within the past 24 hours.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-33

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>60</u></td> <td>x 1 = <u>60</u></td> </tr> <tr> <td>FACW species <u>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>36</u></td> <td>x 3 = <u>108</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>126</u> (A)</td> <td><u>228</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.80</u>	Total % Cover of:	Multiply by:	OBL species <u>60</u>	x 1 = <u>60</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>36</u>	x 3 = <u>108</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>126</u> (A)	<u>228</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>60</u>	x 1 = <u>60</u>																	
FACW species <u>30</u>	x 2 = <u>60</u>																	
FAC species <u>36</u>	x 3 = <u>108</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>126</u> (A)	<u>228</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Alnus serrulata</u>	<u>60</u>	☒	<u>OBL</u>															
2. <u>Cornus amomum</u>	<u>15</u>	☒	<u>FACW</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: <u>37.50</u> 20% of total cover: <u>15.00</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>15</u>	☒	<u>FACW</u>															
2. <u>Rubus pensilvanicus</u>	<u>10</u>	☒	<u>FAC</u>															
3. <u>Viola sororia</u>	<u>10</u>	☒	<u>FAC</u>															
4. <u>Chasmanthium laxum</u>	<u>8</u>	_____	<u>FAC</u>															
5. <u>Microstegium vimineum</u>	<u>8</u>	_____	<u>FAC</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: <u>25.50</u> 20% of total cover: <u>10.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-33

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 4/4	100					Clay Loam	
3 - 9	10YR 4/2	90	7.5YR 5/6	10	C	PL	Clay Loam	
9 - 18	10YR 4/2	95	7.5YR 5/6	5	C	M	Clay Loam	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-28
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-34
Investigator(s): MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 3
Subregion (LRR or MLRA): P 136 Lat: 36.71877494 Long: -79.45694149 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-34

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>10</u></td> <td>x 1 = <u>10</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>48</u></td> <td>x 4 = <u>192</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>68</u> (A)</td> <td><u>252</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.70</u>	Total % Cover of:	Multiply by:	OBL species <u>10</u>	x 1 = <u>10</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>48</u>	x 4 = <u>192</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>68</u> (A)	<u>252</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>10</u>	x 1 = <u>10</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>48</u>	x 4 = <u>192</u>																	
UPL species <u>10</u>	x 5 = <u>50</u>																	
Column Totals: <u>68</u> (A)	<u>252</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Alnus serrulata</u>	<u>10</u>	☒	<u>OBL</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: <u>5.00</u> 20% of total cover: <u>2.00</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Lonicera japonica</u>	<u>30</u>	☒	<u>FACU</u>															
2. <u>Solidago altissima</u>	<u>10</u>	_____	<u>FACU</u>															
3. <u>Andropogon virginicus</u>	<u>8</u>	_____	<u>FACU</u>															
4. <u>Daucus carota</u>	<u>5</u>	_____	<u>UPL</u>															
5. <u>Plantago lanceolata</u>	<u>5</u>	_____	<u>UPL</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: <u>29.00</u> 20% of total cover: <u>11.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

No tree or woody vine strata were observed at this data point.

SOIL

Sampling Point: DP-34

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 8	7.5YR 4/2	50					Sandy Clay Loam	
0 - 8	7.5YR 4/6	50					Sandy Clay Loam	Secondary matrix color
8 - 18	7.5YR 4/2	40					Sand	
8 - 18	7.5YR 4/6	60					Sand	Secondary matrix color
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-28
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-35
Investigator(s): MS, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR or MLRA): P 136 Lat: 36.71997769 Long: -79.45743039 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☒ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>0</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-35

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Acer rubrum</u>	<u>30</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>57.14</u> (A/B)														
2. <u>Platanus occidentalis</u>	<u>30</u>	☒	<u>FACW</u>															
3. <u>Liriodendron tulipifera</u>	<u>20</u>	☒	<u>FACU</u>															
4. <u>Quercus rubra</u>	<u>10</u>		<u>FACU</u>															
5. <u>Quercus montana</u>	<u>5</u>		<u>UPL</u>	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>2</u></td> <td>x 1 = <u>2</u></td> </tr> <tr> <td>FACW species <u>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>52</u></td> <td>x 3 = <u>156</u></td> </tr> <tr> <td>FACU species <u>61</u></td> <td>x 4 = <u>244</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>150</u> (A)</td> <td><u>487</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.24</u>	Total % Cover of:	Multiply by:	OBL species <u>2</u>	x 1 = <u>2</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>52</u>	x 3 = <u>156</u>	FACU species <u>61</u>	x 4 = <u>244</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>150</u> (A)	<u>487</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>2</u>	x 1 = <u>2</u>																	
FACW species <u>30</u>	x 2 = <u>60</u>																	
FAC species <u>52</u>	x 3 = <u>156</u>																	
FACU species <u>61</u>	x 4 = <u>244</u>																	
UPL species <u>5</u>	x 5 = <u>25</u>																	
Column Totals: <u>150</u> (A)	<u>487</u> (B)																	
6. _____																		
7. _____																		
	<u>95</u> = Total Cover																	
50% of total cover: <u>47.50</u>	20% of total cover: <u>19.00</u>																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Acer rubrum</u>	<u>10</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Liriodendron tulipifera</u>	<u>1</u>		<u>FACU</u>															
3. _____																		
4. _____																		
5. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
6. _____																		
7. _____																		
8. _____																		
9. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
10. _____																		
11. _____																		
	<u>11</u> = Total Cover																	
50% of total cover: <u>5.50</u>	20% of total cover: <u>2.20</u>																	
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Lonicera japonica</u>	<u>20</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Present? Yes ☒ No _____														
2. <u>Cyperus rotundus</u>	<u>10</u>	☒	<u>FAC</u>															
3. <u>Polystichum acrostichoides</u>	<u>10</u>	☒	<u>FACU</u>															
4. <u>Microstegium vimineum</u>	<u>2</u>		<u>FAC</u>															
5. <u>Rosa palustris</u>	<u>2</u>		<u>OBL</u>															
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
	<u>44</u> = Total Cover																	
50% of total cover: <u>22.00</u>	20% of total cover: <u>8.80</u>																	
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Vitis sp.</u>	<u>15</u>	☒																
2. _____																		
3. _____																		
4. _____																		
5. _____																		
	<u>15</u> = Total Cover																	
50% of total cover: <u>7.50</u>	20% of total cover: <u>3.00</u>																	
Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: DP-35

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 5/2	100					Loam	
3 - 12	10YR 5/2	80	7.5YR 5/8	15	C	PL / M	Clay Loam	
3 - 12			10YR 7/2	5	D	PL / M	Clay Loam	Secondary Redox feature
12 - 18	10YR 5/2	70	7.5YR 5/8	20	C	PL / M	Clay Loam	Manganese concretions
12 - 18			10YR 7/1	10	D	PL / M	Clay Loam	Secondary Redox feature
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-28
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-36
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR or MLRA): P 136 Lat: 36.71915379 Long: -79.45704541 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☒ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☒ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-36

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Acer rubrum</u>	<u>60</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80.00</u> (A/B)														
2. <u>Juniperus virginiana</u>	<u>10</u>		<u>FACU</u>															
3. <u>Liriodendron tulipifera</u>	<u>8</u>		<u>FACU</u>															
4. _____																		
5. _____				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>20</u></td> <td>x 1 = <u>20</u></td> </tr> <tr> <td>FACW species <u>43</u></td> <td>x 2 = <u>86</u></td> </tr> <tr> <td>FAC species <u>65</u></td> <td>x 3 = <u>195</u></td> </tr> <tr> <td>FACU species <u>26</u></td> <td>x 4 = <u>104</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>154</u> (A)</td> <td><u>405</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.62</u>	Total % Cover of:	Multiply by:	OBL species <u>20</u>	x 1 = <u>20</u>	FACW species <u>43</u>	x 2 = <u>86</u>	FAC species <u>65</u>	x 3 = <u>195</u>	FACU species <u>26</u>	x 4 = <u>104</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>154</u> (A)	<u>405</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>20</u>	x 1 = <u>20</u>																	
FACW species <u>43</u>	x 2 = <u>86</u>																	
FAC species <u>65</u>	x 3 = <u>195</u>																	
FACU species <u>26</u>	x 4 = <u>104</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>154</u> (A)	<u>405</u> (B)																	
6. _____																		
7. _____																		
_____	<u>78</u>		= Total Cover															
50% of total cover: <u>39</u> 20% of total cover: <u>15.6</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Alnus serrulata</u>	<u>15</u>	☒	<u>OBL</u>															
2. _____																		
3. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. _____																		
5. _____																		
6. _____																		
7. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____																		
9. _____																		
_____	<u>15</u>		= Total Cover															
50% of total cover: <u>7.5</u> 20% of total cover: <u>3</u>				Hydrophytic Vegetation Present? Yes ☒ No _____														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>30</u>	☒	<u>FACW</u>															
2. <u>Lonicera japonica</u>	<u>8</u>	☒	<u>FACU</u>															
3. <u>Scirpus cyperinus</u>	<u>8</u>	☒	<u>FACW</u>	Remarks: (Include photo numbers here or on a separate sheet.) <u>No woody vine stratum was observed at this data point.</u>														
4. <u>Carex lurida</u>	<u>5</u>		<u>OBL</u>															
5. <u>Ludwigia alternifolia</u>	<u>5</u>		<u>FACW</u>															
6. <u>Rubus pensilvanicus</u>	<u>5</u>		<u>FAC</u>															
7. _____				Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
8. _____																		
9. _____																		
10. _____																		
11. _____				Hydrophytic Vegetation Present? Yes ☒ No _____														
_____	<u>61</u>		= Total Cover															
50% of total cover: <u>30.5</u> 20% of total cover: <u>12.2</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____				Hydrophytic Vegetation Present? Yes ☒ No _____														
2. _____																		
3. _____																		
4. _____																		
5. _____				Hydrophytic Vegetation Present? Yes ☒ No _____														

50% of total cover: _____ 20% of total cover: _____				Hydrophytic Vegetation Present? Yes ☒ No _____														
Remarks: (Include photo numbers here or on a separate sheet.) <u>No woody vine stratum was observed at this data point.</u>																		
Remarks: (Include photo numbers here or on a separate sheet.) <u>No woody vine stratum was observed at this data point.</u>																		
Remarks: (Include photo numbers here or on a separate sheet.) <u>No woody vine stratum was observed at this data point.</u>																		

SOIL

Sampling Point: DP-36

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 5/2	100					Clay Loam	
3 - 6	2.5Y 5/2	90	7.5YR 5/6	10	C	PL	Clay Loam	
6 - 18	2.5Y 5/2	90	7.5YR 5/8	10	C	PL	Clay Loam	
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-28
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-37
Investigator(s): MS, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 3-5
Subregion (LRR or MLRA): P 136 Lat: 36.71960399 Long: -79.4575288 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Only one secondary wetland hydrology indicator (i.e., geomorphic position) was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-37

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Liriodendron tulipifera</u>	<u>30</u>	☒	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>28.57</u> (A/B)														
2. <u>Quercus alba</u>	<u>30</u>	☒	<u>FACU</u>															
3. <u>Juglans nigra</u>	<u>10</u>		<u>FACU</u>															
4. <u>Rhus typhina</u>	<u>8</u>		<u>UPL</u>															
5. <u>Nyssa sylvatica</u>	<u>3</u>		<u>FAC</u>															
6. <u>Acer rubrum</u>	<u>1</u>		<u>FAC</u>															
7. <u>Cornus florida</u>	<u>1</u>		<u>FACU</u>															
<u>83</u> = Total Cover 50% of total cover: <u>41.50</u> 20% of total cover: <u>16.60</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>20</u></td> <td>x 1 = <u>20</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>12</u></td> <td>x 3 = <u>36</u></td> </tr> <tr> <td>FACU species <u>85</u></td> <td>x 4 = <u>340</u></td> </tr> <tr> <td>UPL species <u>13</u></td> <td>x 5 = <u>65</u></td> </tr> <tr> <td>Column Totals: <u>130</u> (A)</td> <td><u>461</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.54</u>	Total % Cover of:	Multiply by:	OBL species <u>20</u>	x 1 = <u>20</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>12</u>	x 3 = <u>36</u>	FACU species <u>85</u>	x 4 = <u>340</u>	UPL species <u>13</u>	x 5 = <u>65</u>	Column Totals: <u>130</u> (A)	<u>461</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>20</u>	x 1 = <u>20</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>12</u>	x 3 = <u>36</u>																	
FACU species <u>85</u>	x 4 = <u>340</u>																	
UPL species <u>13</u>	x 5 = <u>65</u>																	
Column Totals: <u>130</u> (A)	<u>461</u> (B)																	
<u>32</u> = Total Cover 50% of total cover: <u>16.00</u> 20% of total cover: <u>6.40</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Alnus serrulata</u>	<u>20</u>	☒	<u>OBL</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Rhus typhina</u>	<u>5</u>		<u>UPL</u>															
3. <u>Acer rubrum</u>	<u>2</u>		<u>FAC</u>															
4. <u>Fagus grandifolia</u>	<u>2</u>		<u>FACU</u>															
5. <u>Nyssa sylvatica</u>	<u>2</u>		<u>FAC</u>															
6. <u>Pinus taeda</u>	<u>1</u>		<u>FAC</u>															
7. _____																		
8. _____																		
9. _____																		
<u>32</u> = Total Cover 50% of total cover: <u>16.00</u> 20% of total cover: <u>6.40</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Lonicera japonica</u>	<u>5</u>	☒	<u>FACU</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. <u>Microstegium vimineum</u>	<u>3</u>	☒	<u>FAC</u>															
3. <u>Polystichum acrostichoides</u>	<u>2</u>	☒	<u>FACU</u>															
4. <u>Rubus allegheniensis</u>	<u>2</u>	☒	<u>FACU</u>															
5. <u>Allium vineale</u>	<u>1</u>		<u>FACU</u>															
6. <u>Aster sp.</u>	<u>1</u>																	
7. <u>Fragaria virginiana</u>	<u>1</u>		<u>FACU</u>															
8. <u>Schedonorus pratensis</u>	<u>1</u>		<u>FACU</u>															
9. _____																		
10. _____																		
11. _____																		
<u>16</u> = Total Cover 50% of total cover: <u>8.00</u> 20% of total cover: <u>3.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Vitis sp.</u>	<u>5</u>	☒		Hydrophytic Vegetation Present? Yes _____ No ☒														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
<u>5</u> = Total Cover 50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>																		

Remarks: (Include photo numbers here or on a separate sheet.)

Tree stratum- Pinus virginiana - (1%)- not dominant

SOIL

Sampling Point: DP-37

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 5	7.5YR 5/4	95	7.5YR 5/6	5	C	M	Silty Clay	
5 - 14	7.5YR 5/6	85	5YR 5/8	10	C	M	Silty Clay	
5 - 14			10YR 6/3	5	D	M	Silty Clay	Secondary Redox feature
14 - 18	7.5YR 5/6	45					Clay	
14 - 18	7.5YR 5/3	35					Clay	Secondary Matrix color
14 - 18	10YR 6/6	20					Clay	Tertiary Matrix color
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

In WSSI's best professional judgement, the secondary and tertiary matrices documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-29
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-38
Investigator(s): MS, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR or MLRA): P 136 Lat: 36.722783 Long: -79.454876 Datum: WGS 84
Soil Map Unit Name: 39 - Udorthents, loamy, 0 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this data point

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>8</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>8</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-38

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Acer rubrum</u>	<u>25</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>7</u> (A) Total Number of Dominant Species Across All Strata: <u>12</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>58.33</u> (A/B)														
2. <u>Liriodendron tulipifera</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Prunus serotina</u>	<u>7</u>		<u>FACU</u>															
4. _____																		
5. _____				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>3</u></td> <td>x 1 = <u>3</u></td> </tr> <tr> <td>FACW species <u>1</u></td> <td>x 2 = <u>2</u></td> </tr> <tr> <td>FAC species <u>30</u></td> <td>x 3 = <u>90</u></td> </tr> <tr> <td>FACU species <u>33</u></td> <td>x 4 = <u>132</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>67</u> (A)</td> <td><u>227</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.38</u>	Total % Cover of:	Multiply by:	OBL species <u>3</u>	x 1 = <u>3</u>	FACW species <u>1</u>	x 2 = <u>2</u>	FAC species <u>30</u>	x 3 = <u>90</u>	FACU species <u>33</u>	x 4 = <u>132</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>67</u> (A)	<u>227</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>3</u>	x 1 = <u>3</u>																	
FACW species <u>1</u>	x 2 = <u>2</u>																	
FAC species <u>30</u>	x 3 = <u>90</u>																	
FACU species <u>33</u>	x 4 = <u>132</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>67</u> (A)	<u>227</u> (B)																	
6. _____																		
7. _____																		

_____ = Total Cover 50% of total cover: <u>23.50</u> 20% of total cover: <u>9.40</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Prunus serotina</u>	<u>5</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Alnus serrulata</u>	<u>3</u>	☒	<u>OBL</u>															
3. <u>Liriodendron tulipifera</u>	<u>3</u>	☒	<u>FACU</u>															
4. _____																		
5. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
6. _____																		
7. _____																		
8. _____																		
9. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														

_____ = Total Cover 50% of total cover: <u>5.50</u> 20% of total cover: <u>2.20</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Lonicera japonica</u>	<u>2</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Present? Yes ☒ No _____														
2. <u>Smilax rotundifolia</u>	<u>2</u>	☒	<u>FAC</u>															
3. <u>Athyrium asplenoides</u>	<u>1</u>	☒	<u>FAC</u>															
4. <u>Campsis radicans</u>	<u>1</u>	☒	<u>FAC</u>															
5. <u>Microstegium vimineum</u>	<u>1</u>	☒	<u>FAC</u>															
6. <u>Parthenocissus quinquefolia</u>	<u>1</u>	☒	<u>FACU</u>															
7. <u>Phalaris arundinacea</u>	<u>1</u>	☒	<u>FACW</u>															
8. _____																		
9. _____				Remarks: (Include photo numbers here or on a separate sheet.)														
10. _____																		
11. _____																		

_____ = Total Cover 50% of total cover: <u>4.50</u> 20% of total cover: <u>1.80</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Vitis sp.</u>	<u>3</u>																	
2. _____																		
3. _____																		
4. _____																		
5. _____																		
_____ = Total Cover 50% of total cover: <u>1.50</u> 20% of total cover: <u>0.60</u>																		

SOIL

Sampling Point: DP-38

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 5/3	100					Sandy Loam	
2 - 12	10YR 5/2	80	5YR 4/6	5	C	PL / M	Silty Clay	Manganese concretions
2 - 12			7.5YR 5/4	10	C	PL / M	Silty Clay	Secondary Redox feature
2 - 12			10YR 6/1	5	D	PL / M	Silty Clay	Tertiary Redox feature
12 - 18	10YR 5/1	95	7.5YR 5/6	3	C	PL / M	Sandy Clay Loam	
12 - 18			10YR 6/1	2	D	M	Sandy Clay Loam	Secondary Redox feature
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-28
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-39
Investigator(s): KZ, LS, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.72241916 Long: -79.45484049 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-39

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.66</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>30</u></td> <td>x 4 = <u>120</u></td> </tr> <tr> <td>UPL species <u>8</u></td> <td>x 5 = <u>40</u></td> </tr> <tr> <td>Column Totals: <u>68</u> (A)</td> <td><u>220</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.23</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>30</u>	x 4 = <u>120</u>	UPL species <u>8</u>	x 5 = <u>40</u>	Column Totals: <u>68</u> (A)	<u>220</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>30</u>	x 2 = <u>60</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>30</u>	x 4 = <u>120</u>																	
UPL species <u>8</u>	x 5 = <u>40</u>																	
Column Totals: <u>68</u> (A)	<u>220</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Dactylis glomerata</u>	<u>20</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Aster paludosus ssp. paludosus</u>	<u>15</u>	☒	<u>FACW</u>															
3. <u>Juncus effusus</u>	<u>15</u>	☒	<u>FACW</u>															
4. <u>Alliaria petiolata</u>	<u>10</u>		<u>FACU</u>															
5. <u>Sambucus canadensis</u>	<u>8</u>		<u>UPL</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>68</u> = Total Cover																		
50% of total cover: <u>34.00</u> 20% of total cover: <u>13.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata was observed at this data point.																		

SOIL

Sampling Point: DP-39

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-29
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-40
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 3-5
Subregion (LRR or MLRA): P 136 Lat: 36.72212077 Long: -79.45466304 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-40

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>83</u></td> <td>x 4 = <u>332</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>93</u> (A)</td> <td><u>367</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.94</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>83</u>	x 4 = <u>332</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>93</u> (A)	<u>367</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>5</u>	x 2 = <u>10</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>83</u>	x 4 = <u>332</u>																	
UPL species <u>5</u>	x 5 = <u>25</u>																	
Column Totals: <u>93</u> (A)	<u>367</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Dactylis glomerata</u>	<u>60</u>	☒	<u>FACU</u>															
2. <u>Andropogon virginicus</u>	<u>15</u>		<u>FACU</u>															
3. <u>Solidago altissima</u>	<u>8</u>		<u>FACU</u>															
4. <u>Daucus carota</u>	<u>5</u>		<u>UPL</u>															
5. <u>Juncus effusus</u>	<u>5</u>		<u>FACW</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>93</u> = Total Cover																		
50% of total cover: <u>46.50</u> 20% of total cover: <u>18.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Present? Yes _____ No ☒

SOIL

Sampling Point: DP-40

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 4/2	100					Loam	
2 - 4	10YR 4/2	80					Loam	
2 - 4	7.5YR 5/8	20					Loam	Secondary matrix color
4 - 18	5YR 5/8	100					Clay Loam	
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-29
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-41
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR or MLRA): P 136 Lat: 36.72382975 Long: -79.45371255 Datum: WGS 84
Soil Map Unit Name: 5C3 - Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☒ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-41

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Acer rubrum</u>	<u>45</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.66</u> (A/B)														
2. <u>Liriodendron tulipifera</u>	<u>35</u>	☒	<u>FACU</u>															
3. <u>Pinus echinata</u>	<u>8</u>		<u>FAC</u>															
4. _____																		
5. _____				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>15</u></td> <td>x 1 = <u>15</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>88</u></td> <td>x 3 = <u>264</u></td> </tr> <tr> <td>FACU species <u>45</u></td> <td>x 4 = <u>180</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>148</u> (A)</td> <td><u>459</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.10</u>	Total % Cover of:	Multiply by:	OBL species <u>15</u>	x 1 = <u>15</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>88</u>	x 3 = <u>264</u>	FACU species <u>45</u>	x 4 = <u>180</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>148</u> (A)	<u>459</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>15</u>	x 1 = <u>15</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>88</u>	x 3 = <u>264</u>																	
FACU species <u>45</u>	x 4 = <u>180</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>148</u> (A)	<u>459</u> (B)																	
6. _____																		
7. _____																		
8. _____																		
9. _____				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
10. _____																		
11. _____																		
12. _____																		
50% of total cover: <u>44</u> 20% of total cover: <u>17.6</u> <u>88</u> = Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Acer rubrum</u>	<u>20</u>	☒	<u>FAC</u>															
2. _____																		
3. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
4. _____																		
5. _____																		
6. _____																		
7. _____				Hydrophytic Vegetation Present? Yes ☒ No _____														
8. _____																		
9. _____																		
10. _____																		
50% of total cover: <u>10</u> 20% of total cover: <u>4</u> <u>20</u> = Total Cover				Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Dulichium arundinaceum</u>	<u>15</u>	☒	<u>OBL</u>															
2. <u>Smilax rotundifolia</u>	<u>15</u>	☒	<u>FAC</u>															
3. <u>Lonicera japonica</u>	<u>10</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Present? Yes ☒ No _____														
4. _____																		
5. _____																		
6. _____																		
7. _____				Hydrophytic Vegetation Present? Yes ☒ No _____														
8. _____																		
9. _____																		
10. _____																		
50% of total cover: <u>20</u> 20% of total cover: <u>8</u> <u>40</u> = Total Cover				Hydrophytic Vegetation Present? Yes ☒ No _____														
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____																		
2. _____																		
3. _____				Hydrophytic Vegetation Present? Yes ☒ No _____														
4. _____																		
5. _____																		
6. _____																		
50% of total cover: _____ 20% of total cover: _____ _____ = Total Cover				Hydrophytic Vegetation Present? Yes ☒ No _____														
Remarks: (Include photo numbers here or on a separate sheet.)																		
No woody vine stratum was observed at this data point.																		

SOIL

Sampling Point: DP-41**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 1	10YR 2/2	100					Mucky Peat	
1 - 6	10YR 4/2	95	10YR 5/8	5	C	PL	Sandy Clay Loam	
6 - 18	2.5YR 4/2	90	7.5YR 5/8	10	C	PL / M	Sandy Clay	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-29
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-42
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 6
Subregion (LRR or MLRA): P 136 Lat: 36.72381288 Long: -79.45373333 Datum: WGS 84
Soil Map Unit Name: 5C3 - Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-42

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>7</u></td> <td>x 2 = <u>14</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>35</u></td> <td>x 4 = <u>140</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>57</u> (A)</td> <td><u>229</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.01</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>7</u>	x 2 = <u>14</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>35</u>	x 4 = <u>140</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>57</u> (A)	<u>229</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>7</u>	x 2 = <u>14</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>35</u>	x 4 = <u>140</u>																	
UPL species <u>15</u>	x 5 = <u>75</u>																	
Column Totals: <u>57</u> (A)	<u>229</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Dactylis glomerata</u>	<u>15</u>	☒	<u>FACU</u>															
2. <u>Daucus carota</u>	<u>15</u>	☒	<u>UPL</u>															
3. <u>Allium canadense</u>	<u>10</u>		<u>FACU</u>															
4. <u>Lonicera japonica</u>	<u>10</u>		<u>FACU</u>															
5. <u>Juncus effusus</u>	<u>7</u>		<u>FACW</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>57</u> = Total Cover																		
50% of total cover: <u>28.50</u> 20% of total cover: <u>11.40</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ☒

SOIL

Sampling Point: DP-42

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 5	10YR 4/2	70					Sandy Loam	
0 - 5	10YR 5/4	30					Sandy Loam	Secondary matrix color
5 - 10	10YR 5/1	95	7.5YR 5/8	5	C	PL	Sandy Clay Loam	
10 - 18	7.5YR 5/8	70					Sandy Clay Loam	
10 - 18	10YR 5/4	30					Sandy Clay Loam	Secondary matrix color
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒**Remarks:**

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeastern Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-29
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-43
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2%
Subregion (LRR or MLRA): P 136 Lat: 36.72359886 Long: -79.45359938 Datum: WGS 84
Soil Map Unit Name: 5C3 - Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	_____
_____ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	_____
_____ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☒ Drainage Patterns (B10)	_____
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	_____
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	_____
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	_____
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	_____
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	_____
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	_____
☒ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	_____
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	_____
		_____ FAC-Neutral Test (D5)	_____

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes ☒ No _____ Depth (inches): <u>0.5</u>	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-43

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>45</u></td> <td>x 2 = <u>90</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>25</u></td> <td>x 4 = <u>100</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>70</u> (A)</td> <td><u>190</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.71</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>45</u>	x 2 = <u>90</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>25</u>	x 4 = <u>100</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>70</u> (A)	<u>190</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>45</u>	x 2 = <u>90</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>25</u>	x 4 = <u>100</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>70</u> (A)	<u>190</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>35</u>	☒	<u>FACW</u>															
2. <u>Dactylis glomerata</u>	<u>20</u>	☒	<u>FACU</u>															
3. <u>Aster paludosus</u>	<u>10</u>		<u>FACW</u>															
4. <u>Lonicera japonica</u>	<u>5</u>		<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>70</u> = Total Cover																		
50% of total cover: <u>35.00</u> 20% of total cover: <u>14.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-43

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 5	2.5Y 4/3	95	7.5YR 5/6	5	C	PL	Clay Loam	
5 - 18	2.5Y 4/2	95	7.5YR 5/8	3	C	M	Sandy Clay Loam	
5 - 18			7.5YR 6/2	2	D	M	Sandy Clay Loam	Secondary redox color
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-29
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-44
Investigator(s): KZ, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 1-3
Subregion (LRR or MLRA): P 136 Lat: 36.72922104 Long: -79.44676198 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>4</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-44

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Acer rubrum</u>	<u>20</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>57.14</u> (A/B)														
2. <u>Betula nigra</u>	<u>10</u>	☒	<u>FACW</u>															
3. <u>Juniperus virginiana</u>	<u>5</u>		<u>FACU</u>															
4. _____																		
5. _____				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>50</u></td> <td>x 3 = <u>150</u></td> </tr> <tr> <td>FACU species <u>22</u></td> <td>x 4 = <u>88</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>92</u> (A)</td> <td><u>278</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.02</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>50</u>	x 3 = <u>150</u>	FACU species <u>22</u>	x 4 = <u>88</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>92</u> (A)	<u>278</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>20</u>	x 2 = <u>40</u>																	
FAC species <u>50</u>	x 3 = <u>150</u>																	
FACU species <u>22</u>	x 4 = <u>88</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>92</u> (A)	<u>278</u> (B)																	
6. _____																		
7. _____																		
8. _____																		
9. _____				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
10. _____																		
11. _____																		
12. _____																		
50% of total cover: <u>17.50</u> 20% of total cover: <u>7.00</u> Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
1. <u>Ligustrum sinense</u>	<u>5</u>	☒	<u>FACU</u>															
2. <u>Viburnum prunifolium</u>	<u>2</u>	☒	<u>FACU</u>															
3. _____																		
4. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
5. _____																		
6. _____																		
7. _____																		
8. _____				Hydrophytic Vegetation Present? Yes ☒ No _____														
9. _____																		
10. _____																		
11. _____																		
50% of total cover: <u>3.50</u> 20% of total cover: <u>1.40</u> Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Viola sororia</u>	<u>30</u>	☒	<u>FAC</u>															
2. <u>Cyperus esculentus</u>	<u>10</u>	☒	<u>FACW</u>															
3. <u>Lonicera japonica</u>	<u>10</u>	☒	<u>FACU</u>															
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
50% of total cover: <u>25.00</u> 20% of total cover: <u>10.00</u> Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																		

SOIL

Sampling Point: DP-44

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 8	10YR 5/2	60	7.5YR 4/6	15	C	PL / M	Sandy Loam	
0 - 8			10YR 5/8	15	C	PL / M	Sandy Loam	Secondary Redox feature
0 - 8			10YR 4/2	10	D	PL / M	Sandy Loam	Tertiary Redox feature
8 - 13	10YR 6/2	65	10YR 5/8	15	C	PL / M	Sandy Loam	
8 - 13			7.5YR 4/6	15	C	PL / M	Sandy Loam	Secondary Redox feature
8 - 13			2.5Y 5/1	5	D	PL / M	Sandy Loam	Tertiary Redox feature
13 - 18	2.5Y 5/1	70	7.5YR 4/6	20	C	PL / M	Sandy Clay Loam	
13 - 18			10YR 5/8	10	C	PL / M	Sandy Clay Loam	Secondary Redox feature
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-29
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-45
Investigator(s): MS, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Convex Slope (%): 2
Subregion (LRR or MLRA): P 136 Lat: 36.72909719 Long: -79.4458236 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
_____ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		_____ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes ☒ No _____ Depth (inches): 2
Water Table Present? Yes ☒ No _____ Depth (inches): 18
Saturation Present? Yes ☒ No _____ Depth (inches): 0
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-45

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Salix nigra</u>	<u>15</u>	☒	<u>OBL</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.00</u> (A/B)														
2. <u>Acer rubrum</u>	<u>2</u>		<u>FAC</u>															
3. _____	_____		_____															
4. _____	_____		_____															
5. _____	_____		_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>70</u></td> <td>x 1 = <u>70</u></td> </tr> <tr> <td>FACW species <u>47</u></td> <td>x 2 = <u>94</u></td> </tr> <tr> <td>FAC species <u>14</u></td> <td>x 3 = <u>42</u></td> </tr> <tr> <td>FACU species <u>16</u></td> <td>x 4 = <u>64</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>147</u> (A)</td> <td><u>270</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.83</u>	Total % Cover of:	Multiply by:	OBL species <u>70</u>	x 1 = <u>70</u>	FACW species <u>47</u>	x 2 = <u>94</u>	FAC species <u>14</u>	x 3 = <u>42</u>	FACU species <u>16</u>	x 4 = <u>64</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>147</u> (A)	<u>270</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>70</u>	x 1 = <u>70</u>																	
FACW species <u>47</u>	x 2 = <u>94</u>																	
FAC species <u>14</u>	x 3 = <u>42</u>																	
FACU species <u>16</u>	x 4 = <u>64</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>147</u> (A)	<u>270</u> (B)																	
6. _____	_____		_____															
7. _____	_____		_____															
_____	<u>17</u> = Total Cover																	
50% of total cover: <u>8.50</u> 20% of total cover: <u>3.40</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Cephalanthus occidentalis</u>	<u>55</u>	☒	<u>OBL</u>															
2. <u>Diospyros virginiana</u>	<u>2</u>		<u>FAC</u>															
3. _____	_____		_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. _____	_____		_____															
5. _____	_____		_____															
6. _____	_____		_____															
7. _____	_____		_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____	_____		_____															
9. _____	_____		_____															
_____	<u>57</u> = Total Cover																	
50% of total cover: <u>28.50</u> 20% of total cover: <u>11.40</u>				Hydrophytic Vegetation Present? Yes ☒ No _____														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Solidago gigantea</u>	<u>40</u>	☒	<u>FACW</u>															
2. <u>Poa pratensis</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Campsis radicans</u>	<u>10</u>		<u>FAC</u>															
4. <u>Impatiens capensis</u>	<u>7</u>		<u>FACW</u>															
5. <u>Cardamine hirsuta</u>	<u>1</u>		<u>FACU</u>															
6. _____	_____		_____															
7. _____	_____		_____	Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
8. _____	_____		_____															
9. _____	_____		_____															
10. _____	_____		_____															
11. _____	_____		_____	_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____														
50% of total cover: <u>36.50</u> 20% of total cover: <u>14.60</u>																		
Remarks: (Include photo numbers here or on a separate sheet.)																		
No woody vine stratum was observed at this data point.																		

SOIL

Sampling Point: DP-45

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 4/2	85	5YR 5/6	10	C	PL / M	Sandy Clay Loam	
0 - 3			10YR 5/2	5	D	PL / M	Sandy Clay Loam	Secondary Redox feature
3 - 18	10YR 3/1	90	10YR 5/2	5	D	PL / M	Silty Clay Loam	
3 - 18			10YR 4/6	5	C		Silty Clay Loam	Secondary Redox feature
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Company City/County: Pittsylvania County Sampling Date: 2024-03-29
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-46
Investigator(s): KZ, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.72897499 Long: -79.44619449 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-46

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>63</u></td> <td>x 4 = <u>252</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>73</u> (A)</td> <td><u>302</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.13</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>63</u>	x 4 = <u>252</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>73</u> (A)	<u>302</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>63</u>	x 4 = <u>252</u>																	
UPL species <u>10</u>	x 5 = <u>50</u>																	
Column Totals: <u>73</u> (A)	<u>302</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Dactylis glomerata</u>	<u>50</u>	<u>✓</u>	<u>FACU</u>															
2. <u>Daucus carota</u>	<u>10</u>		<u>UPL</u>															
3. <u>Lonicera japonica</u>	<u>8</u>		<u>FACU</u>															
4. <u>Rosa multiflora</u>	<u>5</u>		<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>73</u> = Total Cover																		
50% of total cover: <u>36.50</u> 20% of total cover: <u>14.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>														

SOIL

Sampling Point: DP-46

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 5	10YR 5/3	100					Sandy Loam	
5 - 10	10YR 5/3	90					Sandy Loam	
5 - 10	2.5Y 6/3	10					Sandy Loam	Secondary Matrix color
10 - 18	2.5Y 6/3	90					Sandy Loam	
10 - 18	10YR 6/6	10					Sandy Loam	Secondary Matrix color
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-03-29
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-47
Investigator(s): KZ, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.72908151 Long: -79.44614585 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☒ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☒ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☒ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-47

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.66</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>53</u></td> <td>x 2 = <u>106</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>15</u></td> <td>x 4 = <u>60</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>68</u> (A)</td> <td><u>166</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.44</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>53</u>	x 2 = <u>106</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>15</u>	x 4 = <u>60</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>68</u> (A)	<u>166</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>53</u>	x 2 = <u>106</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>15</u>	x 4 = <u>60</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>68</u> (A)	<u>166</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>30</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Aster paludosus</u>	<u>15</u>	☒	<u>FACW</u>															
3. <u>Dactylis glomerata</u>	<u>15</u>	☒	<u>FACU</u>															
4. <u>Impatiens capensis</u>	<u>8</u>		<u>FACW</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>68</u> = Total Cover																		
50% of total cover: <u>34.00</u> 20% of total cover: <u>13.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-47

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 4	2.5Y 5/1	80	10YR 6/2	15	D	M	Sandy Loam	
0 - 4			7.5YR 4/6	5	C	PL / M	Sandy Loam	Secondary Redox feature
4 - 18	2.5Y 5/1	90	7.5YR 4/6	10	C	M	Sandy Loam	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeastern Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-03
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-48
Investigator(s): KZ, LS, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 2-3
Subregion (LRR or MLRA): P 136 Lat: 36.73674385 Long: -79.43882934 Datum: WGS 84
Soil Map Unit Name: 5C3 - Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>7</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>2</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-48

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>87</u></td> <td>x 2 = <u>174</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>15</u></td> <td>x 4 = <u>60</u></td> </tr> <tr> <td>UPL species <u>6</u></td> <td>x 5 = <u>30</u></td> </tr> <tr> <td>Column Totals: <u>113</u> (A)</td> <td><u>279</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.46</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>87</u>	x 2 = <u>174</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>15</u>	x 4 = <u>60</u>	UPL species <u>6</u>	x 5 = <u>30</u>	Column Totals: <u>113</u> (A)	<u>279</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>87</u>	x 2 = <u>174</u>																	
FAC species <u>5</u>	x 3 = <u>15</u>																	
FACU species <u>15</u>	x 4 = <u>60</u>																	
UPL species <u>6</u>	x 5 = <u>30</u>																	
Column Totals: <u>113</u> (A)	<u>279</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>70</u>	☒	<u>FACW</u>															
2. <u>Lolium pratense</u>	<u>15</u>		<u>FACU</u>															
3. <u>Cyperus esculentus</u>	<u>12</u>		<u>FACW</u>															
4. <u>Dichanthelium clandestinum</u>	<u>5</u>		<u>FAC</u>															
5. <u>Dichanthelium scoparium</u>	<u>5</u>		<u>FACW</u>															
6. <u>Geranium carolinianum</u>	<u>3</u>		<u>UPL</u>															
7. <u>Sambucus canadensis</u>	<u>3</u>		<u>UPL</u>															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>113</u> = Total Cover																		
50% of total cover: <u>56.50</u> 20% of total cover: <u>22.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Hydrophytic Vegetation Present?																		
Yes ☒ No _____																		
Remarks: (Include photo numbers here or on a separate sheet.) <u>No tree, sapling/shrub, or woody vine strata were observed at this data point.</u>																		

SOIL

Sampling Point: DP-48

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 6	10YR 6/1	60	7.5YR 5/8	40	C	PL	Loam	
6 - 18	10YR 6/2	65	7.5YR 5/8	20	C	PL	Loam	
6 - 18			10YR 5/6	15	C	PL	Loam	Secodary redox color
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-03
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-49
Investigator(s): MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 2-3
Subregion (LRR or MLRA): P 136 Lat: 36.73671012 Long: -79.4389583 Datum: WGS 84
Soil Map Unit Name: 5C3 - Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-49

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>68</u></td> <td>x 4 = <u>272</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>78</u> (A)</td> <td><u>322</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.12</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>68</u>	x 4 = <u>272</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>78</u> (A)	<u>322</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>68</u>	x 4 = <u>272</u>																	
UPL species <u>10</u>	x 5 = <u>50</u>																	
Column Totals: <u>78</u> (A)	<u>322</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Lolium pratense</u>	<u>60</u>	<u>✓</u>	<u>FACU</u>															
2. <u>Geranium carolinianum</u>	<u>10</u>	_____	<u>UPL</u>															
3. <u>Vicia americana</u>	<u>8</u>	_____	<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>78</u> = Total Cover																		
50% of total cover: <u>39.00</u> 20% of total cover: <u>15.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ✓

SOIL

Sampling Point: DP-49

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 4/3	100					Loam	
2 - 10	7.5YR 4/6	100					Loam	
10 - 18	7.5YR 5/6	70	7.5YR 7/1	25	D	M	Loam	
10 - 18			7.5YR 5/8	5	C	PL	Loam	Secondary Redox feature
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-03
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-50
Investigator(s): KZ, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.73473834 Long: -79.44068336 Datum: WGS 84
Soil Map Unit Name: 8A - Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded NWI classification: PEM1A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-50

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>50</u></td> <td>x 2 = <u>100</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>17</u></td> <td>x 4 = <u>68</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>67</u> (A)</td> <td><u>168</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.50</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>50</u>	x 2 = <u>100</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>17</u>	x 4 = <u>68</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>67</u> (A)	<u>168</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>50</u>	x 2 = <u>100</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>17</u>	x 4 = <u>68</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>67</u> (A)	<u>168</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover				Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Cyperus esculentus</u>	<u>30</u>	☒	<u>FACW</u>															
2. <u>Juncus effusus</u>	<u>15</u>	☒	<u>FACW</u>															
3. <u>Trifolium repens</u>	<u>10</u>		<u>FACU</u>															
4. <u>Lolium pratense</u>	<u>7</u>		<u>FACU</u>															
5. <u>Impatiens capensis</u>	<u>5</u>		<u>FACW</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>67</u> = Total Cover																		
50% of total cover: <u>33.50</u> 20% of total cover: <u>13.40</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-50

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-03
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-51
Investigator(s): KZ, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 4-6
Subregion (LRR or MLRA): P 136 Lat: 36.7345825 Long: -79.44075601 Datum: WGS 84
Soil Map Unit Name: 8A - Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded NWI classification: PEM1A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-51

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>6</u></td> <td>x 3 = <u>18</u></td> </tr> <tr> <td>FACU species <u>25</u></td> <td>x 4 = <u>100</u></td> </tr> <tr> <td>UPL species <u>6</u></td> <td>x 5 = <u>30</u></td> </tr> <tr> <td>Column Totals: <u>37</u> (A)</td> <td><u>148</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.00</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>6</u>	x 3 = <u>18</u>	FACU species <u>25</u>	x 4 = <u>100</u>	UPL species <u>6</u>	x 5 = <u>30</u>	Column Totals: <u>37</u> (A)	<u>148</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>6</u>	x 3 = <u>18</u>																	
FACU species <u>25</u>	x 4 = <u>100</u>																	
UPL species <u>6</u>	x 5 = <u>30</u>																	
Column Totals: <u>37</u> (A)	<u>148</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Andropogon virginicus</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>															
2. <u>Rubus baileyanus</u>	<u>10</u>	<u>✓</u>	<u>FACU</u>															
3. <u>Daucus carota</u>	<u>6</u>		<u>UPL</u>															
4. <u>Viola sororia</u>	<u>6</u>		<u>FAC</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>37</u> = Total Cover																		
50% of total cover: <u>18.50</u> 20% of total cover: <u>7.40</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-51

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-03
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-52
Investigator(s): KZ, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 1-3
Subregion (LRR or MLRA): P 136 Lat: 36.73479857 Long: -79.44148941 Datum: WGS 84
Soil Map Unit Name: 21E - Poplar Forest fine sandy loam, 25 to 45 percent slopes NWI classification: PSS1Eb

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☒ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>6</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-52

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Acer rubrum</u>	<u>60</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>85.71</u> (A/B)														
2. <u>Carpinus caroliniana</u>	<u>20</u>	☒	<u>FAC</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>120</u></td> <td>x 3 = <u>360</u></td> </tr> <tr> <td>FACU species <u>13</u></td> <td>x 4 = <u>52</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>153</u> (A)</td> <td><u>452</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.95</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>120</u>	x 3 = <u>360</u>	FACU species <u>13</u>	x 4 = <u>52</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>153</u> (A)	<u>452</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>20</u>	x 2 = <u>40</u>																	
FAC species <u>120</u>	x 3 = <u>360</u>																	
FACU species <u>13</u>	x 4 = <u>52</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>153</u> (A)	<u>452</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>40</u> 20% of total cover: <u>16</u>				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Carpinus caroliniana</u>	<u>15</u>	☒	<u>FAC</u>															
2. <u>Ligustrum sinense</u>	<u>5</u>	☒	<u>FACU</u>															
3. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>10</u> 20% of total cover: <u>4</u>				Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Viola sororia</u>	<u>25</u>	☒	<u>FAC</u>															
2. <u>Cyperus esculentus</u>	<u>10</u>	☒	<u>FACW</u>															
3. <u>Impatiens capensis</u>	<u>10</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Present? Yes ☒ No _____														
4. <u>Lonicera japonica</u>	<u>8</u>	_____	<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>26.5</u> 20% of total cover: <u>10.6</u>				Hydrophytic Vegetation Present? Yes ☒ No _____														
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____				Hydrophytic Vegetation Present? Yes ☒ No _____														
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																		

SOIL

Sampling Point: DP-52

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 8	10YR 5/2	75	7.5YR 5/8	25	C	PL	Sandy Loam	
8 - 18	2.5Y 6/2	60	7.5YR 4/6	25	C	PL / M	Sandy Clay Loam	
8 - 18			7.5YR 6/8	15	D	M	Sandy Clay Loam	Secondary Redox feature
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-03
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-53
Investigator(s): MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 2%
Subregion (LRR or MLRA): P 136 Lat: 36.735468 Long: -79.441067 Datum: WGS 84
Soil Map Unit Name: 8A - Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☒ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-53

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. <u>Acer rubrum</u>	<u>15</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)																
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>4</u> (B)																
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)																
4. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>70</u></td> <td>x 2 = <u>140</u></td> </tr> <tr> <td>FAC species <u>98</u></td> <td>x 3 = <u>294</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>173</u> (A)</td> <td><u>454</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.62</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>70</u>	x 2 = <u>140</u>	FAC species <u>98</u>	x 3 = <u>294</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>173</u> (A)	<u>454</u> (B)	Prevalence Index = B/A = <u>2.62</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>70</u>	x 2 = <u>140</u>																			
FAC species <u>98</u>	x 3 = <u>294</u>																			
FACU species <u>5</u>	x 4 = <u>20</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>173</u> (A)	<u>454</u> (B)																			
Prevalence Index = B/A = <u>2.62</u>																				
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____	_____	_____	_____																	
<u>15</u> = Total Cover 50% of total cover: <u>7.50</u> 20% of total cover: <u>3.00</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)																
<u>50</u> = Total Cover 50% of total cover: <u>25.00</u> 20% of total cover: <u>10.00</u>																				
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																				
1. <u>Liquidambar styraciflua</u>	<u>30</u>	☒	<u>FAC</u>																	
2. <u>Acer rubrum</u>	<u>20</u>	☒	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
<u>50</u> = Total Cover 50% of total cover: <u>25.00</u> 20% of total cover: <u>10.00</u>																				
Herb Stratum (Plot size: <u>5 ft r</u>)																				
1. <u>Juncus effusus</u>	<u>70</u>	☒	<u>FACW</u>																	
2. <u>Rubus pensilvanicus</u>	<u>20</u>	_____	<u>FAC</u>																	
3. <u>Microstegium vimineum</u>	<u>10</u>	_____	<u>FAC</u>																	
4. <u>Lonicera japonica</u>	<u>5</u>	_____	<u>FACU</u>																	
5. <u>Smilax rotundifolia</u>	<u>3</u>	_____	<u>FAC</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
<u>108</u> = Total Cover 50% of total cover: <u>54.00</u> 20% of total cover: <u>21.60</u>																				
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																				
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																				

SOIL

Sampling Point: DP-53

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 4/2	90	10YR 5/6	10	C	PL	Clay Loam	
2 - 12	10YR 5/1	95	7.5YR 5/8	5	C	PL	Sandy Clay Loam	
12 - 18	2.5Y 5/3	90	7.5YR 5/8	10	C	M	Sandy Clay	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-05
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-54
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.65753514 Long: -79.51860281 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

Only one (i.e., hydrophytic vegetation) of the three wetland parameters was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present?	Yes _____ No ☒	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No ☒
Water Table Present?	Yes _____ No ☒	Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point; only one secondary indicator was present.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-54

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Pinus virginiana</u>	<u>40</u>	☒	<u>UPL</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)														
2. <u>Betula nigra</u>	<u>20</u>	☒	<u>FACW</u>	Total Number of Dominant Species Across All Strata: <u>4</u> (B)														
3. <u>Liquidambar styraciflua</u>	<u>12</u>		<u>FAC</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.00</u> (A/B)														
4. <u>Liriodendron tulipifera</u>	<u>5</u>		<u>FACU</u>															
5. _____	_____																	
6. _____	_____																	
7. _____	_____																	
<u>77</u> = Total Cover 50% of total cover: <u>38.50</u> 20% of total cover: <u>15.40</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>37</u></td> <td>x 3 = <u>111</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>40</u></td> <td>x 5 = <u>200</u></td> </tr> <tr> <td>Column Totals: <u>102</u> (A)</td> <td><u>371</u> (B)</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>37</u>	x 3 = <u>111</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>40</u>	x 5 = <u>200</u>	Column Totals: <u>102</u> (A)	<u>371</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>20</u>	x 2 = <u>40</u>																	
FAC species <u>37</u>	x 3 = <u>111</u>																	
FACU species <u>5</u>	x 4 = <u>20</u>																	
UPL species <u>40</u>	x 5 = <u>200</u>																	
Column Totals: <u>102</u> (A)	<u>371</u> (B)																	
<u>25</u> = Total Cover 50% of total cover: <u>12.50</u> 20% of total cover: <u>5.00</u>				Prevalence Index = B/A = <u>3.63</u>														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)														
1. <u>Carpinus caroliniana</u>	<u>20</u>	☒	<u>FAC</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. <u>Liquidambar styraciflua</u>	<u>5</u>	☒	<u>FAC</u>															
3. _____	_____																	
4. _____	_____																	
5. _____	_____																	
6. _____	_____																	
7. _____	_____																	
8. _____	_____																	
9. _____	_____																	
10. _____	_____																	
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. _____	_____			Hydrophytic Vegetation Present? Yes ☒ No _____														
2. _____	_____																	
3. _____	_____																	
4. _____	_____																	
5. _____	_____																	
6. _____	_____																	
7. _____	_____																	
8. _____	_____																	
9. _____	_____																	
10. _____	_____																	
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____																	
2. _____	_____																	
3. _____	_____																	
4. _____	_____																	
5. _____	_____																	
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		

Remarks: (Include photo numbers here or on a separate sheet.)

No herb or woody vine strata were observed at this data point.

SOIL

Sampling Point: DP-54

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-16
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-55
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2-3
Subregion (LRR or MLRA): P 136 Lat: 36.55286456 Long: -79.62254963 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		_____ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes ☒ No _____ Depth (inches): 0.5
Water Table Present? Yes ☒ No _____ Depth (inches): 0
Saturation Present? Yes ☒ No _____ Depth (inches): 0
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-55

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Carpinus caroliniana</u>	<u>25</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>57.14</u> (A/B)														
2. <u>Liriodendron tulipifera</u>	<u>10</u>	☒	<u>FACU</u>															
3. <u>Acer rubrum</u>	<u>10</u>	☒	<u>FAC</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>8</u></td> <td>x 2 = <u>16</u></td> </tr> <tr> <td>FAC species <u>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>15</u></td> <td>x 4 = <u>60</u></td> </tr> <tr> <td>UPL species <u>2</u></td> <td>x 5 = <u>10</u></td> </tr> <tr> <td>Column Totals: <u>65</u> (A)</td> <td><u>206</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.16</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>8</u>	x 2 = <u>16</u>	FAC species <u>40</u>	x 3 = <u>120</u>	FACU species <u>15</u>	x 4 = <u>60</u>	UPL species <u>2</u>	x 5 = <u>10</u>	Column Totals: <u>65</u> (A)	<u>206</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>8</u>	x 2 = <u>16</u>																	
FAC species <u>40</u>	x 3 = <u>120</u>																	
FACU species <u>15</u>	x 4 = <u>60</u>																	
UPL species <u>2</u>	x 5 = <u>10</u>																	
Column Totals: <u>65</u> (A)	<u>206</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>22.50</u> 20% of total cover: <u>9.00</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Carpinus caroliniana</u>	<u>3</u>	☒	<u>FAC</u>															
2. <u>Elaeagnus umbellata</u>	<u>2</u>	☒	<u>UPL</u>															
3. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>				Hydrophytic Vegetation Present? Yes ☒ No _____														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Cyperus esculentus</u>	<u>8</u>	☒	<u>FACW</u>															
2. <u>Lonicera japonica</u>	<u>5</u>	☒	<u>FACU</u>															
3. _____	_____	_____	_____	Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	1. <u>Toxicodendron radicans</u> <u>2</u> <u>FAC</u>														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____	2. _____ 3. _____ 4. _____ 5. _____														
_____ = Total Cover 50% of total cover: <u>6.50</u> 20% of total cover: <u>2.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Toxicodendron radicans</u>	<u>2</u>	_____	<u>FAC</u>															
2. _____	_____	_____	_____	2. _____ = Total Cover 50% of total cover: <u>1.00</u> 20% of total cover: <u>0.40</u>														
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>1.00</u> 20% of total cover: <u>0.40</u>				Remarks: (Include photo numbers here or on a separate sheet.)														
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Toxicodendron radicans</u>	<u>2</u>	_____	<u>FAC</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____	2. _____ = Total Cover 50% of total cover: <u>1.00</u> 20% of total cover: <u>0.40</u>														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____	_____	_____	_____															

SOIL

Sampling Point: DP-55

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 4	2.5Y 5/1	100					Sandy Loam	
4 - 18	2.5Y 5/1	75	10YR 5/6	25	C	PL / M	Sandy Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-16
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-56
Investigator(s): KZ, MM, LS Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 4-6
Subregion (LRR or MLRA): P 136 Lat: 36.55281278 Long: -79.62252448 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐	No ☒	Is the Sampled Area within a Wetland?	Yes ☐	No ☒
Hydric Soil Present?	Yes ☐	No ☒			
Wetland Hydrology Present?	Yes ☐	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present?	Yes ☐ No ☒ Depth (inches): _____	
Water Table Present?	Yes ☐ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes ☐ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-56

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Liquidambar styraciflua</u>	<u>20</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>28.57</u> (A/B)														
2. <u>Pinus virginiana</u>	<u>15</u>	☒	<u>UPL</u>															
3. <u>Quercus alba</u>	<u>15</u>	☒	<u>FACU</u>															
4. <u>Prunus serotina</u>	<u>10</u>		<u>FACU</u>															
5. _____	_____			Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>30</u></td> <td>x 3 = <u>90</u></td> </tr> <tr> <td>FACU species <u>45</u></td> <td>x 4 = <u>180</u></td> </tr> <tr> <td>UPL species <u>20</u></td> <td>x 5 = <u>100</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>370</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.89</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>30</u>	x 3 = <u>90</u>	FACU species <u>45</u>	x 4 = <u>180</u>	UPL species <u>20</u>	x 5 = <u>100</u>	Column Totals: <u>95</u> (A)	<u>370</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>30</u>	x 3 = <u>90</u>																	
FACU species <u>45</u>	x 4 = <u>180</u>																	
UPL species <u>20</u>	x 5 = <u>100</u>																	
Column Totals: <u>95</u> (A)	<u>370</u> (B)																	
6. _____	_____																	
7. _____	_____																	
_____	_____																	
_____ = Total Cover 50% of total cover: <u>30.00</u> 20% of total cover: <u>12.00</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Fagus grandifolia</u>	<u>15</u>	☒	<u>FACU</u>															
2. <u>Liquidambar styraciflua</u>	<u>10</u>	☒	<u>FAC</u>															
3. _____	_____			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. _____	_____																	
5. _____	_____																	
6. _____	_____																	
7. _____	_____			Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____	_____																	
9. _____	_____																	
10. _____	_____																	
_____ = Total Cover 50% of total cover: <u>12.50</u> 20% of total cover: <u>5.00</u>				Hydrophytic Vegetation Present? Yes _____ No ☒														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Elaeagnus umbellata</u>	<u>5</u>	☒	<u>UPL</u>															
2. <u>Maianthemum racemosum</u>	<u>5</u>	☒	<u>FACU</u>															
3. _____	_____			Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
4. _____	_____																	
5. _____	_____																	
6. _____	_____																	
7. _____	_____			1. _____ 2. _____ 3. _____ 4. _____ 5. _____														
8. _____	_____																	
9. _____	_____																	
10. _____	_____																	
_____ = Total Cover 50% of total cover: <u>5.00</u> 20% of total cover: <u>2.00</u>																		
Remarks: (Include photo numbers here or on a separate sheet.) <u>No woody vine stratum was observed at this data point.</u>																		

SOIL

Sampling Point: DP-56

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 4/3	100					Loam	
3 - 11	7.5YR 5/6	80					Clay Loam	
3 - 11	10YR 4/4	20					Clay Loam	Secondary Matrix color
11 - 18	7.5YR 4/6	70					Loam	
11 - 18	10YR 4/3	30					Loam	Secondary Martix color
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-05
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-57
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 5-7
Subregion (LRR or MLRA): P 136 Lat: 36.71917031 Long: -79.45698906 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-57

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Acer rubrum</u>	<u>45</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>42.85</u> (A/B)														
2. <u>Liriodendron tulipifera</u>	<u>25</u>	☒	<u>FACU</u>															
3. <u>Fagus grandifolia</u>	<u>20</u>		<u>FACU</u>															
4. <u>Quercus montana</u>	<u>15</u>		<u>UPL</u>															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>68</u></td> <td>x 3 = <u>204</u></td> </tr> <tr> <td>FACU species <u>56</u></td> <td>x 4 = <u>224</u></td> </tr> <tr> <td>UPL species <u>33</u></td> <td>x 5 = <u>165</u></td> </tr> <tr> <td>Column Totals: <u>157</u> (A)</td> <td><u>593</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.77</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>68</u>	x 3 = <u>204</u>	FACU species <u>56</u>	x 4 = <u>224</u>	UPL species <u>33</u>	x 5 = <u>165</u>	Column Totals: <u>157</u> (A)	<u>593</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>68</u>	x 3 = <u>204</u>																	
FACU species <u>56</u>	x 4 = <u>224</u>																	
UPL species <u>33</u>	x 5 = <u>165</u>																	
Column Totals: <u>157</u> (A)	<u>593</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>105</u> = Total Cover 50% of total cover: <u>52.50</u> 20% of total cover: <u>21.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
1. <u>Acer rubrum</u>	<u>15</u>	☒	<u>FAC</u>															
2. <u>Elaeagnus umbellata</u>	<u>10</u>	☒	<u>UPL</u>															
3. <u>Carya tomentosa</u>	<u>8</u>	☒	<u>UPL</u>															
4. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>33</u> = Total Cover 50% of total cover: <u>16.50</u> 20% of total cover: <u>6.60</u>				Hydrophytic Vegetation Present? Yes _____ No ☒														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Lonicera japonica</u>	<u>8</u>	☒	<u>FACU</u>															
2. <u>Viola sororia</u>	<u>5</u>	☒	<u>FAC</u>															
3. <u>Ligustrum sinense</u>	<u>3</u>		<u>FACU</u>	Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
4. <u>Rubus pensilvanicus</u>	<u>3</u>		<u>FAC</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	1. _____ 2. _____ 3. _____ 4. _____ 5. _____														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____	_____ = Total Cover 50% of total cover: <u>9.50</u> 20% of total cover: <u>3.80</u>														
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____	_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL

Sampling Point: DP-57

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-05
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-58
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.65774835 Long: -79.51774826 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	
Water Table Present? Yes _____ No ☒	Depth (inches): _____	
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-58

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>26</u></td> <td>x 4 = <u>104</u></td> </tr> <tr> <td>UPL species <u>40</u></td> <td>x 5 = <u>200</u></td> </tr> <tr> <td>Column Totals: <u>71</u> (A)</td> <td><u>319</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.49</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>26</u>	x 4 = <u>104</u>	UPL species <u>40</u>	x 5 = <u>200</u>	Column Totals: <u>71</u> (A)	<u>319</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>5</u>	x 3 = <u>15</u>																	
FACU species <u>26</u>	x 4 = <u>104</u>																	
UPL species <u>40</u>	x 5 = <u>200</u>																	
Column Totals: <u>71</u> (A)	<u>319</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Plantago lanceolata</u>	<u>40</u>	<u>✓</u>	<u>UPL</u>															
2. <u>Anthoxanthum odoratum</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>															
3. <u>Viola sororia</u>	<u>5</u>		<u>FAC</u>															
4. <u>Allium canadense</u>	<u>3</u>		<u>FACU</u>															
5. <u>Ranunculus fascicularis</u>	<u>3</u>		<u>FACU</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>71</u> = Total Cover																		
50% of total cover: <u>35.50</u> 20% of total cover: <u>14.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ✓

SOIL

Sampling Point: DP-58

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-08
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-59
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 5-7
Subregion (LRR or MLRA): P 136 Lat: 36.63242956 Long: -79.54397859 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		_____ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes ☒ No _____ Depth (inches): 0.5
Water Table Present? Yes ☒ No _____ Depth (inches): 4
Saturation Present? Yes ☒ No _____ Depth (inches): 0
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-59

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>43</u></td> <td>x 2 = <u>86</u></td> </tr> <tr> <td>FAC species <u>21</u></td> <td>x 3 = <u>63</u></td> </tr> <tr> <td>FACU species <u>3</u></td> <td>x 4 = <u>12</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>67</u> (A)</td> <td><u>161</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.40</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>43</u>	x 2 = <u>86</u>	FAC species <u>21</u>	x 3 = <u>63</u>	FACU species <u>3</u>	x 4 = <u>12</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>67</u> (A)	<u>161</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>43</u>	x 2 = <u>86</u>																	
FAC species <u>21</u>	x 3 = <u>63</u>																	
FACU species <u>3</u>	x 4 = <u>12</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>67</u> (A)	<u>161</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>35</u>	☒	<u>FACW</u>															
2. <u>Dichanthelium clandestinum</u>	<u>15</u>	☒	<u>FAC</u>															
3. <u>Cyperus esculentus</u>	<u>8</u>		<u>FACW</u>															
4. <u>Rumex crispus</u>	<u>6</u>		<u>FAC</u>															
5. <u>Lonicera japonica</u>	<u>3</u>		<u>FACU</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>67</u> = Total Cover																		
50% of total cover: <u>33.50</u> 20% of total cover: <u>13.40</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-59

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 4/1	55	7.5YR 5/8	20	C	PL	Sandy Loam	
0 - 2	10YR 5/1	25					Sandy Loam	Secondary matrix color
2 - 18	10YR 6/2	60	10YR 6/8	25	C	PL	Sandy Loam	
2 - 18			7.5YR 5/8	15	C	PL	Sandy Loam	Secondary Redox feature
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (LRR N)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (MLRA 147, 148)
- ☐ Thin Dark Surface (S9) (MLRA 147, 148)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ☐ Umbric Surface (F13) (MLRA 136, 122)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 148)
- ☐ Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (MLRA 147)
- ☐ Coast Prairie Redox (A16) (MLRA 147, 148)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-08
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-60
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.63255598 Long: -79.54398646 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____ No ☒
Hydric Soil Present?	Yes _____	No ☒		
Wetland Hydrology Present?	Yes _____	No ☒		

Remarks:

Only one (i.e., hydrophytic vegetation) of the three wetland parameters was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-60

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Ailanthus altissima</u>	<u>20</u>	☒	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>62.50</u> (A/B)														
2. <u>Carpinus caroliniana</u>	<u>10</u>	☒	<u>FAC</u>															
3. <u>Liriodendron tulipifera</u>	<u>10</u>	☒	<u>FACU</u>															
4. <u>Ulmus americana</u>	<u>10</u>	☒	<u>FACW</u>															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>30</u></td> <td>x 3 = <u>90</u></td> </tr> <tr> <td>FACU species <u>57</u></td> <td>x 4 = <u>228</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>97</u> (A)</td> <td><u>338</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.48</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>30</u>	x 3 = <u>90</u>	FACU species <u>57</u>	x 4 = <u>228</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>97</u> (A)	<u>338</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>10</u>	x 2 = <u>20</u>																	
FAC species <u>30</u>	x 3 = <u>90</u>																	
FACU species <u>57</u>	x 4 = <u>228</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>97</u> (A)	<u>338</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>25.00</u> 20% of total cover: <u>10.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Carpinus caroliniana</u>	<u>12</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>6.00</u> 20% of total cover: <u>2.40</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Poa annua</u>	<u>20</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Present? Yes ☒ No _____														
2. <u>Duchesnea indica</u>	<u>5</u>	_____	<u>FACU</u>															
3. <u>Ailanthus altissima</u>	<u>2</u>	_____	<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____	Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____	_____ = Total Cover 50% of total cover: <u>13.50</u> 20% of total cover: <u>5.40</u>														
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>4.00</u> 20% of total cover: <u>1.60</u>																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: DP-60

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-11
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-61
Investigator(s): KZ, LS, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): None Slope (%): 3-5
Subregion (LRR or MLRA): P 136 Lat: 36.63612222 Long: -79.54105682 Datum: WGS 84
Soil Map Unit Name: 23D - Clover fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☒ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☒ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes ☒ No _____ Depth (inches): <u>1</u>	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>0</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-61

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Asimina triloba</u>	<u>40</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>7</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. <u>Carpinus caroliniana</u>	<u>25</u>	☒	<u>FAC</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>103</u></td> <td>x 3 = <u>309</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>143</u> (A)</td> <td><u>409</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.86</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>103</u>	x 3 = <u>309</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>143</u> (A)	<u>409</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>30</u>	x 2 = <u>60</u>																	
FAC species <u>103</u>	x 3 = <u>309</u>																	
FACU species <u>10</u>	x 4 = <u>40</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>143</u> (A)	<u>409</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>32.50</u> 20% of total cover: <u>13.00</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Acer negundo</u>	<u>8</u>	☒	<u>FAC</u>															
2. <u>Lindera benzoin</u>	<u>5</u>	☒	<u>FAC</u>															
3. <u>Asimina triloba</u>	<u>5</u>	☒	<u>FAC</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>9.00</u> 20% of total cover: <u>3.60</u>				Hydrophytic Vegetation Present? Yes ☒ No _____														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Impatiens capensis</u>	<u>30</u>	☒	<u>FACW</u>															
2. <u>Microstegium vimineum</u>	<u>20</u>	☒	<u>FAC</u>															
3. <u>Podophyllum peltatum</u>	<u>10</u>	_____	<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>30.00</u> 20% of total cover: <u>12.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL

Sampling Point: DP-61

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 10	2.5Y 4/1	90	7.5YR 4/6	10	C	PL / M	Clay Loam	
10 - 18	2.5Y 5/1	90	7.5YR 4/6	10	C	M	Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-11
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-62
Investigator(s): MS, KZ Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.6361 Long: -79.541086 Datum: WGS 84
Soil Map Unit Name: 23D - Clover fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____ No ☒
Hydric Soil Present?	Yes _____	No ☒		
Wetland Hydrology Present?	Yes _____	No ☒		

Remarks:

Only one of the three wetland parameters (i.e., hydrophytic vegetation) was observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-62

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Asimina triloba</u>	<u>45</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>71.42</u> (A/B)														
2. <u>Liriodendron tulipifera</u>	<u>25</u>	☒	<u>FACU</u>															
3. <u>Carpinus caroliniana</u>	<u>10</u>		<u>FAC</u>															
4. <u>Oxydendrum arboreum</u>	<u>10</u>		<u>UPL</u>															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>206</u></td> <td>x 3 = <u>618</u></td> </tr> <tr> <td>FACU species <u>54</u></td> <td>x 4 = <u>216</u></td> </tr> <tr> <td>UPL species <u>41</u></td> <td>x 5 = <u>205</u></td> </tr> <tr> <td>Column Totals: <u>301</u> (A)</td> <td><u>1039</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.45</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>206</u>	x 3 = <u>618</u>	FACU species <u>54</u>	x 4 = <u>216</u>	UPL species <u>41</u>	x 5 = <u>205</u>	Column Totals: <u>301</u> (A)	<u>1039</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>206</u>	x 3 = <u>618</u>																	
FACU species <u>54</u>	x 4 = <u>216</u>																	
UPL species <u>41</u>	x 5 = <u>205</u>																	
Column Totals: <u>301</u> (A)	<u>1039</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>45.00</u> 20% of total cover: <u>18.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Lindera benzoin</u>	<u>45</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Asimina triloba</u>	<u>40</u>	☒	<u>FAC</u>															
3. <u>Rosa multiflora</u>	<u>10</u>		<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
_____	_____	_____	_____															
_____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>47.50</u> 20% of total cover: <u>19.00</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Microstegium vimineum</u>	<u>40</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Present? Yes ☒ No _____														
2. <u>Lamium purpureum</u>	<u>30</u>	☒	<u>UPL</u>															
3. <u>Carpinus caroliniana</u>	<u>10</u>		<u>FAC</u>															
4. <u>Oxalis corniculata</u>	<u>5</u>		<u>FACU</u>															
5. <u>Lonicera japonica</u>	<u>5</u>		<u>FACU</u>	_____														
6. <u>Cardamine concatenata</u>	<u>5</u>		<u>FACU</u>															
7. <u>Acer negundo</u>	<u>5</u>		<u>FAC</u>															
8. <u>Rosa multiflora</u>	<u>2</u>		<u>FACU</u>															
9. <u>Perilla frutescens</u>	<u>2</u>		<u>FACU</u>	_____														
10. <u>Toxicodendron radicans</u>	<u>1</u>		<u>FAC</u>															
11. <u>Erythronium rostratum</u>	<u>1</u>		<u>UPL</u>															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>53.00</u> 20% of total cover: <u>21.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Vitis rotundifolia</u>	<u>10</u>	☒	<u>FAC</u>	_____														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____	_____														
_____	_____	_____	_____															
_____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>5.00</u> 20% of total cover: <u>2.00</u>																		
Remarks: (Include photo numbers here or on a separate sheet.) Herbs: Viola sp. 1% and Trillium sp. 1%.																		

SOIL

Sampling Point: DP-62

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 5	10YR 4/3	100					Silt Loam	
5 - 18	10YR 4/6	100					Silt Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-16
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-63
Investigator(s): KZ, LS, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.63279021 Long: -79.54325923 Datum: WGS 84
Soil Map Unit Name: 23B - Clover fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
_____ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
_____ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		_____ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes ☒ No _____ Depth (inches): 0.25
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-63

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Carpinus caroliniana</u>	<u>10</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>71.42</u> (A/B)														
2. <u>Acer rubrum</u>	<u>5</u>	☒	<u>FAC</u>															
3. <u>Liriodendron tulipifera</u>	<u>2</u>		<u>FACU</u>															
4. _____																		
5. _____				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>80</u></td> <td>x 3 = <u>240</u></td> </tr> <tr> <td>FACU species <u>13</u></td> <td>x 4 = <u>52</u></td> </tr> <tr> <td>UPL species <u>32</u></td> <td>x 5 = <u>160</u></td> </tr> <tr> <td>Column Totals: <u>145</u> (A)</td> <td><u>492</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.39</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>80</u>	x 3 = <u>240</u>	FACU species <u>13</u>	x 4 = <u>52</u>	UPL species <u>32</u>	x 5 = <u>160</u>	Column Totals: <u>145</u> (A)	<u>492</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>20</u>	x 2 = <u>40</u>																	
FAC species <u>80</u>	x 3 = <u>240</u>																	
FACU species <u>13</u>	x 4 = <u>52</u>																	
UPL species <u>32</u>	x 5 = <u>160</u>																	
Column Totals: <u>145</u> (A)	<u>492</u> (B)																	
6. _____																		
7. _____																		
8. _____																		
9. _____				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
50% of total cover: <u>8.50</u> 20% of total cover: <u>3.40</u> Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Carpinus caroliniana</u>	<u>5</u>	☒	<u>FAC</u>															
2. <u>Juniperus virginiana</u>	<u>3</u>	☒	<u>FACU</u>															
3. <u>Liquidambar styraciflua</u>	<u>3</u>	☒	<u>FAC</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. <u>Quercus montana</u>	<u>2</u>		<u>UPL</u>															
5. <u>Quercus alba</u>	<u>2</u>		<u>FACU</u>															
6. _____																		
7. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____																		
9. _____																		
10. _____																		
11. _____				Hydrophytic Vegetation Present? Yes ☒ No _____														
50% of total cover: <u>7.50</u> 20% of total cover: <u>3.00</u> Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Microstegium vimineum</u>	<u>55</u>	☒	<u>FAC</u>															
2. <u>Stellaria media</u>	<u>30</u>	☒	<u>UPL</u>															
3. <u>Impatiens capensis</u>	<u>20</u>		<u>FACW</u>	Hydrophytic Vegetation Present? Yes ☒ No _____														
4. <u>Achillea millefolium</u>	<u>5</u>		<u>FACU</u>															
5. <u>Sambucus nigra</u>	<u>2</u>		<u>FAC</u>															
6. <u>Lonicera japonica</u>	<u>1</u>		<u>FACU</u>															
7. _____				Hydrophytic Vegetation Present? Yes ☒ No _____														
8. _____																		
9. _____																		
10. _____																		
11. _____				Hydrophytic Vegetation Present? Yes ☒ No _____														
50% of total cover: <u>56.50</u> 20% of total cover: <u>22.60</u> Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____																		
2. _____																		
3. _____				Hydrophytic Vegetation Present? Yes ☒ No _____														
4. _____																		
5. _____																		
6. _____																		
50% of total cover: _____ 20% of total cover: _____				Hydrophytic Vegetation Present? Yes ☒ No _____														
50% of total cover: _____ 20% of total cover: _____																		
50% of total cover: _____ 20% of total cover: _____																		
50% of total cover: _____ 20% of total cover: _____																		

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL

Sampling Point: DP-63

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-16
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-64
Investigator(s): KZ, LS, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 5-7
Subregion (LRR or MLRA): P 136 Lat: 36.63274526 Long: -79.54342482 Datum: WGS 84
Soil Map Unit Name: 23B - Clover fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soil) were observed at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	
Water Table Present? Yes _____ No ☒	Depth (inches): _____	
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-64

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.33</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>1</u></td> <td>x 2 = <u>2</u></td> </tr> <tr> <td>FAC species <u>30</u></td> <td>x 3 = <u>90</u></td> </tr> <tr> <td>FACU species <u>53</u></td> <td>x 4 = <u>212</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>84</u> (A)</td> <td><u>304</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.61</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>1</u>	x 2 = <u>2</u>	FAC species <u>30</u>	x 3 = <u>90</u>	FACU species <u>53</u>	x 4 = <u>212</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>84</u> (A)	<u>304</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>1</u>	x 2 = <u>2</u>																	
FAC species <u>30</u>	x 3 = <u>90</u>																	
FACU species <u>53</u>	x 4 = <u>212</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>84</u> (A)	<u>304</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Dichanthelium clandestinum</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. <u>Lonicera japonica</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>															
3. <u>Achillea millefolium</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>															
4. <u>Verbesina alternifolia</u>	<u>10</u>	_____	<u>FAC</u>															
5. <u>Cerastium fontanum</u>	<u>10</u>	_____	<u>FACU</u>															
6. <u>Galium aparine</u>	<u>5</u>	_____	<u>FACU</u>															
7. <u>Rubus allegheniensis</u>	<u>5</u>	_____	<u>FACU</u>															
8. <u>Vicia americana</u>	<u>3</u>	_____	<u>FACU</u>															
9. <u>Juncus effusus</u>	<u>1</u>	_____	<u>FACW</u>															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>84</u> = Total Cover																		
50% of total cover: <u>42.00</u> 20% of total cover: <u>16.80</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		

Remarks: (Include photo numbers here or on a separate sheet.)

No tree, sapling/shrub, or woody vine strata were observed at this data point.

SOIL

Sampling Point: DP-64

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 4/3	100					Silt Loam	
2 - 8	10YR 6/8	100					Silt Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock
 Depth (inches): 8+

Hydric Soil Present? Yes ☐ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-15
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-65
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR or MLRA): P 136 Lat: 36.58733784 Long: -79.58656156 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-65

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>38</u></td> <td>x 3 = <u>114</u></td> </tr> <tr> <td>FACU species <u>25</u></td> <td>x 4 = <u>100</u></td> </tr> <tr> <td>UPL species <u>8</u></td> <td>x 5 = <u>40</u></td> </tr> <tr> <td>Column Totals: <u>91</u> (A)</td> <td><u>294</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.23</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>38</u>	x 3 = <u>114</u>	FACU species <u>25</u>	x 4 = <u>100</u>	UPL species <u>8</u>	x 5 = <u>40</u>	Column Totals: <u>91</u> (A)	<u>294</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>20</u>	x 2 = <u>40</u>																	
FAC species <u>38</u>	x 3 = <u>114</u>																	
FACU species <u>25</u>	x 4 = <u>100</u>																	
UPL species <u>8</u>	x 5 = <u>40</u>																	
Column Totals: <u>91</u> (A)	<u>294</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Holcus lanatus</u>	<u>30</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Juncus effusus</u>	<u>20</u>	☒	<u>FACW</u>															
3. <u>Dactylis glomerata</u>	<u>15</u>		<u>FACU</u>															
4. <u>Lolium perenne</u>	<u>10</u>		<u>FACU</u>															
5. <u>Daucus carota</u>	<u>8</u>		<u>UPL</u>															
6. <u>Solidago rugosa</u>	<u>8</u>		<u>FAC</u>															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>91</u> = Total Cover																		
50% of total cover: <u>45.50</u> 20% of total cover: <u>18.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-65

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 5	10YR 4/2	80	5YR 5/8	5	C		Clay Loam	
0 - 5	10YR 5/3	15					Clay Loam	Secondary matrix color
5 - 18	2.5Y 5/2	90	5YR 5/8	10	C	PL	Sandy Clay Loam	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-15
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-66
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 3-5
Subregion (LRR or MLRA): P 136 Lat: 36.58748249 Long: -79.5865269 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-66

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>40</u></td> <td>x 4 = <u>160</u></td> </tr> <tr> <td>UPL species <u>18</u></td> <td>x 5 = <u>90</u></td> </tr> <tr> <td>Column Totals: <u>63</u> (A)</td> <td><u>265</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.20</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>40</u>	x 4 = <u>160</u>	UPL species <u>18</u>	x 5 = <u>90</u>	Column Totals: <u>63</u> (A)	<u>265</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>5</u>	x 3 = <u>15</u>																	
FACU species <u>40</u>	x 4 = <u>160</u>																	
UPL species <u>18</u>	x 5 = <u>90</u>																	
Column Totals: <u>63</u> (A)	<u>265</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Lolium perenne</u>	<u>40</u>	<u>✓</u>	<u>FACU</u>															
2. <u>Coronilla varia</u>	<u>10</u>	_____	<u>UPL</u>															
3. <u>Daucus carota</u>	<u>8</u>	_____	<u>UPL</u>															
4. <u>Holcus lanatus</u>	<u>5</u>	_____	<u>FAC</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>63</u> = Total Cover																		
50% of total cover: <u>31.50</u> 20% of total cover: <u>12.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ✓

SOIL

Sampling Point: DP-66

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 8	5YR 4/6	100					Clay Loam	
8 - 12	5YR 4/6	70	2.5Y 6/4	10	C	M	Clay Loam	
8 - 12	2.5YR 4/3	20					Clay Loam	Secondary Matrix color
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Gravel
 Depth (inches): 12+

Hydric Soil Present? Yes ☐ No ☒

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-15
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-67
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2-3
Subregion (LRR or MLRA): P 136 Lat: 36.588753 Long: -79.58513047 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>4</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>2</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-67

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>77</u></td> <td>x 2 = <u>154</u></td> </tr> <tr> <td>FAC species <u>2</u></td> <td>x 3 = <u>6</u></td> </tr> <tr> <td>FACU species <u>7</u></td> <td>x 4 = <u>28</u></td> </tr> <tr> <td>UPL species <u>2</u></td> <td>x 5 = <u>10</u></td> </tr> <tr> <td>Column Totals: <u>88</u> (A)</td> <td><u>198</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.25</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>77</u>	x 2 = <u>154</u>	FAC species <u>2</u>	x 3 = <u>6</u>	FACU species <u>7</u>	x 4 = <u>28</u>	UPL species <u>2</u>	x 5 = <u>10</u>	Column Totals: <u>88</u> (A)	<u>198</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>77</u>	x 2 = <u>154</u>																	
FAC species <u>2</u>	x 3 = <u>6</u>																	
FACU species <u>7</u>	x 4 = <u>28</u>																	
UPL species <u>2</u>	x 5 = <u>10</u>																	
Column Totals: <u>88</u> (A)	<u>198</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>75</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Cerastium fontanum</u>	<u>3</u>		<u>FACU</u>															
3. <u>Lespedeza cuneata</u>	<u>3</u>		<u>FACU</u>															
4. <u>Geranium carolinianum</u>	<u>2</u>		<u>UPL</u>															
5. <u>Holcus lanatus</u>	<u>2</u>		<u>FAC</u>															
6. <u>Poa palustris</u>	<u>2</u>		<u>FACW</u>															
7. <u>Cardamine hirsuta</u>	<u>1</u>		<u>FACU</u>															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>88</u> = Total Cover																		
50% of total cover: <u>44.00</u> 20% of total cover: <u>17.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) <u>No tree, sapling/shrub, or woody vine strata were observed at this data point.</u>																		

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-67

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 6	2.5Y 4/2	55	7.5YR 5/8	30	C	M	Sandy Clay Loam	
0 - 6			5YR 5/8	15	C	PL	Sandy Clay Loam	Secondary Redox feature
6 - 18	2.5YR 6/2	85	7.5YR 5/8	15	C	PL	Sandy Loam	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-15
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-68
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2-3
Subregion (LRR or MLRA): P 136 Lat: 36.58886598 Long: -79.58528176 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	
Water Table Present? Yes _____ No ☒	Depth (inches): _____	
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Only one secondary wetland hydrology indicator (i.e., geomorphic position) was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-68

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. <u>Liquidambar styraciflua</u>	<u>15</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)																
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>5</u> (B)																
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60.00</u> (A/B)																
4. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>15</u></td> <td>x 2 = <u>30</u></td> </tr> <tr> <td>FAC species <u>50</u></td> <td>x 3 = <u>150</u></td> </tr> <tr> <td>FACU species <u>65</u></td> <td>x 4 = <u>260</u></td> </tr> <tr> <td>UPL species <u>21</u></td> <td>x 5 = <u>105</u></td> </tr> <tr> <td>Column Totals: <u>151</u> (A)</td> <td><u>545</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.60</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>15</u>	x 2 = <u>30</u>	FAC species <u>50</u>	x 3 = <u>150</u>	FACU species <u>65</u>	x 4 = <u>260</u>	UPL species <u>21</u>	x 5 = <u>105</u>	Column Totals: <u>151</u> (A)	<u>545</u> (B)	Prevalence Index = B/A = <u>3.60</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>15</u>	x 2 = <u>30</u>																			
FAC species <u>50</u>	x 3 = <u>150</u>																			
FACU species <u>65</u>	x 4 = <u>260</u>																			
UPL species <u>21</u>	x 5 = <u>105</u>																			
Column Totals: <u>151</u> (A)	<u>545</u> (B)																			
Prevalence Index = B/A = <u>3.60</u>																				
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____	_____	_____	_____																	
<u>15</u> = Total Cover 50% of total cover: <u>7.50</u> 20% of total cover: <u>3.00</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)																
<u>10</u> = Total Cover 50% of total cover: <u>5.00</u> 20% of total cover: <u>2.00</u>																				
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																				
1. <u>Liquidambar styraciflua</u>	<u>10</u>	☒	<u>FAC</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
<u>10</u> = Total Cover 50% of total cover: <u>5.00</u> 20% of total cover: <u>2.00</u>																				
Herb Stratum (Plot size: <u>5 ft r</u>)																				
1. <u>Lolium perenne</u>	<u>50</u>	☒	<u>FACU</u>																	
2. <u>Holcus lanatus</u>	<u>20</u>	☒	<u>FAC</u>																	
3. <u>Stellaria media</u>	<u>20</u>	☒	<u>UPL</u>																	
4. <u>Juncus effusus</u>	<u>15</u>	_____	<u>FACW</u>																	
5. <u>Lespedeza cuneata</u>	<u>15</u>	_____	<u>FACU</u>																	
6. <u>Verbesina alternifolia</u>	<u>5</u>	_____	<u>FAC</u>																	
7. <u>Geranium carolinianum</u>	<u>1</u>	_____	<u>UPL</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
<u>126</u> = Total Cover 50% of total cover: <u>63.00</u> 20% of total cover: <u>25.20</u>																				
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																				
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																				
Hydrophytic Vegetation Present? Yes _____ No ☒																				

SOIL

Sampling Point: DP-68

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 1	10YR 4/4	100					Silt Loam	
1 - 12	10YR 5/4	100					Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 12+

Hydric Soil Present? Yes ☐ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-15
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-69
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR or MLRA): P 136 Lat: 36.58896644 Long: -79.58559412 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☒ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes ☒ No _____ Depth (inches): <u>2</u>	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>2</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

Sampling Point: DP-69

Tree Stratum (Plot size: <u>30 ft r</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Liquidambar styraciflua</u>	<u>70</u>	☒	<u>FAC</u>
2.	<u>Platanus occidentalis</u>	<u>20</u>		<u>FACW</u>
3.	<u>Carpinus caroliniana</u>	<u>10</u>		<u>FAC</u>
4.	<u>Liriodendron tulipifera</u>	<u>5</u>		<u>FACU</u>
5.				
6.				
7.				
		<u>105</u>	= Total Cover	
50% of total cover: <u>52.50</u>		20% of total cover: <u>21.00</u>		
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15 ft r</u>)				
1.	<u>Liquidambar styraciflua</u>	<u>35</u>	☒	<u>FAC</u>
2.	<u>Carpinus caroliniana</u>	<u>30</u>	☒	<u>FAC</u>
3.	<u>Liriodendron tulipifera</u>	<u>3</u>		<u>FACU</u>
4.				
5.				
6.				
7.				
8.				
9.				
		<u>68</u>	= Total Cover	
50% of total cover: <u>34.00</u>		20% of total cover: <u>13.60</u>		
<u>Herb Stratum</u> (Plot size: <u>5 ft r</u>)				
1.	<u>Microstegium vimineum</u>	<u>80</u>	☒	<u>FAC</u>
2.	<u>Sambucus nigra ssp. canadensis</u>	<u>8</u>		<u>FAC</u>
3.	<u>Lonicera japonica</u>	<u>5</u>		<u>FACU</u>
4.	<u>Viola sororia</u>	<u>5</u>		<u>FAC</u>
5.				
6.				
7.				
8.				
9.				
10.				
11.				
		<u>98</u>	= Total Cover	
50% of total cover: <u>49.00</u>		20% of total cover: <u>19.60</u>		
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft r</u>)				
1.	<u>Smilax rotundifolia</u>	<u>5</u>	☒	<u>FAC</u>
2.				
3.				
4.				
5.				
		<u>5</u>	= Total Cover	
50% of total cover: <u>2.50</u>		20% of total cover: <u>1.00</u>		

Remarks: (Include photo numbers here or on a separate sheet.)

Dominance Test worksheet:	
Number of Dominant Species That Are OBL, FACW, or FAC:	<u>5</u> (A)
Total Number of Dominant Species Across All Strata:	<u>5</u> (B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100.00</u> (A/B)
Prevalence Index worksheet:	
Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>20</u>	x 2 = <u>40</u>
FAC species <u>243</u>	x 3 = <u>729</u>
FACU species <u>13</u>	x 4 = <u>52</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>276</u> (A)	<u>821</u> (B)
Prevalence Index = B/A = <u>2.97</u>	
Hydrophytic Vegetation Indicators:	
☐ 1 - Rapid Test for Hydrophytic Vegetation	
☒ 2 - Dominance Test is >50%	
☒ 3 - Prevalence Index is ≤3.0 ¹	
☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
☐ Problematic Hydrophytic Vegetation ¹ (Explain)	
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Definitions of Four Vegetation Strata:	
Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.	
Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.	
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.	
Woody vine – All woody vines greater than 3.28 ft in height.	
Hydrophytic Vegetation Present?	Yes ☒ No ☐

SOIL

Sampling Point: DP-69

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	2.5Y 5/3	95	7.5YR 5/6	5	C	M	Sandy Clay Loam	
3 - 18	2.5Y 5/2	92	7.5YR 5/8	8	C	M	Sandy Clay	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-15
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-70
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 3
Subregion (LRR or MLRA): P 136 Lat: 36.59043725 Long: -79.58346597 Datum: WGS 84
Soil Map Unit Name: 29D - Pinkston-Clover complex, 15 to 35 percent slopes, very stony NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes ☒ No _____ Depth (inches): <u>1</u>	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>2</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with standing water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-70

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>40</u></td> <td>x 1 = <u>40</u></td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>45</u></td> <td>x 3 = <u>135</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>195</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.05</u>	Total % Cover of:	Multiply by:	OBL species <u>40</u>	x 1 = <u>40</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>45</u>	x 3 = <u>135</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>95</u> (A)	<u>195</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>40</u>	x 1 = <u>40</u>																	
FACW species <u>10</u>	x 2 = <u>20</u>																	
FAC species <u>45</u>	x 3 = <u>135</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>95</u> (A)	<u>195</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Carex lurida</u>	<u>40</u>	☒	<u>OBL</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Holcus lanatus</u>	<u>35</u>	☒	<u>FAC</u>															
3. <u>Juncus effusus</u>	<u>10</u>		<u>FACW</u>															
4. <u>Microstegium vimineum</u>	<u>10</u>		<u>FAC</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>95</u> = Total Cover																		
50% of total cover: <u>47.50</u> 20% of total cover: <u>19.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-70

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-15
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-71
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 4
Subregion (LRR or MLRA): P 136 Lat: 36.59047386 Long: -79.58353634 Datum: WGS 84
Soil Map Unit Name: 29D - Pinkston-Clover complex, 15 to 35 percent slopes, very stony NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-71

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. <u>Ailanthus altissima</u>	<u>20</u>	☒	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)																
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)																
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)																
4. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>105</u></td> <td>x 4 = <u>420</u></td> </tr> <tr> <td>UPL species <u>8</u></td> <td>x 5 = <u>40</u></td> </tr> <tr> <td>Column Totals: <u>113</u> (A)</td> <td><u>460</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.07</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>105</u>	x 4 = <u>420</u>	UPL species <u>8</u>	x 5 = <u>40</u>	Column Totals: <u>113</u> (A)	<u>460</u> (B)	Prevalence Index = B/A = <u>4.07</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>105</u>	x 4 = <u>420</u>																			
UPL species <u>8</u>	x 5 = <u>40</u>																			
Column Totals: <u>113</u> (A)	<u>460</u> (B)																			
Prevalence Index = B/A = <u>4.07</u>																				
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)																
50% of total cover: <u>10.00</u> 20% of total cover: <u>4.00</u> Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.																
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No ☒																
11. _____	_____	_____	_____																	
50% of total cover: _____ 20% of total cover: _____ Herb Stratum (Plot size: <u>5 ft r</u>)																				
1. <u>Dactylis glomerata</u>	<u>60</u>	☒	<u>FACU</u>																	
2. <u>Lolium perenne</u>	<u>20</u>	☒	<u>FACU</u>																	
3. <u>Coronilla varia</u>	<u>8</u>	_____	<u>UPL</u>																	
4. <u>Perilla frutescens</u>	<u>5</u>	_____	<u>FACU</u>																	
5. _____	_____	_____	_____	Remarks: (Include photo numbers here or on a separate sheet.) <u>No sapling/shrub or woody vine strata were observed at this data point.</u>																
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____	Woody Vine Stratum (Plot size: <u>30 ft r</u>)																
11. _____	_____	_____	_____																	
50% of total cover: <u>46.50</u> 20% of total cover: <u>18.60</u> Woody Vine Stratum (Plot size: <u>30 ft r</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No ☒																
5. _____	_____	_____	_____																	
50% of total cover: _____ 20% of total cover: _____																				

SOIL

Sampling Point: DP-71

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-15
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-72
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 3
Subregion (LRR or MLRA): P 136 Lat: 36.59386101 Long: -79.57978278 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Only one secondary wetland hydrology indicator (i.e., geomorphic position) was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-72

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.33</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>46</u></td> <td>x 4 = <u>184</u></td> </tr> <tr> <td>UPL species <u>19</u></td> <td>x 5 = <u>95</u></td> </tr> <tr> <td>Column Totals: <u>85</u> (A)</td> <td><u>319</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.75</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>46</u>	x 4 = <u>184</u>	UPL species <u>19</u>	x 5 = <u>95</u>	Column Totals: <u>85</u> (A)	<u>319</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>20</u>	x 2 = <u>40</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>46</u>	x 4 = <u>184</u>																	
UPL species <u>19</u>	x 5 = <u>95</u>																	
Column Totals: <u>85</u> (A)	<u>319</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>20</u>	☒	<u>FACW</u>															
2. <u>Cynodon dactylon</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Dactylis glomerata</u>	<u>15</u>	☒	<u>FACU</u>															
4. <u>Trifolium repens</u>	<u>12</u>		<u>FACU</u>															
5. <u>Geranium carolinianum</u>	<u>8</u>		<u>UPL</u>															
6. <u>Gamochaeta pensylvanica</u>	<u>6</u>		<u>UPL</u>															
7. <u>Plantago lanceolata</u>	<u>5</u>		<u>UPL</u>															
8. <u>Cerastium fontanum</u>	<u>4</u>		<u>FACU</u>															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>85</u> = Total Cover																		
50% of total cover: <u>42.50</u> 20% of total cover: <u>17.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ☒

SOIL

Sampling Point: DP-72

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 4	10YR 4/6	100					Silt Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.								
² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators:							Indicators for Problematic Hydric Soils³:	
☐ Histosol (A1)			☐ Dark Surface (S7)			☐ 2 cm Muck (A10) (MLRA 147)		
☐ Histic Epipedon (A2)			☐ Polyvalue Below Surface (S8) (MLRA 147, 148)			☐ Coast Prairie Redox (A16)		
☐ Black Histic (A3)			☐ Thin Dark Surface (S9) (MLRA 147, 148)			☐ (MLRA 147, 148)		
☐ Hydrogen Sulfide (A4)			☐ Loamy Gleyed Matrix (F2)			☐ Piedmont Floodplain Soils (F19)		
☐ Stratified Layers (A5)			☐ Depleted Matrix (F3)			☐ (MLRA 136, 147)		
☐ 2 cm Muck (A10) (LRR N)			☐ Redox Dark Surface (F6)			☐ Very Shallow Dark Surface (TF12)		
☐ Depleted Below Dark Surface (A11)			☐ Depleted Dark Surface (F7)			☐ Other (Explain in Remarks)		
☐ Thick Dark Surface (A12)			☐ Redox Depressions (F8)					
☐ Sandy Mucky Mineral (S1) (LRR N,			☐ Iron-Manganese Masses (F12) (LRR N,					
☐ MLRA 147, 148)			☐ MLRA 136)					
☐ Sandy Gleyed Matrix (S4)			☐ Umbric Surface (F13) (MLRA 136, 122)			³ Indicators of hydrophytic vegetation and		
☐ Sandy Redox (S5)			☐ Piedmont Floodplain Soils (F19) (MLRA 148)			wetland hydrology must be present,		
☐ Stripped Matrix (S6)			☐ Red Parent Material (F21) (MLRA 127, 147)			unless disturbed or problematic.		
Restrictive Layer (if observed):								
Type: <u>Gravel</u>								
Depth (inches): <u>4+</u>							Hydric Soil Present? Yes _____ No ☒	
Remarks:								

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-15
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-73
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.59374382 Long: -79.57980438 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland? Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____	
Wetland Hydrology Present?	Yes ☒	No _____	

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
<u>Primary Indicators (minimum of one is required; check all that apply)</u>			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	_____ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		_____ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes ☒ No _____ Depth (inches): 1
Water Table Present? Yes ☒ No _____ Depth (inches): 0
Saturation Present? Yes ☒ No _____ Depth (inches): 0
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-73

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>13</u></td> <td>x 3 = <u>39</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>43</u> (A)</td> <td><u>109</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.53</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>13</u>	x 3 = <u>39</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>43</u> (A)	<u>109</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>25</u>	x 2 = <u>50</u>																	
FAC species <u>13</u>	x 3 = <u>39</u>																	
FACU species <u>5</u>	x 4 = <u>20</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>43</u> (A)	<u>109</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>25</u>	☒	<u>FACW</u>															
2. <u>Rumex crispus</u>	<u>8</u>	☐	<u>FAC</u>															
3. <u>Holcus lanatus</u>	<u>5</u>	☐	<u>FAC</u>															
4. <u>Dactylis glomerata</u>	<u>5</u>	☐	<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>43</u> = Total Cover																		
50% of total cover: <u>21.50</u> 20% of total cover: <u>8.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Hydrophytic Vegetation Present?																		
Yes ☒ No ☐																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-73

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-16
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-74
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2-3
Subregion (LRR or MLRA): P 136 Lat: 36.60050386 Long: -79.5633039 Datum: WGS 84
Soil Map Unit Name: 23B - Clover fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
_____ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
_____ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes ☒ No _____ Depth (inches): 0.25
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-74

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>52</u></td> <td>x 2 = <u>104</u></td> </tr> <tr> <td>FAC species <u>15</u></td> <td>x 3 = <u>45</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>67</u> (A)</td> <td><u>149</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.22</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>52</u>	x 2 = <u>104</u>	FAC species <u>15</u>	x 3 = <u>45</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>67</u> (A)	<u>149</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>52</u>	x 2 = <u>104</u>																	
FAC species <u>15</u>	x 3 = <u>45</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>67</u> (A)	<u>149</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Cyperus esculentus</u>	<u>40</u>	☒	<u>FACW</u>															
2. <u>Arthraxon hispidus</u>	<u>15</u>	☒	<u>FAC</u>															
3. <u>Juncus effusus</u>	<u>12</u>		<u>FACW</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>67</u> = Total Cover																		
50% of total cover: <u>33.50</u> 20% of total cover: <u>13.40</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-74

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-16
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-75
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 3-4
Subregion (LRR or MLRA): P 136 Lat: 36.60070964 Long: -79.56249849 Datum: WGS 84
Soil Map Unit Name: 9B - Lackstown fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
_____ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
_____ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes ☒ No _____ Depth (inches): 0.5
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-75

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>55</u></td> <td>x 2 = <u>110</u></td> </tr> <tr> <td>FAC species <u>35</u></td> <td>x 3 = <u>105</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>215</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.38</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>55</u>	x 2 = <u>110</u>	FAC species <u>35</u>	x 3 = <u>105</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>90</u> (A)	<u>215</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>55</u>	x 2 = <u>110</u>																	
FAC species <u>35</u>	x 3 = <u>105</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>90</u> (A)	<u>215</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Cyperus esculentus</u>	<u>40</u>	<u>✓</u>	<u>FACW</u>															
2. <u>Arthraxon hispidus</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>															
3. <u>Juncus effusus</u>	<u>15</u>		<u>FACW</u>															
4. <u>Pycnanthemum virginianum</u>	<u>15</u>		<u>FAC</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>90</u> = Total Cover																		
50% of total cover: <u>45.00</u> 20% of total cover: <u>18.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.				Hydrophytic Vegetation Present? Yes <u>✓</u> No _____														

SOIL

Sampling Point: DP-75

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-16
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-76
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 3
Subregion (LRR or MLRA): P 136 Lat: 36.60062646 Long: -79.5626137 Datum: WGS 84
Soil Map Unit Name: 9B - Lackstown fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-76

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>98</u></td> <td>x 4 = <u>392</u></td> </tr> <tr> <td>UPL species <u>4</u></td> <td>x 5 = <u>20</u></td> </tr> <tr> <td>Column Totals: <u>102</u> (A)</td> <td><u>412</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.03</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>98</u>	x 4 = <u>392</u>	UPL species <u>4</u>	x 5 = <u>20</u>	Column Totals: <u>102</u> (A)	<u>412</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>98</u>	x 4 = <u>392</u>																	
UPL species <u>4</u>	x 5 = <u>20</u>																	
Column Totals: <u>102</u> (A)	<u>412</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Lolium perenne</u>	<u>70</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Trifolium repens</u>	<u>20</u>	☐	<u>FACU</u>															
3. <u>Oxalis dillenii</u>	<u>5</u>	☐	<u>FACU</u>															
4. <u>Plantago lanceolata</u>	<u>3</u>	☐	<u>UPL</u>															
5. <u>Rubus allegheniensis</u>	<u>3</u>	☐	<u>FACU</u>															
6. <u>Conyza canadensis</u>	<u>1</u>	☐	<u>UPL</u>															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>102</u> = Total Cover																		
50% of total cover: <u>51.00</u> 20% of total cover: <u>20.40</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Hydrophytic Vegetation Present? Yes _____ No ☒																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-76

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 4/3	100					Loam	
2 - 18	10YR 4/4	100					Silt Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-16
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-77
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.60682728 Long: -79.56839478 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

Only one (i.e., hydrophytic vegetation) of the three wetland parameters was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-77

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Acer rubrum</u>	<u>40</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. <u>Liquidambar styraciflua</u>	<u>20</u>	☒	<u>FAC</u>															
3. <u>Liriodendron tulipifera</u>	<u>15</u>		<u>FACU</u>															
4. <u>Carpinus caroliniana</u>	<u>5</u>		<u>FAC</u>															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>85</u></td> <td>x 3 = <u>255</u></td> </tr> <tr> <td>FACU species <u>17</u></td> <td>x 4 = <u>68</u></td> </tr> <tr> <td>UPL species <u>2</u></td> <td>x 5 = <u>10</u></td> </tr> <tr> <td>Column Totals: <u>104</u> (A)</td> <td><u>333</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.20</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>85</u>	x 3 = <u>255</u>	FACU species <u>17</u>	x 4 = <u>68</u>	UPL species <u>2</u>	x 5 = <u>10</u>	Column Totals: <u>104</u> (A)	<u>333</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>85</u>	x 3 = <u>255</u>																	
FACU species <u>17</u>	x 4 = <u>68</u>																	
UPL species <u>2</u>	x 5 = <u>10</u>																	
Column Totals: <u>104</u> (A)	<u>333</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____	<u>80</u>	= Total Cover	_____															
50% of total cover: <u>40.00</u> 20% of total cover: <u>16.00</u>				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____				Hydrophytic Vegetation Present? Yes ☒ No _____														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Smilax rotundifolia</u>	<u>15</u>	☒	<u>FAC</u>															
2. <u>Parathelypteris noveboracensis</u>	<u>5</u>	☒	<u>FAC</u>															
3. <u>Maianthemum racemosum ssp. racemosum</u>	<u>2</u>		<u>UPL</u>	Hydrophytic Vegetation Present? Yes ☒ No _____														
4. <u>Quercus alba</u>	<u>2</u>		<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____														
_____ = Total Cover 50% of total cover: <u>12.00</u> 20% of total cover: <u>4.80</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____														
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____				Hydrophytic Vegetation Present? Yes ☒ No _____														
Remarks: (Include photo numbers here or on a separate sheet.)																		
No sapling/shrub or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-77

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 1	10YR 3/3	100					Loam	
1 - 18	5YR 5/8	100					Sandy Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-16
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-78
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.60685252 Long: -79.5683621 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes ☒ No _____ Depth (inches): <u>1</u>	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>5</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-78

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Acer rubrum</u>	<u>15</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>7</u> (A) Total Number of Dominant Species Across All Strata: <u>9</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>77.77</u> (A/B)														
2. <u>Carpinus caroliniana</u>	<u>10</u>	☒	<u>FAC</u>															
3. <u>Liquidambar styraciflua</u>	<u>10</u>	☒	<u>FAC</u>															
4. <u>Quercus rubra</u>	<u>10</u>	☒	<u>FACU</u>															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>15</u></td> <td>x 1 = <u>15</u></td> </tr> <tr> <td>FACW species <u>35</u></td> <td>x 2 = <u>70</u></td> </tr> <tr> <td>FAC species <u>37</u></td> <td>x 3 = <u>111</u></td> </tr> <tr> <td>FACU species <u>12</u></td> <td>x 4 = <u>48</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>99</u> (A)</td> <td><u>244</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.46</u>	Total % Cover of:	Multiply by:	OBL species <u>15</u>	x 1 = <u>15</u>	FACW species <u>35</u>	x 2 = <u>70</u>	FAC species <u>37</u>	x 3 = <u>111</u>	FACU species <u>12</u>	x 4 = <u>48</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>99</u> (A)	<u>244</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>15</u>	x 1 = <u>15</u>																	
FACW species <u>35</u>	x 2 = <u>70</u>																	
FAC species <u>37</u>	x 3 = <u>111</u>																	
FACU species <u>12</u>	x 4 = <u>48</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>99</u> (A)	<u>244</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>22.50</u> 20% of total cover: <u>9.00</u>				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Ilex verticillata</u>	<u>5</u>	☒	<u>FACW</u>															
2. <u>Carpinus caroliniana</u>	<u>2</u>	☒	<u>FAC</u>															
3. <u>Fagus grandifolia</u>	<u>2</u>	☒	<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>4.50</u> 20% of total cover: <u>1.80</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Osmundastrum cinnamomeum</u>	<u>25</u>	☒	<u>FACW</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. <u>Leersia oryzoides</u>	<u>15</u>	☒	<u>OBL</u>															
3. <u>Juncus effusus</u>	<u>5</u>	_____	<u>FACW</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>22.50</u> 20% of total cover: <u>9.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL

Sampling Point: DP-78

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-16
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-79
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 2-4%
Subregion (LRR or MLRA): P 136 Lat: 36.6061485 Long: -79.5680701 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☒ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-79

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>16</u></td> <td>x 1 = <u>16</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>15</u></td> <td>x 3 = <u>45</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>56</u> (A)</td> <td><u>111</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.98</u>	Total % Cover of:	Multiply by:	OBL species <u>16</u>	x 1 = <u>16</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>15</u>	x 3 = <u>45</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>56</u> (A)	<u>111</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>16</u>	x 1 = <u>16</u>																	
FACW species <u>25</u>	x 2 = <u>50</u>																	
FAC species <u>15</u>	x 3 = <u>45</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>56</u> (A)	<u>111</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>25</u>	☒	<u>FACW</u>															
2. <u>Holcus lanatus</u>	<u>15</u>	☒	<u>FAC</u>															
3. <u>Dulichium arundinaceum</u>	<u>8</u>		<u>OBL</u>															
4. <u>Symphyotrichum puniceum</u>	<u>8</u>		<u>OBL</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>56</u> = Total Cover																		
50% of total cover: <u>28.00</u> 20% of total cover: <u>11.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-79

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 4	10YR 4/1	90	7.5YR 5/8	10	C	PL / M	Clay Loam	
4 - 12	5Y 5/1	85	7.5YR 5/8	15	C	PL / M	Sandy Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Gravel

Depth (inches): 12+

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-16
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-80
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Convex Slope (%): 2-4%
Subregion (LRR or MLRA): P 136 Lat: 36.6060678 Long: -79.5679849 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-80

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Acer rubrum</u>	<u>10</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>57.14</u> (A/B)														
2. <u>Liquidambar styraciflua</u>	<u>10</u>	☒	<u>FAC</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>12</u></td> <td>x 1 = <u>12</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>78</u></td> <td>x 3 = <u>234</u></td> </tr> <tr> <td>FACU species <u>58</u></td> <td>x 4 = <u>232</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>148</u> (A)</td> <td><u>478</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.22</u>	Total % Cover of:	Multiply by:	OBL species <u>12</u>	x 1 = <u>12</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>78</u>	x 3 = <u>234</u>	FACU species <u>58</u>	x 4 = <u>232</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>148</u> (A)	<u>478</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>12</u>	x 1 = <u>12</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>78</u>	x 3 = <u>234</u>																	
FACU species <u>58</u>	x 4 = <u>232</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>148</u> (A)	<u>478</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>10</u> 20% of total cover: <u>4</u>				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Rosa multiflora</u>	<u>20</u>	☒	<u>FACU</u>															
2. <u>Liquidambar styraciflua</u>	<u>10</u>	☒	<u>FAC</u>															
3. <u>Ligustrum sinense</u>	<u>10</u>	☒	<u>FACU</u>															
4. <u>Liriodendron tulipifera</u>	<u>8</u>	_____	<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
_____ = Total Cover 50% of total cover: <u>24</u> 20% of total cover: <u>9.6</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Dichanthelium clandestinum</u>	<u>40</u>	☒	<u>FAC</u>															
2. <u>Andropogon virginicus</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Athyrium asplenoides</u>	<u>8</u>	_____	<u>FAC</u>															
4. <u>Symphyotrichum puniceum</u>	<u>7</u>	_____	<u>OBL</u>															
5. <u>Lonicera japonica</u>	<u>5</u>	_____	<u>FACU</u>															
6. <u>Carex lurida</u>	<u>5</u>	_____	<u>OBL</u>															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____														
_____ = Total Cover 50% of total cover: <u>40</u> 20% of total cover: <u>16</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																		

SOIL

Sampling Point: DP-80

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 4	10YR 4/1	95	7.5YR 5/6	5	C	PL	Sandy Clay Loam	
4 - 18	10YR 5/1	90	7.5YR 5/8	10	C	PL / M	Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-06-04
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-81
Investigator(s): KZ, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.606498 Long: -79.568153 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____ No ☒
Hydric Soil Present?	Yes _____	No ☒		
Wetland Hydrology Present?	Yes _____	No ☒		

Remarks:

Only one (i.e., hydrophytic vegetation) of the three wetland parameters was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-81

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>50</u></td> <td>x 3 = <u>150</u></td> </tr> <tr> <td>FACU species <u>15</u></td> <td>x 4 = <u>60</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>70</u> (A)</td> <td><u>220</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.14</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>50</u>	x 3 = <u>150</u>	FACU species <u>15</u>	x 4 = <u>60</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>70</u> (A)	<u>220</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>5</u>	x 2 = <u>10</u>																	
FAC species <u>50</u>	x 3 = <u>150</u>																	
FACU species <u>15</u>	x 4 = <u>60</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>70</u> (A)	<u>220</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Holcus lanatus</u>	<u>35</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Panicum capillare</u>	<u>15</u>	☒	<u>FAC</u>															
3. <u>Lonicera japonica</u>	<u>10</u>		<u>FACU</u>															
4. <u>Trifolium pratense</u>	<u>5</u>		<u>FACU</u>															
5. <u>Juncus effusus</u>	<u>5</u>		<u>FACW</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>70</u> = Total Cover																		
50% of total cover: <u>35.00</u> 20% of total cover: <u>14.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-81

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-16
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-82
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2-3
Subregion (LRR or MLRA): P 136 Lat: 36.60286645 Long: -79.5672995 Datum: WGS 84
Soil Map Unit Name: 9B - Lackstown fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-82

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>17</u></td> <td>x 1 = <u>17</u></td> </tr> <tr> <td>FACW species <u>60</u></td> <td>x 2 = <u>120</u></td> </tr> <tr> <td>FAC species <u>20</u></td> <td>x 3 = <u>60</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>112</u> (A)</td> <td><u>267</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.38</u>	Total % Cover of:	Multiply by:	OBL species <u>17</u>	x 1 = <u>17</u>	FACW species <u>60</u>	x 2 = <u>120</u>	FAC species <u>20</u>	x 3 = <u>60</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>112</u> (A)	<u>267</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>17</u>	x 1 = <u>17</u>																	
FACW species <u>60</u>	x 2 = <u>120</u>																	
FAC species <u>20</u>	x 3 = <u>60</u>																	
FACU species <u>5</u>	x 4 = <u>20</u>																	
UPL species <u>10</u>	x 5 = <u>50</u>																	
Column Totals: <u>112</u> (A)	<u>267</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Salix nigra</u>	<u>12</u>	☒	<u>OBL</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: <u>6.00</u> 20% of total cover: <u>2.40</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>60</u>	☒	<u>FACW</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. <u>Solidago rugosa</u>	<u>20</u>	☒	<u>FAC</u>															
3. <u>Plantago lanceolata</u>	<u>8</u>	_____	<u>UPL</u>															
4. <u>Trifolium repens</u>	<u>5</u>	_____	<u>FACU</u>															
5. <u>Rosa palustris</u>	<u>5</u>	_____	<u>OBL</u>															
6. <u>Stellaria media</u>	<u>2</u>	_____	<u>UPL</u>															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: <u>50.00</u> 20% of total cover: <u>20.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		

Remarks: (Include photo numbers here or on a separate sheet.)

No tree or woody vine strata were observed at this data point.

SOIL

Sampling Point: DP-82

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 8	5YR 5/8	30	5YR 4/6	15	C	PL / M	Clay Loam	
0 - 8	10YR 6/1	40	7.5YR 5/8	15	C	PL / M	Clay Loam	Secondary Matrix color, Secondary Redox color
8 - 18	10YR 6/1	60	7.5YR 5/8	25	C	PL	Sandy Loam	
-			5YR 4/6	15	C	PL	Sandy Loam	Secondary redox color
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-16
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-83
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 3-5
Subregion (LRR or MLRA): P 136 Lat: 36.60280058 Long: -79.56726364 Datum: WGS 84
Soil Map Unit Name: 9B - Lackstown fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	
Water Table Present? Yes _____ No ☒	Depth (inches): _____	
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology has been observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-83

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>50</u></td> <td>x 4 = <u>200</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>65</u> (A)</td> <td><u>275</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.23</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>50</u>	x 4 = <u>200</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>65</u> (A)	<u>275</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>50</u>	x 4 = <u>200</u>																	
UPL species <u>15</u>	x 5 = <u>75</u>																	
Column Totals: <u>65</u> (A)	<u>275</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Lolium perenne</u>	<u>30</u>	<u>✓</u>	<u>FACU</u>															
2. <u>Trifolium repens</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>															
3. <u>Plantago lanceolata</u>	<u>15</u>	<u>✓</u>	<u>UPL</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>65</u> = Total Cover																		
50% of total cover: <u>32.50</u> 20% of total cover: <u>13.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ✓

SOIL

Sampling Point: DP-83

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-17
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-84
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2-3
Subregion (LRR or MLRA): P 136 Lat: 36.5998337 Long: -79.56512826 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
<u>Primary Indicators (minimum of one is required; check all that apply)</u>			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes ☒ No _____ Depth (inches): <u>0.5</u>	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>6</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-84

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>50</u></td> <td>x 2 = <u>100</u></td> </tr> <tr> <td>FAC species <u>25</u></td> <td>x 3 = <u>75</u></td> </tr> <tr> <td>FACU species <u>8</u></td> <td>x 4 = <u>32</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>93</u> (A)</td> <td><u>257</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.76</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>50</u>	x 2 = <u>100</u>	FAC species <u>25</u>	x 3 = <u>75</u>	FACU species <u>8</u>	x 4 = <u>32</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>93</u> (A)	<u>257</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>50</u>	x 2 = <u>100</u>																	
FAC species <u>25</u>	x 3 = <u>75</u>																	
FACU species <u>8</u>	x 4 = <u>32</u>																	
UPL species <u>10</u>	x 5 = <u>50</u>																	
Column Totals: <u>93</u> (A)	<u>257</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Liquidambar styraciflua</u>	<u>5</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Cyperus esculentus</u>	<u>45</u>	☒	<u>FACW</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. <u>Microstegium vimineum</u>	<u>15</u>	_____	<u>FAC</u>															
3. <u>Plantago lanceolata</u>	<u>10</u>	_____	<u>UPL</u>															
4. <u>Trifolium repens</u>	<u>8</u>	_____	<u>FACU</u>															
5. <u>Juncus effusus</u>	<u>5</u>	_____	<u>FACW</u>															
6. <u>Rumex crispus</u>	<u>5</u>	_____	<u>FAC</u>															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: <u>44.00</u> 20% of total cover: <u>17.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		

Remarks: (Include photo numbers here or on a separate sheet.)

No tree or woody vine strata were observed at this data point.

SOIL

Sampling Point: DP-84

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 8	10YR 4/1	95	10YR 5/6	5	C	PL / M	Sandy Loam	
8 - 12	10YR 4/1	50	10YR 5/6	20	C	PL / M	Sandy Clay Loam	
8 - 12	2.5Y 6/3	30					Sandy Clay Loam	Secondary matrix color
12 - 18	2.5Y 6/3	65	10YR 5/6	35	C	PL / M	Clay Loam	
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-17
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-85
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 3-4
Subregion (LRR or MLRA): P 136 Lat: 36.59990002 Long: -79.56506441 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-85

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. <u>Quercus phellos</u>	<u>15</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)																
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)																
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.33</u> (A/B)																
4. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>15</u></td> <td>x 3 = <u>45</u></td> </tr> <tr> <td>FACU species <u>75</u></td> <td>x 4 = <u>300</u></td> </tr> <tr> <td>UPL species <u>4</u></td> <td>x 5 = <u>20</u></td> </tr> <tr> <td>Column Totals: <u>94</u> (A)</td> <td><u>365</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.88</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>15</u>	x 3 = <u>45</u>	FACU species <u>75</u>	x 4 = <u>300</u>	UPL species <u>4</u>	x 5 = <u>20</u>	Column Totals: <u>94</u> (A)	<u>365</u> (B)	Prevalence Index = B/A = <u>3.88</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>15</u>	x 3 = <u>45</u>																			
FACU species <u>75</u>	x 4 = <u>300</u>																			
UPL species <u>4</u>	x 5 = <u>20</u>																			
Column Totals: <u>94</u> (A)	<u>365</u> (B)																			
Prevalence Index = B/A = <u>3.88</u>																				
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____	_____	_____	_____																	
<u>15</u> = Total Cover 50% of total cover: <u>7.50</u> 20% of total cover: <u>3.00</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)																
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.																
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																				
Herb Stratum (Plot size: <u>5 ft r</u>)																				
1. <u>Trifolium repens</u>	<u>35</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Present? Yes _____ No ☒																
2. <u>Lolium perenne</u>	<u>25</u>	☒	<u>FACU</u>																	
3. <u>Poa annua</u>	<u>10</u>	_____	<u>FACU</u>																	
4. <u>Cichorium intybus</u>	<u>5</u>	_____	<u>FACU</u>																	
5. <u>Coronilla varia</u>	<u>2</u>	_____	<u>UPL</u>																	
6. <u>Plantago lanceolata</u>	<u>2</u>	_____	<u>UPL</u>	Remarks: (Include photo numbers here or on a separate sheet.) <u>No sapling/shrub or woody vine strata were observed at this data point.</u>																
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
<u>79</u> = Total Cover 50% of total cover: <u>39.50</u> 20% of total cover: <u>15.80</u>																				
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																				

Remarks: (Include photo numbers here or on a separate sheet.)

No sapling/shrub or woody vine strata were observed at this data point.

SOIL

Sampling Point: DP-85

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-17
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-86
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2-3
Subregion (LRR or MLRA): P 136 Lat: 36.60798124 Long: -79.5673754 Datum: WGS 84
Soil Map Unit Name: 4C - Clifford sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____ No ☒
Hydric Soil Present?	Yes _____	No ☒		
Wetland Hydrology Present?	Yes _____	No ☒		

Remarks:

Only one (i.e., hydrophytic vegetation) of the three wetland parameters was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-86

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Liriodendron tulipifera</u>	<u>25</u>	☒	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60.00</u> (A/B)														
2. <u>Liquidambar styraciflua</u>	<u>20</u>	☒	<u>FAC</u>															
3. <u>Quercus rubra</u>	<u>15</u>		<u>FACU</u>															
4. <u>Cornus florida</u>	<u>10</u>		<u>FACU</u>															
5. <u>Nyssa sylvatica</u>	<u>5</u>		<u>FAC</u>															
6. <u>Quercus alba</u>	<u>3</u>		<u>FACU</u>															
7. <u>Carya tomentosa</u>	<u>1</u>		<u>UPL</u>															
<u>79</u> = Total Cover 50% of total cover: <u>39.50</u> 20% of total cover: <u>15.80</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>92</u></td> <td>x 3 = <u>276</u></td> </tr> <tr> <td>FACU species <u>63</u></td> <td>x 4 = <u>252</u></td> </tr> <tr> <td>UPL species <u>17</u></td> <td>x 5 = <u>85</u></td> </tr> <tr> <td>Column Totals: <u>172</u> (A)</td> <td><u>613</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.56</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>92</u>	x 3 = <u>276</u>	FACU species <u>63</u>	x 4 = <u>252</u>	UPL species <u>17</u>	x 5 = <u>85</u>	Column Totals: <u>172</u> (A)	<u>613</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>92</u>	x 3 = <u>276</u>																	
FACU species <u>63</u>	x 4 = <u>252</u>																	
UPL species <u>17</u>	x 5 = <u>85</u>																	
Column Totals: <u>172</u> (A)	<u>613</u> (B)																	
<u>57</u> = Total Cover 50% of total cover: <u>28.50</u> 20% of total cover: <u>11.40</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Liquidambar styraciflua</u>	<u>45</u>	☒	<u>FAC</u>															
2. <u>Cornus florida</u>	<u>10</u>		<u>FACU</u>															
3. <u>Carya tomentosa</u>	<u>1</u>		<u>UPL</u>															
4. <u>Quercus phellos</u>	<u>1</u>		<u>FAC</u>															
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
<u>57</u> = Total Cover 50% of total cover: <u>28.50</u> 20% of total cover: <u>11.40</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Galium circaezans</u>	<u>10</u>	☒	<u>UPL</u>															
2. <u>Microstegium vimineum</u>	<u>10</u>	☒	<u>FAC</u>															
3. <u>Salvia azurea</u>	<u>5</u>		<u>FAC</u>															
4. <u>Viola sororia</u>	<u>5</u>		<u>FAC</u>															
5. <u>Oxalis grandis</u>	<u>3</u>		<u>UPL</u>															
6. <u>Quercus montana</u>	<u>2</u>		<u>UPL</u>															
7. <u>Liquidambar styraciflua</u>	<u>1</u>		<u>FAC</u>															
8. _____																		
9. _____																		
10. _____																		
11. _____																		
<u>36</u> = Total Cover 50% of total cover: <u>18.00</u> 20% of total cover: <u>7.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.				Hydrophytic Vegetation Present? Yes ☒ No _____														

SOIL

Sampling Point: DP-86

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	7.5YR 4/4	100					Silt Loam	
3 - 14	7.5YR 5/4	100					Silt Loam	
14 - 18	10YR 5/6	100					Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-17
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-87
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope (%): 2-3
Subregion (LRR or MLRA): P 136 Lat: 36.60395912 Long: -79.57101178 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>1</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-87

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Liquidambar styraciflua</u>	<u>45</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. <u>Acer rubrum</u>	<u>30</u>	☒	<u>FAC</u>															
3. <u>Quercus montana</u>	<u>15</u>		<u>UPL</u>															
4. <u>Nyssa sylvatica</u>	<u>10</u>		<u>FAC</u>															
5. <u>Liriodendron tulipifera</u>	<u>5</u>		<u>FACU</u>															
6. _____	_____		_____															
7. _____	_____		_____															
<u>105</u> = Total Cover 50% of total cover: <u>52.50</u> 20% of total cover: <u>21.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>3</u></td> <td>x 1 = <u>3</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>148</u></td> <td>x 3 = <u>444</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>196</u> (A)</td> <td><u>592</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.02</u>	Total % Cover of:	Multiply by:	OBL species <u>3</u>	x 1 = <u>3</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>148</u>	x 3 = <u>444</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>196</u> (A)	<u>592</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>3</u>	x 1 = <u>3</u>																	
FACW species <u>25</u>	x 2 = <u>50</u>																	
FAC species <u>148</u>	x 3 = <u>444</u>																	
FACU species <u>5</u>	x 4 = <u>20</u>																	
UPL species <u>15</u>	x 5 = <u>75</u>																	
Column Totals: <u>196</u> (A)	<u>592</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Nyssa sylvatica</u>	<u>5</u>	☒	<u>FAC</u>															
2. _____	_____		_____															
3. _____	_____		_____															
4. _____	_____		_____															
5. _____	_____		_____															
6. _____	_____		_____															
7. _____	_____		_____															
8. _____	_____		_____															
9. _____	_____		_____															
<u>5</u> = Total Cover 50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Microstegium vimineum</u>	<u>35</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Juncus effusus</u>	<u>25</u>	☒	<u>FACW</u>															
3. <u>Athyrium angustum</u>	<u>20</u>	☒	<u>FAC</u>															
4. <u>Cicuta maculata</u>	<u>3</u>		<u>OBL</u>															
5. <u>Smilax rotundifolia</u>	<u>3</u>		<u>FAC</u>															
6. _____	_____		_____															
7. _____	_____		_____															
8. _____	_____		_____															
9. _____	_____		_____															
10. _____	_____		_____															
11. _____	_____		_____															
<u>86</u> = Total Cover 50% of total cover: <u>43.00</u> 20% of total cover: <u>17.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____		_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. _____	_____		_____															
3. _____	_____		_____															
4. _____	_____		_____															
5. _____	_____		_____															
6. _____	_____		_____															
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																		

SOIL

Sampling Point: DP-87

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 4/1	100					Sandy Loam	
3 - 6	10YR 5/1	80	10YR 6/2	10	D	PL	Sandy Loam	
3 - 6			7.5YR 5/6	10	C	PL	Sandy Loam	Secondary redox color
6 - 18	10YR 5/1	65	10YR 6/1	15	D	PL	Sandy Clay Loam	
6 - 18			7.5YR 5/6	20	C	PL / M		Secondary redox color
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-17
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-88
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Stream Terrace Local relief (concave, convex, none): Concave Slope (%): 0-2%
Subregion (LRR or MLRA): P 136 Lat: 36.60402023 Long: -79.57097054 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No _____	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

Only one of the three wetland parameters (i.e. hydrophytic vegetation) was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	
Water Table Present? Yes _____ No ☒	Depth (inches): _____	
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-88

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Liquidambar styraciflua</u>	<u>35</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>7</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>87.50</u> (A/B)														
2. <u>Liriodendron tulipifera</u>	<u>30</u>	☒	<u>FACU</u>															
3. <u>Acer rubrum</u>	<u>15</u>		<u>FAC</u>															
4. <u>Carya tomentosa</u>	<u>15</u>		<u>UPL</u>															
5. _____	_____		_____															
6. _____	_____		_____															
7. _____	_____		_____															
<u>95</u> = Total Cover 50% of total cover: <u>47.50</u> 20% of total cover: <u>19.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>100</u></td> <td>x 3 = <u>300</u></td> </tr> <tr> <td>FACU species <u>34</u></td> <td>x 4 = <u>136</u></td> </tr> <tr> <td>UPL species <u>18</u></td> <td>x 5 = <u>90</u></td> </tr> <tr> <td>Column Totals: <u>152</u> (A)</td> <td><u>526</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.46</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>100</u>	x 3 = <u>300</u>	FACU species <u>34</u>	x 4 = <u>136</u>	UPL species <u>18</u>	x 5 = <u>90</u>	Column Totals: <u>152</u> (A)	<u>526</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>100</u>	x 3 = <u>300</u>																	
FACU species <u>34</u>	x 4 = <u>136</u>																	
UPL species <u>18</u>	x 5 = <u>90</u>																	
Column Totals: <u>152</u> (A)	<u>526</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Acer rubrum</u>	<u>15</u>	☒	<u>FAC</u>															
2. <u>Liquidambar styraciflua</u>	<u>10</u>	☒	<u>FAC</u>															
3. _____	_____		_____															
4. _____	_____		_____															
5. _____	_____		_____															
6. _____	_____		_____															
7. _____	_____		_____															
8. _____	_____		_____															
9. _____	_____		_____															
<u>25</u> = Total Cover 50% of total cover: <u>12.50</u> 20% of total cover: <u>5.00</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Smilax rotundifolia</u>	<u>8</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Liquidambar styraciflua</u>	<u>5</u>	☒	<u>FAC</u>															
3. <u>Acer rubrum</u>	<u>5</u>	☒	<u>FAC</u>															
4. <u>Juniperus virginiana</u>	<u>4</u>		<u>FACU</u>															
5. <u>Carya tomentosa</u>	<u>3</u>		<u>UPL</u>															
6. _____	_____		_____															
7. _____	_____		_____															
8. _____	_____		_____															
9. _____	_____		_____															
10. _____	_____		_____															
11. _____	_____		_____															
<u>25</u> = Total Cover 50% of total cover: <u>12.50</u> 20% of total cover: <u>5.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Vitis rotundifolia</u>	<u>7</u>	☒	<u>FAC</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. _____	_____		_____															
3. _____	_____		_____															
4. _____	_____		_____															
5. _____	_____		_____															
6. _____	_____		_____															
<u>7</u> = Total Cover 50% of total cover: <u>3.50</u> 20% of total cover: <u>1.40</u>																		
Hydrophytic Vegetation Present? Yes ☒ No _____																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: DP-88

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 4/2	100					Loam	
2 - 18	7.5YR 5/8	95					Sandy Loam	
2 - 18	10YR 4/4	5					Sandy Loam	Secondary matrix color
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-17
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-89
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.60348727 Long: -79.57062831 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-89

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>8</u></td> <td>x 1 = <u>8</u></td> </tr> <tr> <td>FACW species <u>43</u></td> <td>x 2 = <u>86</u></td> </tr> <tr> <td>FAC species <u>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>91</u> (A)</td> <td><u>214</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.35</u>	Total % Cover of:	Multiply by:	OBL species <u>8</u>	x 1 = <u>8</u>	FACW species <u>43</u>	x 2 = <u>86</u>	FAC species <u>40</u>	x 3 = <u>120</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>91</u> (A)	<u>214</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>8</u>	x 1 = <u>8</u>																	
FACW species <u>43</u>	x 2 = <u>86</u>																	
FAC species <u>40</u>	x 3 = <u>120</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>91</u> (A)	<u>214</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Salix nigra</u>	<u>8</u>	☒	<u>OBL</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
<u>8</u> = Total Cover 50% of total cover: <u>4.00</u> 20% of total cover: <u>1.60</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>25</u>	☒	<u>FACW</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. <u>Dichanthelium clandestinum</u>	<u>20</u>	☒	<u>FAC</u>															
3. <u>Cyperus esculentus</u>	<u>10</u>	_____	<u>FACW</u>															
4. <u>Microstegium vimineum</u>	<u>10</u>	_____	<u>FAC</u>															
5. <u>Solidago rugosa</u>	<u>10</u>	_____	<u>FAC</u>															
6. <u>Aster paludosus</u>	<u>8</u>	_____	<u>FACW</u>															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>83</u> = Total Cover 50% of total cover: <u>41.50</u> 20% of total cover: <u>16.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		

Remarks: (Include photo numbers here or on a separate sheet.)

No sapling/shrub or woody vine strata were observed at this data point.

SOIL

Sampling Point: DP-89

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 4/4	95	7.5YR 5/6	5	C	PL	Clay Loam	
2 - 14	2.5Y 4/2	90	7.5YR 5/8	10	C	PL	Sandy Clay Loam	
14 - 18	10YR 5/2	95	7.5YR 5/6	5	C	PL	Sandy Clay Loam	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-17
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-90
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 4-5
Subregion (LRR or MLRA): P 136 Lat: 36.60346593 Long: -79.57066128 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-90

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>52</u></td> <td>x 3 = <u>156</u></td> </tr> <tr> <td>FACU species <u>21</u></td> <td>x 4 = <u>84</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>83</u> (A)</td> <td><u>290</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.49</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>52</u>	x 3 = <u>156</u>	FACU species <u>21</u>	x 4 = <u>84</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>83</u> (A)	<u>290</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>52</u>	x 3 = <u>156</u>																	
FACU species <u>21</u>	x 4 = <u>84</u>																	
UPL species <u>10</u>	x 5 = <u>50</u>																	
Column Totals: <u>83</u> (A)	<u>290</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Dichanthelium clandestinum</u>	<u>40</u>	<u>✓</u>	<u>FAC</u>															
2. <u>Dactylis glomerata</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>															
3. <u>Arthraxon hispidus</u>	<u>12</u>		<u>FAC</u>															
4. <u>Daucus carota</u>	<u>10</u>		<u>UPL</u>															
5. <u>Solidago altissima</u>	<u>6</u>		<u>FACU</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>83</u> = Total Cover																		
50% of total cover: <u>41.50</u> 20% of total cover: <u>16.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ✓

SOIL

Sampling Point: DP-90

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-17
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-91
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 1-2
Subregion (LRR or MLRA): P 136 Lat: 36.59879502 Long: -79.57442631 Datum: WGS 84
Soil Map Unit Name: 5C3 - Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-91

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>60</u></td> <td>x 2 = <u>120</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>25</u></td> <td>x 4 = <u>100</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>85</u> (A)</td> <td><u>220</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.58</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>60</u>	x 2 = <u>120</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>25</u>	x 4 = <u>100</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>85</u> (A)	<u>220</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>60</u>	x 2 = <u>120</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>25</u>	x 4 = <u>100</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>85</u> (A)	<u>220</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>50</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Lonicera japonica</u>	<u>10</u>	☐	<u>FACU</u>															
3. <u>Lolium perenne</u>	<u>10</u>	☐	<u>FACU</u>															
4. <u>Cyperus esculentus</u>	<u>10</u>	☐	<u>FACW</u>															
5. <u>Securigera varia</u>	<u>5</u>	☐	<u>FACU</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>85</u> = Total Cover																		
50% of total cover: <u>42.50</u> 20% of total cover: <u>17.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-91

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-17
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-92
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.5989413 Long: -79.57436648 Datum: WGS 84
Soil Map Unit Name: 5C3 - Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-92

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>55</u></td> <td>x 4 = <u>220</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>60</u> (A)</td> <td><u>230</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.83</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>55</u>	x 4 = <u>220</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>60</u> (A)	<u>230</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>5</u>	x 2 = <u>10</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>55</u>	x 4 = <u>220</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>60</u> (A)	<u>230</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Poa annua</u>	<u>25</u>	☒	<u>FACU</u>															
2. <u>Dactylis glomerata</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Lonicera japonica</u>	<u>10</u>		<u>FACU</u>															
4. <u>Agrimonia parviflora</u>	<u>5</u>		<u>FACW</u>															
5. <u>Galium triflorum</u>	<u>5</u>		<u>FACU</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>60</u> = Total Cover																		
50% of total cover: <u>30.00</u> 20% of total cover: <u>12.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-92

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-17
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-93
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 1-3
Subregion (LRR or MLRA): P 136 Lat: 36.59867988 Long: -79.5742266 Datum: WGS 84
Soil Map Unit Name: 5C3 - Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		_____ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes ☒ No _____ Depth (inches): 0.5
Water Table Present? Yes ☒ No _____ Depth (inches): 0
Saturation Present? Yes ☒ No _____ Depth (inches): 0
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-93

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Acer rubrum</u>	<u>40</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. <u>Ulmus americana</u>	<u>25</u>	☒	<u>FACW</u>															
3. <u>Carpinus caroliniana</u>	<u>10</u>		<u>FAC</u>															
4. _____																		
5. _____				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>65</u></td> <td>x 3 = <u>195</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>255</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.68</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>65</u>	x 3 = <u>195</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>95</u> (A)	<u>255</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>30</u>	x 2 = <u>60</u>																	
FAC species <u>65</u>	x 3 = <u>195</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>95</u> (A)	<u>255</u> (B)																	
6. _____																		
7. _____																		

<u>75</u> = Total Cover 50% of total cover: <u>37.50</u> 20% of total cover: <u>15.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Lindera benzoin</u>	<u>15</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. _____																		
3. _____																		
4. _____																		
5. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
6. _____																		
7. _____																		
8. _____																		
9. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
10. _____																		
11. _____																		

<u>15</u> = Total Cover 50% of total cover: <u>7.50</u> 20% of total cover: <u>3.00</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Cyperus esculentus</u>	<u>5</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Present? Yes ☒ No _____														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		

<u>5</u> = Total Cover 50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		

_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL

Sampling Point: DP-93

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 6	2.5Y 4/2	95	7.5YR 5/8	5	C	PL / M	Sandy Clay	
6 - 12	2.5Y 5/2	90	7.5YR 5/8	10	C	PL / M	Sandy Clay	
12 - 18	2.5Y 5/2	70	7.5YR 5/8	20	C	M	Sandy Clay	
12 - 18			2.5Y 6/1	10	D	M	Sandy Clay	Secondary redox feature
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-17
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-94
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.60187959 Long: -79.56685815 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>3</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-94

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.66</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>15</u></td> <td>x 1 = <u>15</u></td> </tr> <tr> <td>FACW species <u>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>23</u></td> <td>x 3 = <u>69</u></td> </tr> <tr> <td>FACU species <u>25</u></td> <td>x 4 = <u>100</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>93</u> (A)</td> <td><u>244</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.62</u>	Total % Cover of:	Multiply by:	OBL species <u>15</u>	x 1 = <u>15</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>23</u>	x 3 = <u>69</u>	FACU species <u>25</u>	x 4 = <u>100</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>93</u> (A)	<u>244</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>15</u>	x 1 = <u>15</u>																	
FACW species <u>30</u>	x 2 = <u>60</u>																	
FAC species <u>23</u>	x 3 = <u>69</u>																	
FACU species <u>25</u>	x 4 = <u>100</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>93</u> (A)	<u>244</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>30</u>	☒	<u>FACW</u>															
2. <u>Lolium perenne</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Carex lacustris</u>	<u>15</u>	☒	<u>OBL</u>															
4. <u>Juncus tenuis</u>	<u>10</u>		<u>FAC</u>															
5. <u>Trifolium repens</u>	<u>10</u>		<u>FACU</u>															
6. <u>Rumex crispus</u>	<u>8</u>		<u>FAC</u>															
7. <u>Holcus lanatus</u>	<u>5</u>		<u>FAC</u>															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>93</u> = Total Cover																		
50% of total cover: <u>46.50</u> 20% of total cover: <u>18.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-94

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 6/1	90	7.5YR 5/6	8	C	PL / M	Loam	
0 - 3			10YR 6/2	2	D	M		Secondary redox feature
3 - 8	10YR 4/1	70	10YR 6/1	10	D	PL / M	Clay Loam	
-			7.5YR 5/6	20	C	PL / M		Secondary redox color
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Bedrock

Depth (inches): 8+

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-17
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-95
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.6018262 Long: -79.56682608 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-95

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>104</u></td> <td>x 4 = <u>416</u></td> </tr> <tr> <td>UPL species <u>6</u></td> <td>x 5 = <u>30</u></td> </tr> <tr> <td>Column Totals: <u>115</u> (A)</td> <td><u>461</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.00</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>104</u>	x 4 = <u>416</u>	UPL species <u>6</u>	x 5 = <u>30</u>	Column Totals: <u>115</u> (A)	<u>461</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>5</u>	x 3 = <u>15</u>																	
FACU species <u>104</u>	x 4 = <u>416</u>																	
UPL species <u>6</u>	x 5 = <u>30</u>																	
Column Totals: <u>115</u> (A)	<u>461</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Trifolium repens</u>	<u>70</u>	☒	<u>FACU</u>															
2. <u>Lolium perenne</u>	<u>20</u>	☐	<u>FACU</u>															
3. <u>Cerastium fontanum</u>	<u>10</u>	☐	<u>FACU</u>															
4. <u>Holcus lanatus</u>	<u>5</u>	☐	<u>FAC</u>															
5. <u>Veronica arvensis</u>	<u>5</u>	☐	<u>UPL</u>															
6. <u>Anthoxanthum odoratum</u>	<u>2</u>	☐	<u>FACU</u>															
7. <u>Oxalis corniculata</u>	<u>2</u>	☐	<u>FACU</u>															
8. <u>Geranium carolinianum</u>	<u>1</u>	☐	<u>UPL</u>															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>115</u> = Total Cover																		
50% of total cover: <u>57.50</u> 20% of total cover: <u>23.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ☒

SOIL

Sampling Point: DP-95

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 4/4	100					Clay Loam	
2 - 10	10YR 6/2	100					Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Bedrock

Depth (inches): 10+

Hydric Soil Present? Yes ☐ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-17
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-96
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.59601446 Long: -79.57718764 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Only one secondary wetland hydrology indicator (i.e., geomorphic position) was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-96

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>20</u></td> <td>x 3 = <u>60</u></td> </tr> <tr> <td>FACU species <u>15</u></td> <td>x 4 = <u>60</u></td> </tr> <tr> <td>UPL species <u>50</u></td> <td>x 5 = <u>250</u></td> </tr> <tr> <td>Column Totals: <u>85</u> (A)</td> <td><u>370</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.35</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>20</u>	x 3 = <u>60</u>	FACU species <u>15</u>	x 4 = <u>60</u>	UPL species <u>50</u>	x 5 = <u>250</u>	Column Totals: <u>85</u> (A)	<u>370</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>20</u>	x 3 = <u>60</u>																	
FACU species <u>15</u>	x 4 = <u>60</u>																	
UPL species <u>50</u>	x 5 = <u>250</u>																	
Column Totals: <u>85</u> (A)	<u>370</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Cerastium arvense</u>	<u>45</u>	☒	<u>UPL</u>															
2. <u>Ranunculus bulbosus</u>	<u>20</u>	☒	<u>FAC</u>															
3. <u>Andropogon virginicus</u>	<u>15</u>		<u>FACU</u>															
4. <u>Plantago lanceolata</u>	<u>5</u>		<u>UPL</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>85</u> = Total Cover				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
50% of total cover: <u>42.50</u> 20% of total cover: <u>17.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes _____ No ☒														

No tree, sapling/shrub, or woody vine strata were observed at this data point.

SOIL

Sampling Point: DP-96

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-18
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-97
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.59605824 Long: -79.57729242 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>0</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-97

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>60</u></td> <td>x 1 = <u>60</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>85</u> (A)</td> <td><u>110</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.29</u>	Total % Cover of:	Multiply by:	OBL species <u>60</u>	x 1 = <u>60</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>85</u> (A)	<u>110</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>60</u>	x 1 = <u>60</u>																	
FACW species <u>25</u>	x 2 = <u>50</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>85</u> (A)	<u>110</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Carex crinita</u>	<u>60</u>	☒	<u>OBL</u>	Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Juncus effusus</u>	<u>25</u>	☒	<u>FACW</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>85</u> = Total Cover																		
50% of total cover: <u>42.50</u> 20% of total cover: <u>17.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-97

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-18
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-98
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.59572621 Long: -79.57714603 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
_____ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
_____ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☒ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes ☒ No _____ Depth (inches): 0.25
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-98

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Acer rubrum</u>	<u>40</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. <u>Liquidambar styraciflua</u>	<u>15</u>	☒	<u>FAC</u>															
3. <u>Juniperus virginiana</u>	<u>5</u>		<u>FACU</u>															
4. _____																		
5. _____				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>10</u></td> <td>x 1 = <u>10</u></td> </tr> <tr> <td>FACW species <u>13</u></td> <td>x 2 = <u>26</u></td> </tr> <tr> <td>FAC species <u>83</u></td> <td>x 3 = <u>249</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>116</u> (A)</td> <td><u>325</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.80</u>	Total % Cover of:	Multiply by:	OBL species <u>10</u>	x 1 = <u>10</u>	FACW species <u>13</u>	x 2 = <u>26</u>	FAC species <u>83</u>	x 3 = <u>249</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>116</u> (A)	<u>325</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>10</u>	x 1 = <u>10</u>																	
FACW species <u>13</u>	x 2 = <u>26</u>																	
FAC species <u>83</u>	x 3 = <u>249</u>																	
FACU species <u>10</u>	x 4 = <u>40</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>116</u> (A)	<u>325</u> (B)																	
6. _____																		
7. _____																		
8. _____																		
50% of total cover: <u>30.00</u> 20% of total cover: <u>12.00</u> Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
1. <u>Liquidambar styraciflua</u>	<u>8</u>	☒	<u>FAC</u>															
2. _____																		
3. _____																		
4. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
5. _____																		
6. _____																		
7. _____																		
8. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
9. _____																		
10. _____																		
11. _____																		
50% of total cover: <u>4.00</u> 20% of total cover: <u>1.60</u> Herb Stratum (Plot size: <u>5 ft r</u>)				Hydrophytic Vegetation Present? Yes ☒ No _____														
1. <u>Anthoxanthum hirtum</u>	<u>10</u>	☒	<u>FACW</u>															
2. <u>Carex crinita</u>	<u>10</u>	☒	<u>OBL</u>															
3. <u>Microstegium vimineum</u>	<u>10</u>	☒	<u>FAC</u>															
4. <u>Athyrium asplenoides</u>	<u>5</u>		<u>FAC</u>	Remarks: (Include photo numbers here or on a separate sheet.) <u>No woody vine stratum was observed at this data point.</u>														
5. <u>Liquidambar styraciflua</u>	<u>5</u>		<u>FAC</u>															
6. <u>Solidago altissima</u>	<u>5</u>		<u>FACU</u>															
7. <u>Juncus effusus</u>	<u>3</u>		<u>FACW</u>															
8. _____				50% of total cover: _____ 20% of total cover: _____ Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
9. _____																		
10. _____																		
11. _____																		
50% of total cover: _____ 20% of total cover: _____ Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: DP-98

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 4/2	95	7.5YR 4/6	5	C	PL	Clay Loam	
3 - 18	10YR 5/1	80	7.5YR 5/8	15	C	PL	Clay Loam	
3 - 18			10YR 7/1	5	D	M	Clay Loam	Secondary Redox feature
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-18
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-99 STP
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.59531864 Long: -79.5789217 Datum: WGS 84
Soil Map Unit Name: 23B - Clover fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

Only two (i.e., wetland hydrology and hydric soils) of the three wetland parameters were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-99 STP

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>35</u></td> <td>x 3 = <u>105</u></td> </tr> <tr> <td>FACU species <u>70</u></td> <td>x 4 = <u>280</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>105</u> (A)</td> <td><u>385</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.66</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>35</u>	x 3 = <u>105</u>	FACU species <u>70</u>	x 4 = <u>280</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>105</u> (A)	<u>385</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>35</u>	x 3 = <u>105</u>																	
FACU species <u>70</u>	x 4 = <u>280</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>105</u> (A)	<u>385</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Anthoxanthum odoratum</u>	<u>45</u>	<u>✓</u>	<u>FACU</u>															
2. <u>Juncus tenuis</u>	<u>35</u>	<u>✓</u>	<u>FAC</u>															
3. <u>Andropogon virginicus</u>	<u>15</u>		<u>FACU</u>															
4. <u>Lolium perenne</u>	<u>10</u>		<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>105</u> = Total Cover																		
50% of total cover: <u>52.50</u> 20% of total cover: <u>21.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-99 STP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 4/2	90	7.5YR 5/6	10	C	PL / M	Clay Loam	
3 - 18	10YR 5/3	90	7.5YR 5/6	10	C	PL / M	Sandy Clay	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-22
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-100
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.61373527 Long: -79.56288849 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes ☒ No _____ Depth (inches): 0.5
Water Table Present? Yes ☒ No _____ Depth (inches): 2
Saturation Present? Yes ☒ No _____ Depth (inches): 0
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with standing water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-100

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Liquidambar styraciflua</u>	<u>20</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>85.71</u> (A/B)														
2. <u>Acer rubrum</u>	<u>15</u>	☒	<u>FAC</u>															
3. <u>Liriodendron tulipifera</u>	<u>15</u>	☒	<u>FACU</u>															
4. <u>Carpinus caroliniana</u>	<u>10</u>		<u>FAC</u>															
5. <u>Quercus alba</u>	<u>5</u>		<u>FACU</u>															
6. _____	_____		_____															
7. _____	_____		_____															
<u>65</u> = Total Cover 50% of total cover: <u>32.50</u> 20% of total cover: <u>13.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>12</u></td> <td>x 1 = <u>12</u></td> </tr> <tr> <td>FACW species <u>17</u></td> <td>x 2 = <u>34</u></td> </tr> <tr> <td>FAC species <u>95</u></td> <td>x 3 = <u>285</u></td> </tr> <tr> <td>FACU species <u>26</u></td> <td>x 4 = <u>104</u></td> </tr> <tr> <td>UPL species <u>3</u></td> <td>x 5 = <u>15</u></td> </tr> <tr> <td>Column Totals: <u>153</u> (A)</td> <td><u>450</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.94</u>	Total % Cover of:	Multiply by:	OBL species <u>12</u>	x 1 = <u>12</u>	FACW species <u>17</u>	x 2 = <u>34</u>	FAC species <u>95</u>	x 3 = <u>285</u>	FACU species <u>26</u>	x 4 = <u>104</u>	UPL species <u>3</u>	x 5 = <u>15</u>	Column Totals: <u>153</u> (A)	<u>450</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>12</u>	x 1 = <u>12</u>																	
FACW species <u>17</u>	x 2 = <u>34</u>																	
FAC species <u>95</u>	x 3 = <u>285</u>																	
FACU species <u>26</u>	x 4 = <u>104</u>																	
UPL species <u>3</u>	x 5 = <u>15</u>																	
Column Totals: <u>153</u> (A)	<u>450</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Oxydendrum arboreum</u>	<u>3</u>		<u>UPL</u>															
2. _____	_____		_____															
3. _____	_____		_____															
4. _____	_____		_____															
5. _____	_____		_____															
6. _____	_____		_____															
7. _____	_____		_____															
8. _____	_____		_____															
9. _____	_____		_____															
<u>3</u> = Total Cover 50% of total cover: <u>1.50</u> 20% of total cover: <u>0.60</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Microstegium vimineum</u>	<u>20</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Smilax rotundifolia</u>	<u>15</u>	☒	<u>FAC</u>															
3. <u>Carex vulpinoidea</u>	<u>12</u>	☒	<u>OBL</u>															
4. <u>Osmundastrum cinnamomeum</u>	<u>12</u>	☒	<u>FACW</u>															
5. <u>Athyrium asplenoides</u>	<u>10</u>		<u>FAC</u>															
6. <u>Dichantherium clandestinum</u>	<u>5</u>		<u>FAC</u>															
7. <u>Juncus effusus</u>	<u>5</u>		<u>FACW</u>															
8. <u>Maianthemum racemosum</u>	<u>3</u>		<u>FACU</u>															
9. <u>Solidago altissima</u>	<u>3</u>		<u>FACU</u>															
10. _____	_____		_____															
11. _____	_____		_____															
<u>85</u> = Total Cover 50% of total cover: <u>42.50</u> 20% of total cover: <u>17.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____		_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. _____	_____		_____															
3. _____	_____		_____															
4. _____	_____		_____															
5. _____	_____		_____															
6. _____	_____		_____															
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																		

SOIL

Sampling Point: DP-100

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-22
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-101
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.61379199 Long: -79.56289781 Datum: WGS 84
Soil Map Unit Name: 4C - Clifford sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present?	Yes _____	No ☒	
Wetland Hydrology Present?	Yes _____	No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Only one secondary wetland hydrology indicator (i.e., geomorphic position) was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-101

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. <u>Oxydendrum arboreum</u>	<u>20</u>	☒	<u>UPL</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20.00</u> (A/B)																
2. <u>Liriodendron tulipifera</u>	<u>15</u>	☒	<u>FACU</u>																	
3. <u>Quercus alba</u>	<u>10</u>		<u>FACU</u>																	
4. <u>Quercus montana</u>	<u>10</u>		<u>UPL</u>																	
5. <u>Acer rubrum</u>	<u>5</u>		<u>FAC</u>																	
6. <u>Liquidambar styraciflua</u>	<u>5</u>		<u>FAC</u>																	
7. _____				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>15</u></td> <td>x 3 = <u>45</u></td> </tr> <tr> <td>FACU species <u>32</u></td> <td>x 4 = <u>128</u></td> </tr> <tr> <td>UPL species <u>50</u></td> <td>x 5 = <u>250</u></td> </tr> <tr> <td>Column Totals: <u>97</u> (A)</td> <td><u>423</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.36</u></td> </tr> </table> Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>15</u>	x 3 = <u>45</u>	FACU species <u>32</u>	x 4 = <u>128</u>	UPL species <u>50</u>	x 5 = <u>250</u>	Column Totals: <u>97</u> (A)	<u>423</u> (B)	Prevalence Index = B/A = <u>4.36</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>15</u>	x 3 = <u>45</u>																			
FACU species <u>32</u>	x 4 = <u>128</u>																			
UPL species <u>50</u>	x 5 = <u>250</u>																			
Column Totals: <u>97</u> (A)	<u>423</u> (B)																			
Prevalence Index = B/A = <u>4.36</u>																				
50% of total cover: <u>32.50</u> 20% of total cover: <u>13.00</u> Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																				
1. <u>Cornus florida</u>	<u>5</u>	☒	<u>FACU</u>																	
2. <u>Liquidambar styraciflua</u>	<u>2</u>	☒	<u>FAC</u>																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
50% of total cover: <u>3.50</u> 20% of total cover: <u>1.40</u> Herb Stratum (Plot size: <u>5 ft r</u>)																				
1. <u>Quercus montana</u>	<u>20</u>	☒	<u>UPL</u>																	
2. <u>Smilax rotundifolia</u>	<u>3</u>		<u>FAC</u>																	
3. <u>Maianthemum racemosum</u>	<u>2</u>		<u>FACU</u>																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
50% of total cover: <u>12.50</u> 20% of total cover: <u>5.00</u> Woody Vine Stratum (Plot size: <u>30 ft r</u>)																				
1. _____																				
2. _____																				
3. _____																				
4. _____																				
5. _____																				
50% of total cover: _____ 20% of total cover: _____ _____ = Total Cover																				
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																				

SOIL

Sampling Point: DP-101

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2025-01-14
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-102
Investigator(s): KZ, JF Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2-4%
Subregion (LRR or MLRA): P 136 Lat: 36.613901 Long: -79.562018 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____ No ☒
Hydric Soil Present?	Yes _____	No ☒		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

Only two of the three wetland parameters (i.e., wetland hydrology and hydrophytic vegetation) were satisfied at this data point. This data point was updated during additional fieldwork conducted on January 14, 2025.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-102

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>32</u></td> <td>x 2 = <u>64</u></td> </tr> <tr> <td>FAC species <u>25</u></td> <td>x 3 = <u>75</u></td> </tr> <tr> <td>FACU species <u>17</u></td> <td>x 4 = <u>68</u></td> </tr> <tr> <td>UPL species <u>7</u></td> <td>x 5 = <u>35</u></td> </tr> <tr> <td>Column Totals: <u>81</u> (A)</td> <td><u>242</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.98</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>32</u>	x 2 = <u>64</u>	FAC species <u>25</u>	x 3 = <u>75</u>	FACU species <u>17</u>	x 4 = <u>68</u>	UPL species <u>7</u>	x 5 = <u>35</u>	Column Totals: <u>81</u> (A)	<u>242</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>32</u>	x 2 = <u>64</u>																	
FAC species <u>25</u>	x 3 = <u>75</u>																	
FACU species <u>17</u>	x 4 = <u>68</u>																	
UPL species <u>7</u>	x 5 = <u>35</u>																	
Column Totals: <u>81</u> (A)	<u>242</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Microstegium vimineum</u>	<u>25</u>	☒	<u>FAC</u>															
2. <u>Juncus effusus</u>	<u>20</u>	☒	<u>FACW</u>															
3. <u>Carex grayi</u>	<u>12</u>		<u>FACW</u>															
4. <u>Gamochaeta pensylvanica</u>	<u>7</u>		<u>UPL</u>															
5. <u>Verbesina occidentalis</u>	<u>7</u>		<u>FACU</u>															
6. <u>Solidago altissima</u>	<u>5</u>		<u>FACU</u>															
7. <u>Lonicera japonica</u>	<u>5</u>		<u>FACU</u>															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>81</u> = Total Cover																		
50% of total cover: <u>40.50</u> 20% of total cover: <u>16.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No trees, sapling/shrub, or woody vine strata were observed at this data point.				Hydrophytic Vegetation Present?														
				Yes ☒ No _____														

SOIL

Sampling Point: DP-102

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 4/1	100					Loam	
2 - 10	2.5Y 5/3	95	7.5YR 5/6	5	C	PL	Sandy Clay Loam	
10 - 18	2.5Y 5/3	80	7.5YR 5/6	20	C	PL / M	Clay Loam	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-22
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-103
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 4-6%
Subregion (LRR or MLRA): P 136 Lat: 36.613862 Long: -79.562014 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-103

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>8</u></td> <td>x 3 = <u>24</u></td> </tr> <tr> <td>FACU species <u>58</u></td> <td>x 4 = <u>232</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>66</u> (A)</td> <td><u>256</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.87</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>8</u>	x 3 = <u>24</u>	FACU species <u>58</u>	x 4 = <u>232</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>66</u> (A)	<u>256</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>8</u>	x 3 = <u>24</u>																	
FACU species <u>58</u>	x 4 = <u>232</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>66</u> (A)	<u>256</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Lolium perenne</u>	<u>25</u>	<u>✓</u>	<u>FACU</u>															
2. <u>Lonicera japonica</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>															
3. <u>Anthoxanthum odoratum</u>	<u>10</u>		<u>FACU</u>															
4. <u>Rubus allegheniensis</u>	<u>8</u>		<u>FACU</u>															
5. <u>Ranunculus bulbosus</u>	<u>8</u>		<u>FAC</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>66</u> = Total Cover																		
50% of total cover: <u>33.00</u> 20% of total cover: <u>13.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ✓

SOIL

Sampling Point: DP-103

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 8	7.5YR 5/4	100					Loam	
8 - 18	7.5YR 5/8	80					Sandy Loam	
8 - 18	7.5YR 5/2	20					Sandy Loam	Secondary matrix color
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-22
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-104
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 0-3
Subregion (LRR or MLRA): P 136 Lat: 36.61433924 Long: -79.56149317 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes ☒ No _____ Depth (inches): 0.5
Water Table Present? Yes ☒ No _____ Depth (inches): 2
Saturation Present? Yes ☒ No _____ Depth (inches): 0
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-104

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>30</u></td> <td>x 1 = <u>30</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>28</u></td> <td>x 3 = <u>84</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>83</u> (A)</td> <td><u>174</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.09</u>	Total % Cover of:	Multiply by:	OBL species <u>30</u>	x 1 = <u>30</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>28</u>	x 3 = <u>84</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>83</u> (A)	<u>174</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>30</u>	x 1 = <u>30</u>																	
FACW species <u>20</u>	x 2 = <u>40</u>																	
FAC species <u>28</u>	x 3 = <u>84</u>																	
FACU species <u>5</u>	x 4 = <u>20</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>83</u> (A)	<u>174</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Carex lurida</u>	<u>30</u>	☒	<u>OBL</u>															
2. <u>Microstegium vimineum</u>	<u>25</u>	☒	<u>FAC</u>															
3. <u>Juncus effusus</u>	<u>20</u>	☒	<u>FACW</u>															
4. <u>Solidago altissima</u>	<u>5</u>		<u>FACU</u>															
5. <u>Dichanthelium clandestinum</u>	<u>3</u>		<u>FAC</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>83</u> = Total Cover																		
50% of total cover: <u>41.50</u> 20% of total cover: <u>16.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-104

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 6	10YR 4/1	85	7.5YR 5/8	15	C	PL	Silty Clay	
6 - 18	10YR 5/1	60	7.5YR 5/6	20	C	PL / M	Silt Loam	
6 - 18			7.5YR 5/8	10	C	PL / M	Silt Loam	Secondary Redox feature
6 - 18			10YR 7/1	10	C	PL / M	Silt Loam	Secondary Redox feature
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-22
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-105
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 0-3
Subregion (LRR or MLRA): P 136 Lat: 36.61435283 Long: -79.56158074 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	
Water Table Present? Yes _____ No ☒	Depth (inches): _____	
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-105

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>8</u></td> <td>x 3 = <u>24</u></td> </tr> <tr> <td>FACU species <u>42</u></td> <td>x 4 = <u>168</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>60</u> (A)</td> <td><u>242</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.03</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>8</u>	x 3 = <u>24</u>	FACU species <u>42</u>	x 4 = <u>168</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>60</u> (A)	<u>242</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>8</u>	x 3 = <u>24</u>																	
FACU species <u>42</u>	x 4 = <u>168</u>																	
UPL species <u>10</u>	x 5 = <u>50</u>																	
Column Totals: <u>60</u> (A)	<u>242</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Anthoxanthum aristatum</u>	<u>20</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Lonicera japonica</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Viola sororia</u>	<u>8</u>		<u>FAC</u>															
4. <u>Rubus allegheniensis</u>	<u>7</u>		<u>FACU</u>															
5. <u>Gamochaeta pensylvanica</u>	<u>5</u>		<u>UPL</u>															
6. <u>Plantago lanceolata</u>	<u>5</u>		<u>UPL</u>															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>60</u> = Total Cover																		
50% of total cover: <u>30.00</u> 20% of total cover: <u>12.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) <u>No tree, sapling/shrub, or woody vine strata were observed at this data point.</u>																		

SOIL

Sampling Point: DP-105

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 18	10YR 4/2	70					Silt Loam	
0 - 18	10YR 4/4	30					Silt Loam	Secondary matrix color
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (LRR N)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (MLRA 147, 148)
- ☐ Thin Dark Surface (S9) (MLRA 147, 148)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ☐ Umbric Surface (F13) (MLRA 136, 122)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 148)
- ☐ Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (MLRA 147)
- ☐ Coast Prairie Redox (A16) (MLRA 147, 148)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-22
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-106
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.6172819 Long: -79.55970629 Datum: WGS 84
Soil Map Unit Name: 5C3 - Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-106

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>25</u></td> <td>x 1 = <u>25</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>13</u></td> <td>x 3 = <u>39</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>63</u> (A)</td> <td><u>129</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.04</u>	Total % Cover of:	Multiply by:	OBL species <u>25</u>	x 1 = <u>25</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>13</u>	x 3 = <u>39</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>63</u> (A)	<u>129</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>25</u>	x 1 = <u>25</u>																	
FACW species <u>20</u>	x 2 = <u>40</u>																	
FAC species <u>13</u>	x 3 = <u>39</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>5</u>	x 5 = <u>25</u>																	
Column Totals: <u>63</u> (A)	<u>129</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Carex lurida</u>	<u>25</u>	☒	<u>OBL</u>	Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Juncus effusus</u>	<u>15</u>	☒	<u>FACW</u>															
3. <u>Dichanthelium clandestinum</u>	<u>10</u>		<u>FAC</u>															
4. <u>Anthoxanthum hirtum</u>	<u>5</u>		<u>FACW</u>															
5. <u>Cerastium arvense</u>	<u>5</u>		<u>UPL</u>															
6. <u>Sambucus canadensis</u>	<u>3</u>		<u>FAC</u>															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>63</u> = Total Cover																		
50% of total cover: <u>31.50</u> 20% of total cover: <u>12.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.)																		
No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-106

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 5	10YR 4/2	85	7.5YR 5/8	15	C	PL / M	Sandy Loam	
5 - 18	10YR 6/2	60	7.5YR 5/8	25	C	PL / M	Clay Loam	
5 - 18			N 6/1	15	D	M	Clay Loam	Secondary redox color
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-22
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-107
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.61716204 Long: -79.55980485 Datum: WGS 84
Soil Map Unit Name: 5C3 - Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	
Water Table Present? Yes _____ No ☒	Depth (inches): _____	
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-107

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>41</u></td> <td>x 4 = <u>164</u></td> </tr> <tr> <td>UPL species <u>8</u></td> <td>x 5 = <u>40</u></td> </tr> <tr> <td>Column Totals: <u>59</u> (A)</td> <td><u>234</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.96</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>41</u>	x 4 = <u>164</u>	UPL species <u>8</u>	x 5 = <u>40</u>	Column Totals: <u>59</u> (A)	<u>234</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>10</u>	x 3 = <u>30</u>																	
FACU species <u>41</u>	x 4 = <u>164</u>																	
UPL species <u>8</u>	x 5 = <u>40</u>																	
Column Totals: <u>59</u> (A)	<u>234</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Anthoxanthum odoratum</u>	<u>15</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Dichanthelium clandestinum</u>	<u>10</u>	☒	<u>FAC</u>															
3. <u>Daucus carota</u>	<u>8</u>	☒	<u>UPL</u>															
4. <u>Verbesina occidentalis</u>	<u>8</u>	☒	<u>FACU</u>															
5. <u>Lonicera japonica</u>	<u>5</u>		<u>FACU</u>															
6. <u>Rosa multiflora</u>	<u>5</u>		<u>FACU</u>															
7. <u>Rubus allegheniensis</u>	<u>5</u>		<u>FACU</u>															
8. <u>Parthenocissus quinquefolia</u>	<u>3</u>		<u>FACU</u>															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>59</u> = Total Cover																		
50% of total cover: <u>29.50</u> 20% of total cover: <u>11.80</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point. Vegetation confined to area outside of the PEM wetland.																		

Hydrophytic Vegetation Present? Yes _____ No ☒

SOIL

Sampling Point: DP-107

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 8	7.5YR 5/6	50					Silt Loam	
0 - 8	7.5YR 5/4	50					Silt Loam	Secondary matrix color
8 - 18	2.5Y 5/3	90	7.5YR 6/8	10	C	PL / M	Silt Loam	
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-23
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-108
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 3-5
Subregion (LRR or MLRA): P 136 Lat: 36.62342953 Long: -79.55313406 Datum: WGS 84
Soil Map Unit Name: 11C3 - Minnieville clay loam, 7 to 15 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes ☒ No _____ Depth (inches): <u>0.5</u>	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>2</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-108

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>17</u></td> <td>x 1 = <u>17</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>25</u></td> <td>x 3 = <u>75</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>77</u> (A)</td> <td><u>182</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.36</u>	Total % Cover of:	Multiply by:	OBL species <u>17</u>	x 1 = <u>17</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>25</u>	x 3 = <u>75</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>77</u> (A)	<u>182</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>17</u>	x 1 = <u>17</u>																	
FACW species <u>25</u>	x 2 = <u>50</u>																	
FAC species <u>25</u>	x 3 = <u>75</u>																	
FACU species <u>10</u>	x 4 = <u>40</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>77</u> (A)	<u>182</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Holcus lanatus</u>	<u>25</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Carex lurida</u>	<u>17</u>	☒	<u>OBL</u>															
3. <u>Juncus effusus</u>	<u>17</u>	☒	<u>FACW</u>															
4. <u>Lonicera japonica</u>	<u>10</u>		<u>FACU</u>															
5. <u>Agrimonia parviflora</u>	<u>8</u>		<u>FACW</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>77</u> = Total Cover																		
50% of total cover: <u>38.50</u> 20% of total cover: <u>15.40</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-108

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-23
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-109
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 3-4
Subregion (LRR or MLRA): P 136 Lat: 36.62338244 Long: -79.55306153 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-109

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>13</u></td> <td>x 3 = <u>39</u></td> </tr> <tr> <td>FACU species <u>60</u></td> <td>x 4 = <u>240</u></td> </tr> <tr> <td>UPL species <u>13</u></td> <td>x 5 = <u>65</u></td> </tr> <tr> <td>Column Totals: <u>86</u> (A)</td> <td><u>344</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.00</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>13</u>	x 3 = <u>39</u>	FACU species <u>60</u>	x 4 = <u>240</u>	UPL species <u>13</u>	x 5 = <u>65</u>	Column Totals: <u>86</u> (A)	<u>344</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>13</u>	x 3 = <u>39</u>																	
FACU species <u>60</u>	x 4 = <u>240</u>																	
UPL species <u>13</u>	x 5 = <u>65</u>																	
Column Totals: <u>86</u> (A)	<u>344</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Lolium perenne</u>	<u>45</u>	☒	<u>FACU</u>															
2. <u>Holcus lanatus</u>	<u>10</u>	☐	<u>FAC</u>															
3. <u>Solidago altissima</u>	<u>10</u>	☐	<u>FACU</u>															
4. <u>Daucus carota</u>	<u>8</u>	☐	<u>UPL</u>															
5. <u>Coronilla varia</u>	<u>5</u>	☐	<u>UPL</u>															
6. <u>Lonicera japonica</u>	<u>5</u>	☐	<u>FACU</u>															
7. <u>Ranunculus bulbosus</u>	<u>3</u>	☐	<u>FAC</u>															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>86</u> = Total Cover				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
50% of total cover: <u>43.00</u> 20% of total cover: <u>17.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.)																		
No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-109

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-23
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-110
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 1-2
Subregion (LRR or MLRA): P 136 Lat: 36.62570631 Long: -79.55071815 Datum: WGS 84
Soil Map Unit Name: 23B - Clover fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____ No ☒
Hydric Soil Present?	Yes _____	No ☒		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

Only two of the three wetland parameters (i.e., hydrophytic vegetation and wetland hydrology) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology was observed at this data point through two secondary indicators (i.e, geomorphic position and the FAC-Neutral Test) were present.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-110

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>5</u></td> <td>x 1 = <u>5</u></td> </tr> <tr> <td>FACW species <u>15</u></td> <td>x 2 = <u>30</u></td> </tr> <tr> <td>FAC species <u>47</u></td> <td>x 3 = <u>141</u></td> </tr> <tr> <td>FACU species <u>4</u></td> <td>x 4 = <u>16</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>71</u> (A)</td> <td><u>192</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.70</u>	Total % Cover of:	Multiply by:	OBL species <u>5</u>	x 1 = <u>5</u>	FACW species <u>15</u>	x 2 = <u>30</u>	FAC species <u>47</u>	x 3 = <u>141</u>	FACU species <u>4</u>	x 4 = <u>16</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>71</u> (A)	<u>192</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>5</u>	x 1 = <u>5</u>																	
FACW species <u>15</u>	x 2 = <u>30</u>																	
FAC species <u>47</u>	x 3 = <u>141</u>																	
FACU species <u>4</u>	x 4 = <u>16</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>71</u> (A)	<u>192</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Holcus lanatus</u>	<u>35</u>	☒	<u>FAC</u>															
2. <u>Juncus effusus</u>	<u>15</u>	☒	<u>FACW</u>															
3. <u>Dichanthelium clandestinum</u>	<u>10</u>		<u>FAC</u>															
4. <u>Carex lurida</u>	<u>5</u>		<u>OBL</u>															
5. <u>Rosa multiflora</u>	<u>4</u>		<u>FACU</u>															
6. <u>Carex blanda</u>	<u>2</u>		<u>FAC</u>															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>71</u> = Total Cover																		
50% of total cover: <u>35.50</u> 20% of total cover: <u>14.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-110

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 12	2.5Y 5/3	90	7.5YR 5/6	10	C	M	Sandy Clay Loam	
12 - 18	2.5Y 5/3	85	7.5YR 5/6	10	C	M	Sandy Clay	
12 - 18			2.5Y 6/1	5	D	M	Sandy Clay	Secondary Redox feature
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-23
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-111
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2-3
Subregion (LRR or MLRA): P 136 Lat: 36.62607756 Long: -79.55068058 Datum: WGS 84
Soil Map Unit Name: 23B - Clover fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	
Water Table Present? Yes _____ No ☒	Depth (inches): _____	
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-111

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>30</u></td> <td>x 4 = <u>120</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>55</u> (A)</td> <td><u>220</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.00</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>30</u>	x 4 = <u>120</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>55</u> (A)	<u>220</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>5</u>	x 2 = <u>10</u>																	
FAC species <u>5</u>	x 3 = <u>15</u>																	
FACU species <u>30</u>	x 4 = <u>120</u>																	
UPL species <u>15</u>	x 5 = <u>75</u>																	
Column Totals: <u>55</u> (A)	<u>220</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Andropogon virginicus</u>	<u>15</u>	☒	<u>FACU</u>															
2. <u>Anthoxanthum odoratum</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Daucus carota</u>	<u>10</u>		<u>UPL</u>															
4. <u>Cerastium arvense</u>	<u>5</u>		<u>UPL</u>															
5. <u>Dichanthelium clandestinum</u>	<u>5</u>		<u>FAC</u>															
6. <u>Juncus effusus</u>	<u>5</u>		<u>FACW</u>															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>55</u> = Total Cover																		
50% of total cover: <u>27.50</u> 20% of total cover: <u>11.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ☒

SOIL

Sampling Point: DP-111

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2025-01-10
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-112
Investigator(s): KZ, JF Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1-2
Subregion (LRR or MLRA): P 136 Lat: 36.62562238 Long: -79.55055612 Datum: WGS 84
Soil Map Unit Name: 23B - Clover fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____ No ☒
Hydric Soil Present?	Yes _____	No ☒		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

Only two of the three wetland parameters (i.e., wetland hydrology and hydrophytic vegetation) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☒ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: DP-112

Dominance Test worksheet:			
<u>Tree Stratum</u> (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Quercus phellos</u>	<u>90</u>	☒	FAC
2. <u>Liquidambar styraciflua</u>	<u>5</u>		FAC
3.			
4.			
5.			
6.			
7.			
	<u>95</u> = Total Cover		
50% of total cover: <u>47.50</u>	20% of total cover: <u>19.00</u>		
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15 ft r</u>)			
1. <u>Acer rubrum</u>	<u>10</u>	☒	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	<u>10</u> = Total Cover		
50% of total cover: <u>5.00</u>	20% of total cover: <u>2.00</u>		
<u>Herb Stratum</u> (Plot size: <u>5 ft r</u>)			
1. <u>Smilax rotundifolia</u>	<u>8</u>	☒	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	<u>8</u> = Total Cover		
50% of total cover: <u>4.00</u>	20% of total cover: <u>1.60</u>		
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft r</u>)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover: _____	20% of total cover: _____		
Remarks: (Include photo numbers here or on a separate sheet.)			
No woody vine stratum was observed at this data point.			

SOIL

Sampling Point: DP-112

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 1	10YR 3/2	100					Silt Loam	
1 - 18	10YR 5/4	60	7.5YR 5/6	30	C	PL / M	Silty Clay Loam	
1 - 18			7.5YR 4/6	10	C	PL / M	Clay	Secondary Redox feature
18 - 20	2.5Y 6/3	75	7.5YR 4/6	25	C	PL / M	Clay	
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-23
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-113
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.62800738 Long: -79.54827718 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
_____ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
_____ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes ☒ No _____ Depth (inches): 0.25
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-113

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>90</u></td> <td>x 1 = <u>90</u></td> </tr> <tr> <td>FACW species <u>8</u></td> <td>x 2 = <u>16</u></td> </tr> <tr> <td>FAC species <u>20</u></td> <td>x 3 = <u>60</u></td> </tr> <tr> <td>FACU species <u>2</u></td> <td>x 4 = <u>8</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>120</u> (A)</td> <td><u>174</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.45</u>	Total % Cover of:	Multiply by:	OBL species <u>90</u>	x 1 = <u>90</u>	FACW species <u>8</u>	x 2 = <u>16</u>	FAC species <u>20</u>	x 3 = <u>60</u>	FACU species <u>2</u>	x 4 = <u>8</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>120</u> (A)	<u>174</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>90</u>	x 1 = <u>90</u>																	
FACW species <u>8</u>	x 2 = <u>16</u>																	
FAC species <u>20</u>	x 3 = <u>60</u>																	
FACU species <u>2</u>	x 4 = <u>8</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>120</u> (A)	<u>174</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover				Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Carex lurida</u>	<u>45</u>	☒	<u>OBL</u>															
2. <u>Carex lacustris</u>	<u>40</u>	☒	<u>OBL</u>															
3. <u>Microstegium vimineum</u>	<u>15</u>		<u>FAC</u>															
4. <u>Juncus tenuis</u>	<u>5</u>		<u>FAC</u>															
5. <u>Solidago gigantea</u>	<u>5</u>		<u>FACW</u>															
6. <u>Symphotrichum puniceum</u>	<u>5</u>		<u>OBL</u>															
7. <u>Polygonum sagittatum</u>	<u>3</u>		<u>FACW</u>															
8. <u>Cardamine hirsuta</u>	<u>2</u>		<u>FACU</u>															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>120</u> = Total Cover				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
50% of total cover: <u>60.00</u> 20% of total cover: <u>24.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-113

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 6	5YR 6/2	70	5YR 5/1	20	D	M	Sandy Loam	
0 - 6			7.5YR 4/6	10	C	PL / M	Sandy Loam	Secondary Redox feature
6 - 18	5YR 5/1	65	5YR 6/2	20	D	M	Sandy Clay Loam	
6 - 18			7.5YR 4/6	15	C	PL / M	Sandy Clay Loam	Secondary Redox feature
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-23
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-114
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 3-5
Subregion (LRR or MLRA): P 136 Lat: 36.62808421 Long: -79.54822174 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____ No ☒
Hydric Soil Present?	Yes _____	No ☒		
Wetland Hydrology Present?	Yes _____	No ☒		

Remarks:

Only one (i.e., hydrophytic vegetation) of the three wetland parameters was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-114

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>65</u></td> <td>x 3 = <u>195</u></td> </tr> <tr> <td>FACU species <u>34</u></td> <td>x 4 = <u>136</u></td> </tr> <tr> <td>UPL species <u>20</u></td> <td>x 5 = <u>100</u></td> </tr> <tr> <td>Column Totals: <u>124</u> (A)</td> <td><u>441</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.55</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>65</u>	x 3 = <u>195</u>	FACU species <u>34</u>	x 4 = <u>136</u>	UPL species <u>20</u>	x 5 = <u>100</u>	Column Totals: <u>124</u> (A)	<u>441</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>5</u>	x 2 = <u>10</u>																	
FAC species <u>65</u>	x 3 = <u>195</u>																	
FACU species <u>34</u>	x 4 = <u>136</u>																	
UPL species <u>20</u>	x 5 = <u>100</u>																	
Column Totals: <u>124</u> (A)	<u>441</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Holcus lanatus</u>	<u>65</u>	☒	<u>FAC</u>															
2. <u>Cerastium arvense</u>	<u>20</u>		<u>UPL</u>															
3. <u>Lolium perenne</u>	<u>20</u>		<u>FACU</u>															
4. <u>Lespedeza cuneata</u>	<u>10</u>		<u>FACU</u>															
5. <u>Solidago gigantea</u>	<u>5</u>		<u>FACW</u>															
6. <u>Rubus allegheniensis</u>	<u>2</u>		<u>FACU</u>															
7. <u>Solanum carolinense</u>	<u>2</u>		<u>FACU</u>															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>124</u> = Total Cover																		
50% of total cover: <u>62.00</u> 20% of total cover: <u>24.80</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-114

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-23
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-115
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Valley Flat Local relief (concave, convex, none): Concave Slope (%): 2%
Subregion (LRR or MLRA): P 136 Lat: 36.628585 Long: -79.548623 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
_____ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
_____ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		_____ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes ☒ No _____ Depth (inches): 1
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-115

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Liriodendron tulipifera</u>	<u>50</u>	☒	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)
2. <u>Liquidambar styraciflua</u>	<u>40</u>	☒	<u>FAC</u>	
3. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>8</u> (B)
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>62.50</u> (A/B)
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>5</u> x 2 = <u>10</u> FAC species <u>88</u> x 3 = <u>264</u> FACU species <u>66</u> x 4 = <u>264</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>159</u> (A) <u>538</u> (B) Prevalence Index = B/A = <u>3.38</u>
$\frac{90}{50\% \text{ of total cover: } 45.00} = \text{Total Cover}$ $\frac{40}{20\% \text{ of total cover: } 18.00}$				
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Liquidambar styraciflua</u>	<u>20</u>	☒	<u>FAC</u>	
2. <u>Carpinus caroliniana</u>	<u>8</u>	☒	<u>FAC</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	_____ = Total Cover 50% of total cover: <u>14.00</u> 20% of total cover: <u>5.60</u>
9. _____	_____	_____	_____	
Herb Stratum (Plot size: <u>5 ft r</u>)				Woody Vine Stratum (Plot size: <u>30 ft r</u>)
1. <u>Liquidambar styraciflua</u>	<u>10</u>	☒	<u>FAC</u>	
2. <u>Athyrium asplenoides</u>	<u>10</u>	☒	<u>FAC</u>	1. _____ 2. _____ 3. _____ 4. _____ 5. _____
3. <u>Rosa multiflora</u>	<u>8</u>	☒	<u>FACU</u>	
4. <u>Lonicera japonica</u>	<u>8</u>	☒	<u>FACU</u>	_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____
5. <u>Juncus effusus</u>	<u>5</u>	_____	<u>FACW</u>	
6. _____	_____	_____	_____	Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____
11. _____	_____	_____	_____	

SOIL

Sampling Point: DP-115

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-24
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-116
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.63713771 Long: -79.53795725 Datum: WGS 84
Soil Map Unit Name: 23D - Clover fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☒ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>8</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>6</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-116

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Quercus rubra</u>	<u>35</u>	☒	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83.33</u> (A/B)														
2. <u>Carpinus caroliniana</u>	<u>20</u>	☒	<u>FAC</u>															
3. <u>Juniperus virginiana</u>	<u>10</u>		<u>FACU</u>															
4. _____																		
5. _____																		
6. _____																		
7. _____																		
<u>65</u> = Total Cover 50% of total cover: <u>32.50</u> 20% of total cover: <u>13.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Carpinus caroliniana</u>	<u>40</u>	☒	<u>FAC</u>	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>109</u></td> <td>x 3 = <u>327</u></td> </tr> <tr> <td>FACU species <u>58</u></td> <td>x 4 = <u>232</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>172</u> (A)</td> <td><u>569</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.30</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>109</u>	x 3 = <u>327</u>	FACU species <u>58</u>	x 4 = <u>232</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>172</u> (A)	<u>569</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>5</u>	x 2 = <u>10</u>																	
FAC species <u>109</u>	x 3 = <u>327</u>																	
FACU species <u>58</u>	x 4 = <u>232</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>172</u> (A)	<u>569</u> (B)																	
2. <u>Liquidambar styraciflua</u>	<u>12</u>	☒	<u>FAC</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
<u>52</u> = Total Cover 50% of total cover: <u>26.00</u> 20% of total cover: <u>10.40</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Viola sororia</u>	<u>20</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Acer negundo</u>	<u>10</u>	☒	<u>FAC</u>															
3. <u>Lonicera japonica</u>	<u>8</u>		<u>FACU</u>															
4. <u>Carex blanda</u>	<u>7</u>		<u>FAC</u>															
5. <u>Polystichum acrostichoides</u>	<u>5</u>		<u>FACU</u>															
6. <u>Juncus effusus</u>	<u>5</u>		<u>FACW</u>															
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
<u>55</u> = Total Cover 50% of total cover: <u>27.50</u> 20% of total cover: <u>11.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL

Sampling Point: DP-116

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 4/2	100					Clay Loam	
2 - 6	2.5Y 5/2	90	7.5YR 5/8	10	C	PL / M	Sandy Clay Loam	
6 - 18	2.5Y 6/2	85	7.5YR 5/6	15	C	PL / M	Sandy Clay Loam	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-24
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-117
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.63718129 Long: -79.53786986 Datum: WGS 84
Soil Map Unit Name: 23D - Clover fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____ No ☒
Hydric Soil Present?	Yes _____	No ☒		
Wetland Hydrology Present?	Yes _____	No ☒		

Remarks:

Only one (i.e., hydrophytic vegetation) of the three wetland parameters was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-117

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Liriodendron tulipifera</u>	<u>35</u>	☒	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>62.50</u> (A/B)														
2. <u>Quercus rubra</u>	<u>35</u>	☒	<u>FACU</u>															
3. <u>Acer rubrum</u>	<u>15</u>		<u>FAC</u>															
4. <u>Carpinus caroliniana</u>	<u>10</u>		<u>FAC</u>															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>74</u></td> <td>x 3 = <u>222</u></td> </tr> <tr> <td>FACU species <u>83</u></td> <td>x 4 = <u>332</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>157</u> (A)</td> <td><u>554</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.52</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>74</u>	x 3 = <u>222</u>	FACU species <u>83</u>	x 4 = <u>332</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>157</u> (A)	<u>554</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>74</u>	x 3 = <u>222</u>																	
FACU species <u>83</u>	x 4 = <u>332</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>157</u> (A)	<u>554</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____	<u>95</u>	= Total Cover																
50% of total cover: <u>47.50</u> 20% of total cover: <u>19.00</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Carpinus caroliniana</u>	<u>20</u>	☒	<u>FAC</u>															
2. <u>Acer rubrum</u>	<u>10</u>	☒	<u>FAC</u>															
3. <u>Prunus serotina</u>	<u>8</u>		<u>FACU</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. <u>Liquidambar styraciflua</u>	<u>5</u>		<u>FAC</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____	<u>43</u>	= Total Cover																
50% of total cover: <u>21.50</u> 20% of total cover: <u>8.60</u>				Hydrophytic Vegetation Present? Yes ☒ No _____														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Carex blanda</u>	<u>5</u>	☒	<u>FAC</u>															
2. <u>Carpinus caroliniana</u>	<u>5</u>	☒	<u>FAC</u>															
3. <u>Lonicera japonica</u>	<u>5</u>	☒	<u>FACU</u>	Remarks: (Include photo numbers here or on a separate sheet.) <u>No woody vine stratum was observed at this data point.</u>														
4. <u>Viola sororia</u>	<u>4</u>	☒	<u>FAC</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____	Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
_____	<u>19</u>	= Total Cover																
50% of total cover: <u>9.50</u> 20% of total cover: <u>3.80</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____	Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____	Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
_____	_____	_____	_____															
_____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		

SOIL

Sampling Point: DP-117**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 4/6	100					Silt Loam	
2 - 18	7.5YR 4/6	100					Silt Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-29
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-118
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 1-3
Subregion (LRR or MLRA): P 136 Lat: 36.64178195 Long: -79.53382865 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-118

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Celtis occidentalis</u>	<u>5</u>	☒	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60.00</u> (A/B)														
2. <u>Platanus occidentalis</u>	<u>2</u>	☒	<u>FACW</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
7 = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>35</u></td> <td>x 1 = <u>35</u></td> </tr> <tr> <td>FACW species <u>44</u></td> <td>x 2 = <u>88</u></td> </tr> <tr> <td>FAC species <u>23</u></td> <td>x 3 = <u>69</u></td> </tr> <tr> <td>FACU species <u>14</u></td> <td>x 4 = <u>56</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>116</u> (A)</td> <td><u>248</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.13</u>	Total % Cover of:	Multiply by:	OBL species <u>35</u>	x 1 = <u>35</u>	FACW species <u>44</u>	x 2 = <u>88</u>	FAC species <u>23</u>	x 3 = <u>69</u>	FACU species <u>14</u>	x 4 = <u>56</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>116</u> (A)	<u>248</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>35</u>	x 1 = <u>35</u>																	
FACW species <u>44</u>	x 2 = <u>88</u>																	
FAC species <u>23</u>	x 3 = <u>69</u>																	
FACU species <u>14</u>	x 4 = <u>56</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>116</u> (A)	<u>248</u> (B)																	
50% of total cover: <u>3.50</u> 20% of total cover: <u>1.40</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Rosa multiflora</u>	<u>5</u>	☒	<u>FACU</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
5 = Total Cover																		
50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Carex lurida</u>	<u>35</u>	☒	<u>OBL</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Juncus effusus</u>	<u>25</u>	☒	<u>FACW</u>															
3. <u>Anthoxanthum hirtum</u>	<u>15</u>		<u>FACW</u>															
4. <u>Rumex crispus</u>	<u>10</u>		<u>FAC</u>															
5. <u>Sambucus canadensis</u>	<u>5</u>		<u>FAC</u>															
6. <u>Lonicera japonica</u>	<u>4</u>		<u>FACU</u>															
7. <u>Toxicodendron radicans</u>	<u>4</u>		<u>FAC</u>															
8. <u>Trifolium campestre</u>	<u>4</u>		<u>FAC</u>															
9. <u>Vernonia noveboracensis</u>	<u>2</u>		<u>FACW</u>															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
104 = Total Cover																		
50% of total cover: <u>52.00</u> 20% of total cover: <u>20.80</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																		

SOIL

Sampling Point: DP-118

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 8	2.5Y 4/1	70	2.5Y 5/1	20	D	PL / M	Silty Clay	
0 - 8			10YR 5/8	10	C	PL / M	Silty Clay	Secondary Redox feature
8 - 18	2.5Y 6/1	60	2.5Y 7/1	5	C	PL / M	Clay Loam	
8 - 18			10YR 4/6	20	C	PL / M	Clay Loam	Secondary Redox feature
8 - 18			10YR 5/8	15	C	PL / M	Clay Loam	Tertiary Redox feature
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-29
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-119
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 3-5
Subregion (LRR or MLRA): P 136 Lat: 36.64179247 Long: -79.53376567 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-119

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																												
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)																																											
2. _____	_____	_____	_____																																												
3. _____	_____	_____	_____																																												
4. _____	_____	_____	_____																																												
5. _____	_____	_____	_____																																												
6. _____	_____	_____	_____																																												
7. _____	_____	_____	_____																																												
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>11</u></td> <td>x 2 = <u>22</u></td> </tr> <tr> <td>FAC species <u>45</u></td> <td>x 3 = <u>135</u></td> </tr> <tr> <td>FACU species <u>56</u></td> <td>x 4 = <u>224</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>112</u> (A)</td> <td><u>381</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.40</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>11</u>	x 2 = <u>22</u>	FAC species <u>45</u>	x 3 = <u>135</u>	FACU species <u>56</u>	x 4 = <u>224</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>112</u> (A)	<u>381</u> (B)																													
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50% of total cover: _____ 20% of total cover: _____																																															
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ _____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																																															
Herb Stratum (Plot size: <u>5 ft r</u>) <table style="width: 100%;"> <tr> <td>1. <u>Lolium perenne</u></td> <td style="text-align: center;"><u>45</u></td> <td style="text-align: center;">☒</td> <td style="text-align: center;"><u>FACU</u></td> </tr> <tr> <td>2. <u>Trifolium campestre</u></td> <td style="text-align: center;"><u>45</u></td> <td style="text-align: center;">☒</td> <td style="text-align: center;"><u>FAC</u></td> </tr> <tr> <td>3. <u>Anthoxanthum hirtum</u></td> <td style="text-align: center;"><u>10</u></td> <td></td> <td style="text-align: center;"><u>FACW</u></td> </tr> <tr> <td>4. <u>Poa pratensis</u></td> <td style="text-align: center;"><u>5</u></td> <td></td> <td style="text-align: center;"><u>FACU</u></td> </tr> <tr> <td>5. <u>Lonicera japonica</u></td> <td style="text-align: center;"><u>3</u></td> <td></td> <td style="text-align: center;"><u>FACU</u></td> </tr> <tr> <td>6. <u>Rosa multiflora</u></td> <td style="text-align: center;"><u>2</u></td> <td></td> <td style="text-align: center;"><u>FACU</u></td> </tr> <tr> <td>7. <u>Rubus allegheniensis</u></td> <td style="text-align: center;"><u>1</u></td> <td></td> <td style="text-align: center;"><u>FACU</u></td> </tr> <tr> <td>8. <u>Vernonia noveboracensis</u></td> <td style="text-align: center;"><u>1</u></td> <td></td> <td style="text-align: center;"><u>FACW</u></td> </tr> <tr> <td>9. _____</td> <td></td> <td></td> <td></td> </tr> <tr> <td>10. _____</td> <td></td> <td></td> <td></td> </tr> <tr> <td>11. _____</td> <td></td> <td></td> <td></td> </tr> </table>				1. <u>Lolium perenne</u>	<u>45</u>	☒	<u>FACU</u>	2. <u>Trifolium campestre</u>	<u>45</u>	☒	<u>FAC</u>	3. <u>Anthoxanthum hirtum</u>	<u>10</u>		<u>FACW</u>	4. <u>Poa pratensis</u>	<u>5</u>		<u>FACU</u>	5. <u>Lonicera japonica</u>	<u>3</u>		<u>FACU</u>	6. <u>Rosa multiflora</u>	<u>2</u>		<u>FACU</u>	7. <u>Rubus allegheniensis</u>	<u>1</u>		<u>FACU</u>	8. <u>Vernonia noveboracensis</u>	<u>1</u>		<u>FACW</u>	9. _____				10. _____				11. _____			
1. <u>Lolium perenne</u>	<u>45</u>	☒	<u>FACU</u>																																												
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_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)																																											
50% of total cover: <u>56.00</u> 20% of total cover: <u>22.40</u>																																															
Woody Vine Stratum (Plot size: <u>30 ft r</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover 50% of total cover: _____ 20% of total cover: _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.																																											
					Hydrophytic Vegetation Present? Yes _____ No ☒																																										

Remarks: (Include photo numbers here or on a separate sheet.)

No tree, sapling/shrub, or woody vine strata were observed at this data point.

SOIL

Sampling Point: DP-119

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 5	10YR 4/4	100					Silt Loam	
5 - 18	10YR 5/4	100					Silt Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-30
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-120
Investigator(s): JF, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.71711211 Long: -79.45966712 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	
Water Table Present? Yes _____ No ☒	Depth (inches): _____	
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point; only one of the secondary indicators was present.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-120

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>8</u></td> <td>x 2 = <u>16</u></td> </tr> <tr> <td>FAC species <u>3</u></td> <td>x 3 = <u>9</u></td> </tr> <tr> <td>FACU species <u>27</u></td> <td>x 4 = <u>108</u></td> </tr> <tr> <td>UPL species <u>1</u></td> <td>x 5 = <u>5</u></td> </tr> <tr> <td>Column Totals: <u>39</u> (A)</td> <td><u>138</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.53</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>8</u>	x 2 = <u>16</u>	FAC species <u>3</u>	x 3 = <u>9</u>	FACU species <u>27</u>	x 4 = <u>108</u>	UPL species <u>1</u>	x 5 = <u>5</u>	Column Totals: <u>39</u> (A)	<u>138</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>8</u>	x 2 = <u>16</u>																	
FAC species <u>3</u>	x 3 = <u>9</u>																	
FACU species <u>27</u>	x 4 = <u>108</u>																	
UPL species <u>1</u>	x 5 = <u>5</u>																	
Column Totals: <u>39</u> (A)	<u>138</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Poa sp.</u>	<u>40</u>	<u>✓</u>	_____															
2. <u>Solidago canadensis</u>	<u>25</u>	<u>✓</u>	<u>FACU</u>															
3. <u>Juncus effusus</u>	<u>5</u>	_____	<u>FACW</u>															
4. <u>Boehmeria cylindrica</u>	<u>2</u>	_____	<u>FACW</u>															
5. <u>Dichanthelium clandestinum</u>	<u>2</u>	_____	<u>FAC</u>															
6. <u>Agrimonia parviflora</u>	<u>1</u>	_____	<u>FACW</u>															
7. <u>Ambrosia artemisiifolia</u>	<u>1</u>	_____	<u>FACU</u>															
8. <u>Lamium purpureum</u>	<u>1</u>	_____	<u>UPL</u>															
9. <u>Rubus argutus</u>	<u>1</u>	_____	<u>FACU</u>															
10. <u>Rumex crispus</u>	<u>1</u>	_____	<u>FAC</u>															
11. _____	_____	_____	_____															
<u>79</u> = Total Cover																		
50% of total cover: <u>39.50</u> 20% of total cover: <u>15.80</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Vitis sp.</u>	<u>1</u>	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
<u>1</u> = Total Cover																		
50% of total cover: <u>0.50</u> 20% of total cover: <u>0.20</u>																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree or sapling/shrub strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ✓

SOIL

Sampling Point: DP-120

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 12	7.5YR 4/6	98	7.5YR 5/8	1	C	M	Sandy Clay Loam	Manganese concretions
0 - 12			5YR 5/6	1	C	M	Sandy Clay Loam	Manganese concretions; Secondary Redox feature
12 - 16	7.5YR 4/4	95	5YR 4/6	5	C	M	Clay Loam	
16 - 18	5YR 5/6	98	5YR 5/8	2	C	M	Clay Loam	
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-30
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-121
Investigator(s): JF, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.71752463 Long: -79.45991491 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☒ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-121

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. <u>Liriodendron tulipifera</u>	<u>30</u>	☒	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)																
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)																
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.66</u> (A/B)																
4. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>2</u></td> <td>x 2 = <u>4</u></td> </tr> <tr> <td>FAC species <u>112</u></td> <td>x 3 = <u>336</u></td> </tr> <tr> <td>FACU species <u>35</u></td> <td>x 4 = <u>140</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>149</u> (A)</td> <td><u>480</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.22</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>2</u>	x 2 = <u>4</u>	FAC species <u>112</u>	x 3 = <u>336</u>	FACU species <u>35</u>	x 4 = <u>140</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>149</u> (A)	<u>480</u> (B)	Prevalence Index = B/A = <u>3.22</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>2</u>	x 2 = <u>4</u>																			
FAC species <u>112</u>	x 3 = <u>336</u>																			
FACU species <u>35</u>	x 4 = <u>140</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>149</u> (A)	<u>480</u> (B)																			
Prevalence Index = B/A = <u>3.22</u>																				
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)																
<u>30</u> = Total Cover 50% of total cover: <u>15.00</u> 20% of total cover: <u>6.00</u>																				
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																				
1. <u>Acer rubrum</u>	<u>25</u>	☒	<u>FAC</u>																	
2. <u>Liriodendron tulipifera</u>	<u>5</u>	_____	<u>FACU</u>																	
3. <u>Carpinus caroliniana</u>	<u>2</u>	_____	<u>FAC</u>																	
4. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.																
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____																
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
<u>32</u> = Total Cover 50% of total cover: <u>16.00</u> 20% of total cover: <u>6.40</u>																				
Herb Stratum (Plot size: <u>5 ft r</u>)																				
1. <u>Microstegium vimineum</u>	<u>85</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Present? Yes ☒ No _____																
2. <u>Boehmeria cylindrica</u>	<u>2</u>	_____	<u>FACW</u>																	
3. <u>Persicaria sp.</u>	<u>1</u>	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____																
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____																
<u>88</u> = Total Cover 50% of total cover: <u>44.00</u> 20% of total cover: <u>17.60</u>																				
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____																
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																				
50% of total cover: _____ 20% of total cover: _____																				

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL

Sampling Point: DP-121

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-30
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-122
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2-3
Subregion (LRR or MLRA): P 136 Lat: 36.64304028 Long: -79.53226128 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-122

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>30</u></td> <td>x 1 = <u>30</u></td> </tr> <tr> <td>FACW species <u>45</u></td> <td>x 2 = <u>90</u></td> </tr> <tr> <td>FAC species <u>22</u></td> <td>x 3 = <u>66</u></td> </tr> <tr> <td>FACU species <u>12</u></td> <td>x 4 = <u>48</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>109</u> (A)</td> <td><u>234</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.14</u>	Total % Cover of:	Multiply by:	OBL species <u>30</u>	x 1 = <u>30</u>	FACW species <u>45</u>	x 2 = <u>90</u>	FAC species <u>22</u>	x 3 = <u>66</u>	FACU species <u>12</u>	x 4 = <u>48</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>109</u> (A)	<u>234</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>30</u>	x 1 = <u>30</u>																	
FACW species <u>45</u>	x 2 = <u>90</u>																	
FAC species <u>22</u>	x 3 = <u>66</u>																	
FACU species <u>12</u>	x 4 = <u>48</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>109</u> (A)	<u>234</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>45</u>	☒	<u>FACW</u>															
2. <u>Juncus tenuis</u>	<u>20</u>	☒	<u>FAC</u>															
3. <u>Carex lurida</u>	<u>15</u>		<u>OBL</u>															
4. <u>Carex stipata</u>	<u>15</u>		<u>OBL</u>															
5. <u>Solidago altissima</u>	<u>6</u>		<u>FACU</u>															
6. <u>Poa pratensis</u>	<u>5</u>		<u>FACU</u>															
7. <u>Rumex crispus</u>	<u>2</u>		<u>FAC</u>															
8. <u>Galium boreale</u>	<u>1</u>		<u>FACU</u>															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>109</u> = Total Cover																		
50% of total cover: <u>54.50</u> 20% of total cover: <u>21.80</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-122

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 5	2.5YR 4/1	80	7.5YR 5/8	15	C	PL / M	Clay Loam	
0 - 5			10YR 6/1	5	D	PL / M	Clay Loam	Secondary Redox feature
5 - 14	10GY 4/1	90	10YR 5/6	10	C	PL / M	Clay	
14 - 18	2.5Y 5/1	75	7.5YR 5/6	20	C	M	Silty Clay Loam	
14 - 18			7.5YR 6/2	5	D	M	Silty Clay Loam	Secondary Redox feature
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (LRR N)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (MLRA 147, 148)
- ☐ Thin Dark Surface (S9) (MLRA 147, 148)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ☐ Umbric Surface (F13) (MLRA 136, 122)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 148)
- ☐ Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (MLRA 147)
- ☐ Coast Prairie Redox (A16) (MLRA 147, 148)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-30
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-123
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 3
Subregion (LRR or MLRA): P 136 Lat: 36.6429223 Long: -79.53195704 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-123

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Juglans nigra</u>	<u>30</u>	☒	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. <u>Celtis occidentalis</u>	<u>15</u>	☒	<u>FACU</u>	
3. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25.00</u> (A/B)
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>96</u> x 3 = <u>288</u> FACU species <u>92</u> x 4 = <u>368</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>188</u> (A) <u>656</u> (B) Prevalence Index = B/A = <u>3.48</u>
_____ = Total Cover 50% of total cover: <u>22.50</u> 20% of total cover: <u>9.00</u>				
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Celtis occidentalis</u>	<u>35</u>	☒	<u>FACU</u>	
2. <u>Asimina triloba</u>	<u>10</u>	_____	<u>FAC</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. <u>Lindera benzoin</u>	<u>8</u>	_____	<u>FAC</u>	
4. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No ☒
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	_____ = Total Cover 50% of total cover: <u>26.50</u> 20% of total cover: <u>10.60</u>
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	Woody Vine Stratum (Plot size: <u>30 ft r</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover 50% of total cover: _____ 20% of total cover: _____
11. _____	_____	_____	_____	
Herb Stratum (Plot size: <u>5 ft r</u>)				
1. <u>Microstegium vimineum</u>	<u>65</u>	☒	<u>FAC</u>	
2. <u>Verbesina occidentalis</u>	<u>12</u>	_____	<u>FACU</u>	
3. <u>Persicaria virginiana</u>	<u>8</u>	_____	<u>FAC</u>	
4. <u>Smilax rotundifolia</u>	<u>5</u>	_____	<u>FAC</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL

Sampling Point: DP-123

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 6	10YR 4/2	100					Loam	
6 - 10	10YR 4/4	100					Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Gravel
 Depth (inches): 10

Hydric Soil Present? Yes ☐ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-04-30
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-124
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR or MLRA): P 136 Lat: 36.64269945 Long: -79.53197274 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	_____ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		_____ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes ☒ No _____ Depth (inches): <u>1</u>	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>0</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-124

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Acer negundo</u>	<u>30</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)														
2. <u>Platanus occidentalis</u>	<u>25</u>	☒	<u>FACW</u>															
3. <u>Juglans nigra</u>	<u>15</u>		<u>FACU</u>	Total Number of Dominant Species Across All Strata: <u>6</u> (B)														
4. <u>Liquidambar styraciflua</u>	<u>10</u>		<u>FAC</u>															
5. <u>Prunus serotina</u>	<u>10</u>		<u>FACU</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.66</u> (A/B)														
6. _____	_____																	
7. _____	_____			Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>45</u></td> <td>x 1 = <u>45</u></td> </tr> <tr> <td>FACW species <u>35</u></td> <td>x 2 = <u>70</u></td> </tr> <tr> <td>FAC species <u>81</u></td> <td>x 3 = <u>243</u></td> </tr> <tr> <td>FACU species <u>60</u></td> <td>x 4 = <u>240</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>221</u> (A)</td> <td><u>598</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.70</u>	Total % Cover of:	Multiply by:	OBL species <u>45</u>	x 1 = <u>45</u>	FACW species <u>35</u>	x 2 = <u>70</u>	FAC species <u>81</u>	x 3 = <u>243</u>	FACU species <u>60</u>	x 4 = <u>240</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>221</u> (A)	<u>598</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>45</u>	x 1 = <u>45</u>																	
FACW species <u>35</u>	x 2 = <u>70</u>																	
FAC species <u>81</u>	x 3 = <u>243</u>																	
FACU species <u>60</u>	x 4 = <u>240</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>221</u> (A)	<u>598</u> (B)																	
90 = Total Cover 50% of total cover: <u>45.00</u> 20% of total cover: <u>18.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Juglans nigra</u>	<u>20</u>	☒	<u>FACU</u>															
2. <u>Ligustrum sinense</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Quercus phellos</u>	<u>15</u>	☒	<u>FAC</u>															
4. <u>Liquidambar styraciflua</u>	<u>10</u>		<u>FAC</u>															
5. <u>Acer negundo</u>	<u>8</u>		<u>FAC</u>															
6. _____	_____																	
7. _____	_____																	
8. _____	_____																	
9. _____	_____																	
68 = Total Cover 50% of total cover: <u>34.00</u> 20% of total cover: <u>13.60</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Leersia oryzoides</u>	<u>35</u>	☒	<u>OBL</u>															
2. <u>Impatiens capensis</u>	<u>10</u>		<u>FACW</u>															
3. <u>Penthorum sedoides</u>	<u>10</u>		<u>OBL</u>															
4. <u>Microstegium vimineum</u>	<u>8</u>		<u>FAC</u>															
5. _____	_____																	
6. _____	_____																	
7. _____	_____																	
8. _____	_____																	
9. _____	_____																	
10. _____	_____																	
11. _____	_____																	
63 = Total Cover 50% of total cover: <u>31.50</u> 20% of total cover: <u>12.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____																	
2. _____	_____																	
3. _____	_____																	
4. _____	_____																	
5. _____	_____																	
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-124

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 7	10YR 3/1	100					Sandy Loam	
7 - 18	7.5YR 3/1	80	7.5YR 4/4	20	C	M	Sandy Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☒ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-01
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-125
Investigator(s): JF, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 1
Subregion (LRR or MLRA): P 136 Lat: 36.71249175 Long: -79.46453228 Datum: WGS 84
Soil Map Unit Name: 5B3 - Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

Only one of the three wetland parameters (i.e., wetland hydrology) was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☒ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-125

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>2</u></td> <td>x 2 = <u>4</u></td> </tr> <tr> <td>FAC species <u>1</u></td> <td>x 3 = <u>3</u></td> </tr> <tr> <td>FACU species <u>96</u></td> <td>x 4 = <u>384</u></td> </tr> <tr> <td>UPL species <u>7</u></td> <td>x 5 = <u>35</u></td> </tr> <tr> <td>Column Totals: <u>106</u> (A)</td> <td><u>426</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.01</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>2</u>	x 2 = <u>4</u>	FAC species <u>1</u>	x 3 = <u>3</u>	FACU species <u>96</u>	x 4 = <u>384</u>	UPL species <u>7</u>	x 5 = <u>35</u>	Column Totals: <u>106</u> (A)	<u>426</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>2</u>	x 2 = <u>4</u>																	
FAC species <u>1</u>	x 3 = <u>3</u>																	
FACU species <u>96</u>	x 4 = <u>384</u>																	
UPL species <u>7</u>	x 5 = <u>35</u>																	
Column Totals: <u>106</u> (A)	<u>426</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Anthoxanthum odoratum</u>	<u>85</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Plantago lanceolata</u>	<u>5</u>	☐	<u>UPL</u>															
3. <u>Agrostis gigantea</u>	<u>2</u>	☐	<u>FACW</u>															
4. <u>Trifolium pratense</u>	<u>2</u>	☐	<u>FACU</u>															
5. <u>Andropogon virginicus</u>	<u>2</u>	☐	<u>FACU</u>															
6. <u>Vicia sativa</u>	<u>1</u>	☐	<u>FACU</u>															
7. <u>Viola sororia</u>	<u>1</u>	☐	<u>FAC</u>															
8. <u>Daucus carota</u>	<u>1</u>	☐	<u>UPL</u>															
9. <u>Lamium purpureum</u>	<u>1</u>	☐	<u>UPL</u>															
10. <u>Dactylis glomerata</u>	<u>1</u>	☐	<u>FACU</u>															
11. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
<u>101</u> = Total Cover																		
50% of total cover: <u>50.50</u> 20% of total cover: <u>20.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)				Hydrophytic Vegetation Present? Yes _____ No ☒														
1. <u>Lonicera japonica</u>	<u>5</u>	☒	<u>FACU</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
<u>5</u> = Total Cover																		
50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>																		
Remarks: (Include photo numbers here or on a separate sheet.)																		
No tree or sapling/shrub strata were observed at this data point.																		

SOIL

Sampling Point: DP-125

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 6	7.5YR 4/4	98	7.5YR 4/6	2	C	M	Clay Loam	
6 - 15	10YR 5/4	90	7.5YR 4/6	10	C	M	Clay Loam	
15 - 20	10YR 5/3	85	7.5YR 4/6	15	C	PL / M	Clay Loam	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-01
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-126
Investigator(s): MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Stream Terrace Local relief (concave, convex, none): Concave Slope (%): 3%
Subregion (LRR or MLRA): P 136 Lat: 36.707497 Long: -79.468187 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-126

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.66</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>51</u></td> <td>x 1 = <u>51</u></td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>16</u></td> <td>x 3 = <u>48</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>4</u></td> <td>x 5 = <u>20</u></td> </tr> <tr> <td>Column Totals: <u>91</u> (A)</td> <td><u>179</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.96</u>	Total % Cover of:	Multiply by:	OBL species <u>51</u>	x 1 = <u>51</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>16</u>	x 3 = <u>48</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>4</u>	x 5 = <u>20</u>	Column Totals: <u>91</u> (A)	<u>179</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>51</u>	x 1 = <u>51</u>																	
FACW species <u>10</u>	x 2 = <u>20</u>																	
FAC species <u>16</u>	x 3 = <u>48</u>																	
FACU species <u>10</u>	x 4 = <u>40</u>																	
UPL species <u>4</u>	x 5 = <u>20</u>																	
Column Totals: <u>91</u> (A)	<u>179</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Symphyotrichum puniceum</u>	<u>35</u>	☒	<u>OBL</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Solidago canadensis</u>	<u>10</u>	☒	<u>FACU</u>															
3. <u>Juncus effusus</u>	<u>10</u>	☒	<u>FACW</u>															
4. <u>Holcus lanatus</u>	<u>8</u>		<u>FAC</u>															
5. <u>Carex crinita</u>	<u>8</u>		<u>OBL</u>															
6. <u>Dichanthelium clandestinum</u>	<u>8</u>		<u>FAC</u>															
7. <u>Carex lurida</u>	<u>8</u>		<u>OBL</u>															
8. <u>Daucus carota</u>	<u>4</u>		<u>UPL</u>															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>91</u> = Total Cover																		
50% of total cover: <u>45.50</u> 20% of total cover: <u>18.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) <u>No tree, sapling/shrub, or woody vine strata were observed at this data point.</u>																		

SOIL

Sampling Point: DP-126

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	7.5YR 5/2	70	7.5YR 5/8	20	C	PL / M	Sandy Clay Loam	
0 - 3			10YR 6/1	10	D	M		Secondary redox feature
3 - 10	2.5Y 4/1	90	7.5YR 5/8	10	C	PL / M	Sandy Loam	
10 - 18	2.5Y 4/1	95	7.5YR 5/8	5	C	PL / M	Sandy Loam	
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-01
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-127
Investigator(s): MM, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR or MLRA): P 136 Lat: 36.70753423 Long: -79.46829115 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____ No ☒
Hydric Soil Present?	Yes _____	No ☒		
Wetland Hydrology Present?	Yes _____	No ☒		

Remarks:

Only one of the three wetland parameters (i.e., hydrophytic vegetation) was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-127

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.66</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>30</u></td> <td>x 3 = <u>90</u></td> </tr> <tr> <td>FACU species <u>32</u></td> <td>x 4 = <u>128</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>87</u> (A)</td> <td><u>283</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.25</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>30</u>	x 3 = <u>90</u>	FACU species <u>32</u>	x 4 = <u>128</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>87</u> (A)	<u>283</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>20</u>	x 2 = <u>40</u>																	
FAC species <u>30</u>	x 3 = <u>90</u>																	
FACU species <u>32</u>	x 4 = <u>128</u>																	
UPL species <u>5</u>	x 5 = <u>25</u>																	
Column Totals: <u>87</u> (A)	<u>283</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Dichanthelium clandestinum</u>	<u>20</u>	☒	<u>FAC</u>															
2. <u>Juncus effusus</u>	<u>20</u>	☒	<u>FACW</u>															
3. <u>Solidago altissima</u>	<u>15</u>	☒	<u>FACU</u>															
4. <u>Anthoxanthum odoratum</u>	<u>12</u>		<u>FACU</u>															
5. <u>Solidago rugosa</u>	<u>10</u>		<u>FAC</u>															
6. <u>Daucus carota</u>	<u>5</u>		<u>UPL</u>															
7. <u>Lonicera japonica</u>	<u>5</u>		<u>FACU</u>															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>87</u> = Total Cover																		
50% of total cover: <u>43.50</u> 20% of total cover: <u>17.40</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-127

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 4	10YR 4/3	100					Loam	
4 - 18	10YR 5/3	60	5YR 5/8	35	C	M	Sandy Loam	
4 - 18			10YR 6/1	5	D	M	Sandy Loam	Secondary Redox feature
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-01
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-128
Investigator(s): MS, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope (%): 2-3
Subregion (LRR or MLRA): P 136 Lat: 36.65212275 Long: -79.52243121 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

Only one of the three wetland parameters (i.e., hydric soils) was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-128

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>43</u></td> <td>x 2 = <u>86</u></td> </tr> <tr> <td>FAC species <u>15</u></td> <td>x 3 = <u>45</u></td> </tr> <tr> <td>FACU species <u>45</u></td> <td>x 4 = <u>180</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>103</u> (A)</td> <td><u>311</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.01</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>43</u>	x 2 = <u>86</u>	FAC species <u>15</u>	x 3 = <u>45</u>	FACU species <u>45</u>	x 4 = <u>180</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>103</u> (A)	<u>311</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>43</u>	x 2 = <u>86</u>																	
FAC species <u>15</u>	x 3 = <u>45</u>																	
FACU species <u>45</u>	x 4 = <u>180</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>103</u> (A)	<u>311</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>40</u>	<u>✓</u>	<u>FACW</u>															
2. <u>Solidago altissima</u>	<u>25</u>	<u>✓</u>	<u>FACU</u>															
3. <u>Dichanthelium clandestinum</u>	<u>15</u>		<u>FAC</u>															
4. <u>Glechoma hederacea</u>	<u>15</u>		<u>FACU</u>															
5. <u>Rubus argutus</u>	<u>5</u>		<u>FACU</u>															
6. <u>Aster paludosus ssp. paludosus</u>	<u>3</u>		<u>FACW</u>															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>103</u> = Total Cover																		
50% of total cover: <u>51.50</u> 20% of total cover: <u>20.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Present? Yes _____ No ✓

SOIL

Sampling Point: DP-128

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0 - 5	10YR 4/2	85	7.5YR 5/6	10	C	PL / M	Silty Clay Loam
0 - 5			10YR 6/2	5	D	PL	Secondary Redox feature
-							
-							
-							
-							
-							
-							
-							
-							
-							
-							

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1)	☐ Dark Surface (S7)	☐ 2 cm Muck (A10) (MLRA 147)
☐ Histic Epipedon (A2)	☐ Polyvalue Below Surface (S8) (MLRA 147, 148)	☐ Coast Prairie Redox (A16) (MLRA 147, 148)
☐ Black Histic (A3)	☐ Thin Dark Surface (S9) (MLRA 147, 148)	☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Very Shallow Dark Surface (TF12)
☐ Stratified Layers (A5)	☒ Depleted Matrix (F3)	☐ Other (Explain in Remarks)
☐ 2 cm Muck (A10) (LRR N)	☐ Redox Dark Surface (F6)	
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)	
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)	
☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)	☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)	
☐ Sandy Gleyed Matrix (S4)	☐ Umbric Surface (F13) (MLRA 136, 122)	
☐ Sandy Redox (S5)	☐ Piedmont Floodplain Soils (F19) (MLRA 148)	
☐ Stripped Matrix (S6)	☐ Red Parent Material (F21) (MLRA 127, 147)	

^3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):		Hydric Soil Present? Yes ☒ No _____
Type: <u>Gravel/Rock</u>		
Depth (inches): <u>5+</u>		

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-01
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-129 STP
Investigator(s): MS, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 1-2
Subregion (LRR or MLRA): P 136 Lat: 36.65212764 Long: -79.52227209 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____ No ☒
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes _____	No ☒		

Remarks:

Only two (i.e., hydrophytic vegetation and hydric soils) of the three wetland parameters were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Only one secondary wetland hydrology indicator (i.e., geomorphic position) was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-129 STP

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>2</u></td> <td>x 2 = <u>4</u></td> </tr> <tr> <td>FAC species <u>68</u></td> <td>x 3 = <u>204</u></td> </tr> <tr> <td>FACU species <u>23</u></td> <td>x 4 = <u>92</u></td> </tr> <tr> <td>UPL species <u>2</u></td> <td>x 5 = <u>10</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>310</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.26</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>2</u>	x 2 = <u>4</u>	FAC species <u>68</u>	x 3 = <u>204</u>	FACU species <u>23</u>	x 4 = <u>92</u>	UPL species <u>2</u>	x 5 = <u>10</u>	Column Totals: <u>95</u> (A)	<u>310</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>2</u>	x 2 = <u>4</u>																	
FAC species <u>68</u>	x 3 = <u>204</u>																	
FACU species <u>23</u>	x 4 = <u>92</u>																	
UPL species <u>2</u>	x 5 = <u>10</u>																	
Column Totals: <u>95</u> (A)	<u>310</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Sambucus nigra</u>	<u>50</u>	☒	<u>FAC</u>															
2. <u>Solidago altissima</u>	<u>15</u>	_____	<u>FACU</u>															
3. <u>Dichanthelium clandestinum</u>	<u>10</u>	_____	<u>FAC</u>															
4. <u>Juncus tenuis</u>	<u>5</u>	_____	<u>FAC</u>															
5. <u>Lolium perenne</u>	<u>5</u>	_____	<u>FACU</u>															
6. <u>Holcus lanatus</u>	<u>3</u>	_____	<u>FAC</u>															
7. <u>Coronilla varia</u>	<u>2</u>	_____	<u>UPL</u>															
8. <u>Solidago gigantea</u>	<u>2</u>	_____	<u>FACW</u>															
9. <u>Rubus argutus</u>	<u>2</u>	_____	<u>FACU</u>															
10. <u>Achillea millefolium</u>	<u>1</u>	_____	<u>FACU</u>															
11. _____	_____	_____	_____															
_____ = Total Cover				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
50% of total cover: <u>47.50</u> 20% of total cover: <u>19.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-129 STP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 8	7.5YR 5/4	100					Sand	
8 - 18	7.5YR 5/3	85	10YR 4/2	10	D	M	Sandy Loam	
8 - 18			7.5YR 5/6	5	C	M	Sandy Loam	Secondary Redox feature
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☒ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

While the survey area is outside of the MLRAs for Red Parent Material, observations of soils formed from a substrate with an inherent reddish color in the surrounding area led WSSI to conclude that the Red Parent Material Indicator (Indicator F21) was suitable for use within this portion of the survey area. In WSSI's best professional judgement, the sampling point meets this hydric soil indicator.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-01
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-130
Investigator(s): MS, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2-3
Subregion (LRR or MLRA): P 136 Lat: 36.651968 Long: -79.522315 Datum: WGS 84
Soil Map Unit Name: 23C - Clover fine sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-130

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. <u>Acer rubrum</u>	<u>12</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)																
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)																
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.33</u> (A/B)																
4. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>17</u></td> <td>x 3 = <u>51</u></td> </tr> <tr> <td>FACU species <u>74</u></td> <td>x 4 = <u>296</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>96</u> (A)</td> <td><u>357</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.71</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>17</u>	x 3 = <u>51</u>	FACU species <u>74</u>	x 4 = <u>296</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>96</u> (A)	<u>357</u> (B)	Prevalence Index = B/A = <u>3.71</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>5</u>	x 2 = <u>10</u>																			
FAC species <u>17</u>	x 3 = <u>51</u>																			
FACU species <u>74</u>	x 4 = <u>296</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>96</u> (A)	<u>357</u> (B)																			
Prevalence Index = B/A = <u>3.71</u>																				
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____	_____	_____	_____																	
<u>12</u> = Total Cover 50% of total cover: <u>6.00</u> 20% of total cover: <u>2.40</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)																
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.																
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																				
Herb Stratum (Plot size: <u>5 ft r</u>)																				
1. <u>Solidago altissima</u>	<u>40</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Present? Yes _____ No ☒																
2. <u>Kummerowia stipulacea</u>	<u>20</u>	☒	<u>FACU</u>																	
3. <u>Solidago gigantea</u>	<u>5</u>	_____	<u>FACW</u>																	
4. <u>Glechoma hederacea</u>	<u>5</u>	_____	<u>FACU</u>																	
5. <u>Lonicera japonica</u>	<u>5</u>	_____	<u>FACU</u>																	
6. <u>Dichanthelium clandestinum</u>	<u>3</u>	_____	<u>FAC</u>	Remarks: (Include photo numbers here or on a separate sheet.) <u>No sapling/shrub or woody vine strata were observed at this data point.</u>																
7. <u>Rubus argutus</u>	<u>2</u>	_____	<u>FACU</u>																	
8. <u>Parthenocissus quinquefolia</u>	<u>2</u>	_____	<u>FACU</u>																	
9. <u>Campsis radicans</u>	<u>1</u>	_____	<u>FAC</u>																	
10. <u>Juncus tenuis</u>	<u>1</u>	_____	<u>FAC</u>																	
11. _____	_____	_____	_____																	
<u>84</u> = Total Cover 50% of total cover: <u>42.00</u> 20% of total cover: <u>16.80</u>																				
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																				

SOIL

Sampling Point: DP-130**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 7	10YR 5/4	100					Silt Loam	
7 - 18	10YR 6/3	75	7.5YR 5/6	25	C	PL / M	Silt Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-01
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-131
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 3-5
Subregion (LRR or MLRA): P 136 Lat: 36.6517879 Long: -79.52351633 Datum: WGS 84
Soil Map Unit Name: 23B - Clover fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		_____ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes ☒ No _____ Depth (inches): <u>0.25</u>	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>4</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-131

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																																
1. <u>Liquidambar styraciflua</u>	<u>45</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)																																
2. <u>Acer rubrum</u>	<u>20</u>	☒	<u>FAC</u>																																	
3. <u>Pinus virginiana</u>	<u>20</u>	☒	<u>FACU</u>	Total Number of Dominant Species Across All Strata: <u>4</u> (B)																																
4. <u>Prunus serotina</u>	<u>10</u>		<u>FACU</u>																																	
5. <u>Ulmus americana</u>	<u>10</u>		<u>FACW</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.00</u> (A/B)																																
6. _____	_____		_____																																	
7. _____	_____		_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td colspan="2">Total % Cover of:</td> <td colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td><u>0</u></td> <td>x 1 =</td> <td><u>0</u></td> </tr> <tr> <td>FACW species</td> <td><u>16</u></td> <td>x 2 =</td> <td><u>32</u></td> </tr> <tr> <td>FAC species</td> <td><u>118</u></td> <td>x 3 =</td> <td><u>354</u></td> </tr> <tr> <td>FACU species</td> <td><u>45</u></td> <td>x 4 =</td> <td><u>180</u></td> </tr> <tr> <td>UPL species</td> <td><u>0</u></td> <td>x 5 =</td> <td><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td><u>179</u> (A)</td> <td></td> <td><u>566</u> (B)</td> </tr> <tr> <td colspan="4">Prevalence Index = B/A = <u>3.16</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>16</u>	x 2 =	<u>32</u>	FAC species	<u>118</u>	x 3 =	<u>354</u>	FACU species	<u>45</u>	x 4 =	<u>180</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>179</u> (A)		<u>566</u> (B)	Prevalence Index = B/A = <u>3.16</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>0</u>	x 1 =	<u>0</u>																																	
FACW species	<u>16</u>	x 2 =	<u>32</u>																																	
FAC species	<u>118</u>	x 3 =	<u>354</u>																																	
FACU species	<u>45</u>	x 4 =	<u>180</u>																																	
UPL species	<u>0</u>	x 5 =	<u>0</u>																																	
Column Totals:	<u>179</u> (A)		<u>566</u> (B)																																	
Prevalence Index = B/A = <u>3.16</u>																																				
50% of total cover: <u>52.50</u> 20% of total cover: <u>21.00</u> Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																																				
1. <u>Acer rubrum</u>	<u>1</u>		<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)																																
2. <u>Juniperus virginiana</u>	<u>1</u>		<u>FACU</u>																																	
3. <u>Ulmus americana</u>	<u>1</u>		<u>FACW</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
4. _____	_____		_____																																	
5. _____	_____		_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.																																
6. _____	_____		_____																																	
7. _____	_____		_____																																	
8. _____	_____		_____																																	
9. _____	_____		_____	Hydrophytic Vegetation Present? Yes ☒ No _____																																
10. _____	_____		_____																																	
50% of total cover: <u>1.50</u> 20% of total cover: <u>0.60</u> Herb Stratum (Plot size: <u>5 ft r</u>)																																				
1. <u>Microstegium vimineum</u>	<u>50</u>	☒	<u>FAC</u>																																	
2. <u>Lonicera japonica</u>	<u>10</u>		<u>FACU</u>																																	
3. <u>Aster paludosus</u>	<u>5</u>		<u>FACW</u>																																	
4. <u>Parthenocissus quinquefolia</u>	<u>4</u>		<u>FACU</u>																																	
5. <u>Campsis radicans</u>	<u>2</u>		<u>FAC</u>																																	
6. _____	_____		_____																																	
7. _____	_____		_____																																	
8. _____	_____		_____																																	
9. _____	_____		_____																																	
10. _____	_____		_____																																	
11. _____	_____		_____																																	
50% of total cover: <u>35.50</u> 20% of total cover: <u>14.20</u> Woody Vine Stratum (Plot size: <u>30 ft r</u>)																																				
1. _____	_____		_____																																	
2. _____	_____		_____																																	
3. _____	_____		_____																																	
4. _____	_____		_____																																	
5. _____	_____		_____																																	
50% of total cover: _____ 20% of total cover: _____																																				

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL

Sampling Point: DP-131

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	7.5YR 5/1	98	7.5YR 5/6	2	C	PL / M	Sandy Loam	
3 - 12	7.5YR 5/1	80	7.5YR 5/8	15	C	PL	Sandy Clay Loam	
3 - 12			7.5YR 6/1	5	D	PL / M	Sandy Clay Loam	Secondary Redox feature
12 - 18	7.5YR 6/1	50	7.5YR 5/6	45	C	PL	Sandy Clay Loam	
12 - 18			7.5YR 5/8	5	C	PL / M	Sandy Clay Loam	Secondary Redox feature
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (LRR N)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (MLRA 147, 148)
- ☐ Thin Dark Surface (S9) (MLRA 147, 148)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ☐ Umbric Surface (F13) (MLRA 136, 122)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 148)
- ☐ Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (MLRA 147)
- ☐ Coast Prairie Redox (A16) (MLRA 147, 148)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-01
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-132
Investigator(s): KZ, MM, LS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 4-6
Subregion (LRR or MLRA): P 136 Lat: 36.65181518 Long: -79.5234337 Datum: WGS 84
Soil Map Unit Name: 23B - Clover fine sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-132

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. <u>Liquidambar styraciflua</u>	<u>45</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)																
2. <u>Prunus serotina</u>	<u>20</u>	☒	<u>FACU</u>																	
3. <u>Acer rubrum</u>	<u>15</u>		<u>FAC</u>	Total Number of Dominant Species Across All Strata: <u>4</u> (B)																
4. <u>Pinus virginiana</u>	<u>10</u>		<u>UPL</u>																	
5. <u>Carya tomentosa</u>	<u>5</u>		<u>UPL</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)																
6. _____	_____																			
7. _____	_____			Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>95</u></td> <td>x 3 = <u>285</u></td> </tr> <tr> <td>FACU species <u>52</u></td> <td>x 4 = <u>208</u></td> </tr> <tr> <td>UPL species <u>16</u></td> <td>x 5 = <u>80</u></td> </tr> <tr> <td>Column Totals: <u>163</u> (A)</td> <td><u>573</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.51</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>95</u>	x 3 = <u>285</u>	FACU species <u>52</u>	x 4 = <u>208</u>	UPL species <u>16</u>	x 5 = <u>80</u>	Column Totals: <u>163</u> (A)	<u>573</u> (B)	Prevalence Index = B/A = <u>3.51</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>95</u>	x 3 = <u>285</u>																			
FACU species <u>52</u>	x 4 = <u>208</u>																			
UPL species <u>16</u>	x 5 = <u>80</u>																			
Column Totals: <u>163</u> (A)	<u>573</u> (B)																			
Prevalence Index = B/A = <u>3.51</u>																				
50% of total cover: <u>47.50</u> 20% of total cover: <u>19.00</u> Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																				
1. <u>Juniperus virginiana</u>	<u>10</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)																
2. <u>Lindera benzoin</u>	<u>2</u>		<u>FAC</u>																	
3. <u>Carya tomentosa</u>	<u>1</u>		<u>UPL</u>																	
4. _____	_____																			
5. _____	_____			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
6. _____	_____																			
7. _____	_____																			
8. _____	_____																			
9. _____	_____			Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.																
50% of total cover: <u>6.50</u> 20% of total cover: <u>2.60</u> Herb Stratum (Plot size: <u>5 ft r</u>)																				
1. <u>Microstegium vimineum</u>	<u>30</u>	☒	<u>FAC</u>																	
2. <u>Galium boreale</u>	<u>10</u>		<u>FACU</u>																	
3. <u>Rubus argutus</u>	<u>5</u>		<u>FACU</u>	Hydrophytic Vegetation Present? Yes _____ No ☒																
4. <u>Geum canadense</u>	<u>3</u>		<u>FACU</u>																	
5. <u>Toxicodendron radicans</u>	<u>3</u>		<u>FAC</u>																	
6. <u>Parthenocissus quinquefolia</u>	<u>2</u>		<u>FACU</u>																	
7. <u>Prunus serotina</u>	<u>1</u>		<u>FACU</u>	Woody Vine Stratum (Plot size: <u>30 ft r</u>)																
8. <u>Rosa multiflora</u>	<u>1</u>		<u>FACU</u>																	
9. _____	_____																			
10. _____	_____																			
11. _____	_____			50% of total cover: _____ 20% of total cover: _____ Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																
50% of total cover: <u>27.50</u> 20% of total cover: <u>11.00</u>																				
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																				
1. _____	_____																			
2. _____	_____																			
3. _____	_____																			
4. _____	_____																			
5. _____	_____																			
50% of total cover: _____ 20% of total cover: _____																				

SOIL

Sampling Point: DP-132

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 7	10YR 5/4	100					Silt Loam	
7 - 18	10YR 6/6	100					Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-01
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-133
Investigator(s): JF, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-1
Subregion (LRR or MLRA): P 136 Lat: 36.70631195 Long: -79.47011353 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>8</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-133

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Acer rubrum</u>	<u>50</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. <u>Liriodendron tulipifera</u>	<u>15</u>		<u>FACU</u>															
3. <u>Nyssa sylvatica</u>	<u>5</u>		<u>FAC</u>															
4. <u>Prunus serotina</u>	<u>5</u>		<u>FACU</u>															
5. <u>Quercus bicolor</u>	<u>5</u>		<u>FACW</u>															
6. _____	_____			Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>1</u></td> <td>x 1 = <u>1</u></td> </tr> <tr> <td>FACW species <u>27</u></td> <td>x 2 = <u>54</u></td> </tr> <tr> <td>FAC species <u>84</u></td> <td>x 3 = <u>252</u></td> </tr> <tr> <td>FACU species <u>23</u></td> <td>x 4 = <u>92</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>135</u> (A)</td> <td><u>399</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.95</u>	Total % Cover of:	Multiply by:	OBL species <u>1</u>	x 1 = <u>1</u>	FACW species <u>27</u>	x 2 = <u>54</u>	FAC species <u>84</u>	x 3 = <u>252</u>	FACU species <u>23</u>	x 4 = <u>92</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>135</u> (A)	<u>399</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>1</u>	x 1 = <u>1</u>																	
FACW species <u>27</u>	x 2 = <u>54</u>																	
FAC species <u>84</u>	x 3 = <u>252</u>																	
FACU species <u>23</u>	x 4 = <u>92</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>135</u> (A)	<u>399</u> (B)																	
80 = Total Cover 50% of total cover: <u>40.00</u> 20% of total cover: <u>16.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Acer rubrum</u>	<u>2</u>		<u>FAC</u>															
2. <u>Fraxinus pennsylvanica</u>	<u>2</u>		<u>FACW</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
4 = Total Cover 50% of total cover: <u>2.00</u> 20% of total cover: <u>0.80</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Athyrium asplenoides</u>	<u>15</u>	☒	<u>FAC</u>															
2. <u>Arisaema triphyllum</u>	<u>10</u>	☒	<u>FACW</u>															
3. <u>Carex intumescens</u>	<u>10</u>	☒	<u>FACW</u>															
4. <u>Microstegium vimineum</u>	<u>10</u>	☒	<u>FAC</u>															
5. <u>Parthenocissus quinquefolia</u>	<u>2</u>		<u>FACU</u>															
6. <u>Carex crinita</u>	<u>1</u>		<u>OBL</u>															
7. <u>Euonymus americanus</u>	<u>1</u>		<u>FAC</u>															
8. <u>Eutrochium purpureum</u>	<u>1</u>		<u>FAC</u>															
9. <u>Maianthemum racemosum</u>	<u>1</u>		<u>FACU</u>															
10. _____																		
11. _____																		
51 = Total Cover 50% of total cover: <u>25.50</u> 20% of total cover: <u>10.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)																		
Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.																		
Hydrophytic Vegetation Present? Yes ☒ No _____																		

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL

Sampling Point: DP-133

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 14	10YR 3/2	85	10YR 5/6	5	C	PL / M	Sandy Clay Loam	
0 - 14			10YR 3/6	10	C	PL / M	Sandy Clay Loam	Secondary Redox feature
14 - 18	10YR 4/1	95	10YR 3/6	5	C	PL / M	Sandy Clay Loam	
18 - 20	10YR 4/1	95	10YR 3/6	5	C	M	Loamy Sand	Manganese concretions
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☒ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-01
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-134
Investigator(s): MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Stream Terrace Local relief (concave, convex, none): Concave Slope (%): 2%
Subregion (LRR or MLRA): P 136 Lat: 36.706096 Long: -79.469915 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-134

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Liquidambar styraciflua</u>	<u>10</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>71.42</u> (A/B)														
2. <u>Juniperus virginiana</u>	<u>8</u>	☒	<u>FACU</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>8</u></td> <td>x 1 = <u>8</u></td> </tr> <tr> <td>FACW species <u>16</u></td> <td>x 2 = <u>32</u></td> </tr> <tr> <td>FAC species <u>55</u></td> <td>x 3 = <u>165</u></td> </tr> <tr> <td>FACU species <u>13</u></td> <td>x 4 = <u>52</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>92</u> (A)</td> <td><u>257</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.79</u>	Total % Cover of:	Multiply by:	OBL species <u>8</u>	x 1 = <u>8</u>	FACW species <u>16</u>	x 2 = <u>32</u>	FAC species <u>55</u>	x 3 = <u>165</u>	FACU species <u>13</u>	x 4 = <u>52</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>92</u> (A)	<u>257</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>8</u>	x 1 = <u>8</u>																	
FACW species <u>16</u>	x 2 = <u>32</u>																	
FAC species <u>55</u>	x 3 = <u>165</u>																	
FACU species <u>13</u>	x 4 = <u>52</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>92</u> (A)	<u>257</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____	<u>18</u> = Total Cover																	
50% of total cover: <u>9.00</u> 20% of total cover: <u>3.60</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Asimina triloba</u>	<u>5</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Liquidambar styraciflua</u>	<u>5</u>	☒	<u>FAC</u>															
3. <u>Ligustrum sinense</u>	<u>5</u>	☒	<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
_____	<u>15</u> = Total Cover																	
50% of total cover: <u>7.50</u> 20% of total cover: <u>3.00</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Dichanthelium clandestinum</u>	<u>20</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Present? Yes ☒ No _____														
2. <u>Athyrium asplenoides</u>	<u>15</u>	☒	<u>FAC</u>															
3. <u>Juncus effusus</u>	<u>8</u>	_____	<u>FACW</u>															
4. <u>Carex crinita</u>	<u>8</u>	_____	<u>OBL</u>															
5. <u>Arisaema triphyllum</u>	<u>8</u>	_____	<u>FACW</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____	Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
_____	<u>59</u> = Total Cover																	
50% of total cover: <u>29.50</u> 20% of total cover: <u>11.80</u>																		
Remarks: (Include photo numbers here or on a separate sheet.) <u>No woody vine stratum was observed at this data point.</u>																		

SOIL

Sampling Point: DP-134

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 6	10YR 4/2	100					Clay Loam	
6 - 18	10YR 4/1	90	10YR 5/6	10	C	PL / M	Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-01
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-135
Investigator(s): MM, JF, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.7061021 Long: -79.46981157 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No _____	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

Only one of the three wetland parameters (i.e., hydrophytic vegetation) was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☒ FAC-Neutral Test (D5)

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point; only one of the secondary indicators was present.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-135

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>15</u></td> <td>x 2 = <u>30</u></td> </tr> <tr> <td>FAC species <u>6</u></td> <td>x 3 = <u>18</u></td> </tr> <tr> <td>FACU species <u>8</u></td> <td>x 4 = <u>32</u></td> </tr> <tr> <td>UPL species <u>2</u></td> <td>x 5 = <u>10</u></td> </tr> <tr> <td>Column Totals: <u>31</u> (A)</td> <td><u>90</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.90</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>15</u>	x 2 = <u>30</u>	FAC species <u>6</u>	x 3 = <u>18</u>	FACU species <u>8</u>	x 4 = <u>32</u>	UPL species <u>2</u>	x 5 = <u>10</u>	Column Totals: <u>31</u> (A)	<u>90</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>15</u>	x 2 = <u>30</u>																	
FAC species <u>6</u>	x 3 = <u>18</u>																	
FACU species <u>8</u>	x 4 = <u>32</u>																	
UPL species <u>2</u>	x 5 = <u>10</u>																	
Column Totals: <u>31</u> (A)	<u>90</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Juncus effusus</u>	<u>15</u>	☒	<u>FACW</u>															
2. <u>Solidago sp.</u>	<u>15</u>	☒	<u>FACW</u>															
3. <u>Dichanthelium clandestinum</u>	<u>5</u>	☐	<u>FAC</u>															
4. <u>Lonicera japonica</u>	<u>5</u>	☐	<u>FACU</u>															
5. <u>Daucus carota</u>	<u>2</u>	☐	<u>UPL</u>															
6. <u>Duchesnea indica</u>	<u>2</u>	☐	<u>FACU</u>															
7. <u>Ranunculus bulbosus</u>	<u>1</u>	☐	<u>FAC</u>															
8. <u>Rubus argutus</u>	<u>1</u>	☐	<u>FACU</u>															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>46</u> = Total Cover																		
50% of total cover: <u>23.00</u> 20% of total cover: <u>9.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-135

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 4/4	100					Silt Loam	
2 - 8	7.5YR 5/6	80					Loam	
2 - 8	10YR 5/4	20					Loam	Secondary Matrix color
8 - 18	7.5YR 5/6	85	10YR 6/1	5	D	M	Loam	
8 - 18	10YR 5/3	10					Loam	Secondary Matrix color
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (LRR N)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (MLRA 147, 148)
- ☐ Thin Dark Surface (S9) (MLRA 147, 148)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ☐ Umbric Surface (F13) (MLRA 136, 122)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 148)
- ☐ Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (MLRA 147)
- ☐ Coast Prairie Redox (A16) (MLRA 147, 148)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

In WSSI's best professional judgement, the secondary matrix documented within this data point is indicative of historic disturbance to the soil profile and is not a redoximorphic feature.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-02
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-136
Investigator(s): JF Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.70182973 Long: -79.47347123 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>10</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-136

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>2</u></td> <td>x 1 = <u>2</u></td> </tr> <tr> <td>FACW species <u>35</u></td> <td>x 2 = <u>70</u></td> </tr> <tr> <td>FAC species <u>25</u></td> <td>x 3 = <u>75</u></td> </tr> <tr> <td>FACU species <u>2</u></td> <td>x 4 = <u>8</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>64</u> (A)</td> <td><u>155</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.42</u>	Total % Cover of:	Multiply by:	OBL species <u>2</u>	x 1 = <u>2</u>	FACW species <u>35</u>	x 2 = <u>70</u>	FAC species <u>25</u>	x 3 = <u>75</u>	FACU species <u>2</u>	x 4 = <u>8</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>64</u> (A)	<u>155</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>2</u>	x 1 = <u>2</u>																	
FACW species <u>35</u>	x 2 = <u>70</u>																	
FAC species <u>25</u>	x 3 = <u>75</u>																	
FACU species <u>2</u>	x 4 = <u>8</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>64</u> (A)	<u>155</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Dichanthelium clandestinum</u>	<u>25</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Juncus effusus</u>	<u>20</u>	☒	<u>FACW</u>															
3. <u>Solidago gigantea</u>	<u>10</u>		<u>FACW</u>															
4. <u>Glechoma hederacea</u>	<u>2</u>		<u>FACU</u>															
5. <u>Persicaria sagittata</u>	<u>2</u>		<u>OBL</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: <u>29.50</u> 20% of total cover: <u>11.80</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Apios americana</u>	<u>5</u>	☒	<u>FACW</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>																		

Hydrophytic Vegetation Present?
 Yes ☒ No _____

Remarks: (Include photo numbers here or on a separate sheet.)

No tree or sapling/shrub strata were observed at this data point.

SOIL

Sampling Point: DP-136

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 12	10YR 4/2	75	7.5YR 4/6	25	C	PL / M	Clay Loam	
12 - 14	10YR 5/4	85	7.5YR 4/6	15	C	PL / M	Sandy Loam	
14 - 18	10YR 4/3	80	7.5YR 4/6	20	C	PL / M	Sandy Clay Loam	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-02
 Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-137
 Investigator(s): MM Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-2
 Subregion (LRR or MLRA): P 136 Lat: 36.702483 Long: -79.47382126 Datum: WGS 84
 Soil Map Unit Name: 5B3 - Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
 Water Table Present? Yes ☒ No _____ Depth (inches): 9
 Saturation Present? Yes ☒ No _____ Depth (inches): 7
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-137

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Carya tomentosa</u>	<u>45</u>	☒		Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. <u>Acer rubrum</u>	<u>25</u>	☒	FAC															
3. <u>Quercus alba</u>	<u>15</u>		FACU															
4. <u>Quercus montana</u>	<u>15</u>		UPL															
5. <u>Nyssa sylvatica</u>	<u>10</u>		FAC															
6. <u>Liriodendron tulipifera</u>	<u>5</u>		FACU															
7. _____																		
<u>115</u> = Total Cover 50% of total cover: <u>57.50</u> 20% of total cover: <u>23.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>35</u></td> <td>x 1 = <u>35</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>78</u></td> <td>x 3 = <u>234</u></td> </tr> <tr> <td>FACU species <u>38</u></td> <td>x 4 = <u>152</u></td> </tr> <tr> <td>UPL species <u>22</u></td> <td>x 5 = <u>110</u></td> </tr> <tr> <td>Column Totals: <u>173</u> (A)</td> <td><u>531</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.06</u>	Total % Cover of:	Multiply by:	OBL species <u>35</u>	x 1 = <u>35</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>78</u>	x 3 = <u>234</u>	FACU species <u>38</u>	x 4 = <u>152</u>	UPL species <u>22</u>	x 5 = <u>110</u>	Column Totals: <u>173</u> (A)	<u>531</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>35</u>	x 1 = <u>35</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>78</u>	x 3 = <u>234</u>																	
FACU species <u>38</u>	x 4 = <u>152</u>																	
UPL species <u>22</u>	x 5 = <u>110</u>																	
Column Totals: <u>173</u> (A)	<u>531</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Acer rubrum</u>	<u>15</u>	☒	FAC															
2. <u>Nyssa sylvatica</u>	<u>8</u>	☒	FAC															
3. <u>Juniperus virginiana</u>	<u>5</u>		FACU															
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
<u>28</u> = Total Cover 50% of total cover: <u>14.00</u> 20% of total cover: <u>5.60</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Carex crinita</u>	<u>35</u>	☒	OBL	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Dichanthelium clandestinum</u>	<u>20</u>	☒	FAC															
3. <u>Polystichum acrostichoides</u>	<u>10</u>		FACU															
4. <u>Arisaema triphyllum ssp. triphyllum</u>	<u>7</u>																	
5. <u>Quercus montana</u>	<u>7</u>		UPL															
6. <u>Juniperus virginiana</u>	<u>3</u>		FACU															
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
<u>82</u> = Total Cover 50% of total cover: <u>41.00</u> 20% of total cover: <u>16.40</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																		

SOIL

Sampling Point: DP-137

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-02
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-138
Investigator(s): MS, JF Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 2-5
Subregion (LRR or MLRA): P 136 Lat: 36.70207789 Long: -79.47349186 Datum: WGS 84
Soil Map Unit Name: 21D - Poplar Forest fine sandy loam, 15 to 25 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-138

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>7</u></td> <td>x 2 = <u>14</u></td> </tr> <tr> <td>FAC species <u>12</u></td> <td>x 3 = <u>36</u></td> </tr> <tr> <td>FACU species <u>19</u></td> <td>x 4 = <u>76</u></td> </tr> <tr> <td>UPL species <u>91</u></td> <td>x 5 = <u>455</u></td> </tr> <tr> <td>Column Totals: <u>129</u> (A)</td> <td><u>581</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.50</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>7</u>	x 2 = <u>14</u>	FAC species <u>12</u>	x 3 = <u>36</u>	FACU species <u>19</u>	x 4 = <u>76</u>	UPL species <u>91</u>	x 5 = <u>455</u>	Column Totals: <u>129</u> (A)	<u>581</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>7</u>	x 2 = <u>14</u>																	
FAC species <u>12</u>	x 3 = <u>36</u>																	
FACU species <u>19</u>	x 4 = <u>76</u>																	
UPL species <u>91</u>	x 5 = <u>455</u>																	
Column Totals: <u>129</u> (A)	<u>581</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Bromus hordeaceus</u>	<u>85</u>	☒	<u>UPL</u>															
2. <u>Glechoma hederacea</u>	<u>15</u>	☐	<u>FACU</u>															
3. <u>Dichanthelium clandestinum</u>	<u>10</u>	☐	<u>FAC</u>															
4. <u>Juncus effusus</u>	<u>5</u>	☐	<u>FACW</u>															
5. <u>Lonicera japonica</u>	<u>3</u>	☐	<u>FACU</u>															
6. <u>Cerastium arvense</u>	<u>2</u>	☐	<u>UPL</u>															
7. <u>Coronilla varia</u>	<u>2</u>	☐	<u>UPL</u>															
8. <u>Daucus carota</u>	<u>2</u>	☐	<u>UPL</u>															
9. <u>Solidago gigantea</u>	<u>2</u>	☐	<u>FACW</u>															
10. <u>Toxicodendron radicans</u>	<u>2</u>	☐	<u>FAC</u>															
11. <u>Apocynum cannabinum</u>	<u>1</u>	☐	<u>FACU</u>															
_____ = Total Cover																		
50% of total cover: <u>64.50</u> 20% of total cover: <u>25.80</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) Rubus argutus 2%, Veronica arvensis 2% No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ☒

SOIL

Sampling Point: DP-138

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-02
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-139
Investigator(s): MM, JF Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.69331522 Long: -79.48183436 Datum: WGS 84
Soil Map Unit Name: 5B3 - Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Only one secondary wetland hydrology indicator (i.e., geomorphic position) was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-139

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Prunus serotina</u>	<u>30</u>	☒	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>16.66</u> (A/B)														
2. <u>Cornus florida</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Liriodendron tulipifera</u>	<u>5</u>		<u>FACU</u>															
4. _____	_____		_____															
5. _____	_____		_____															
6. _____	_____		_____															
7. _____	_____		_____															
<u>50</u> = Total Cover 50% of total cover: <u>25.00</u> 20% of total cover: <u>10.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>4</u></td> <td>x 2 = <u>8</u></td> </tr> <tr> <td>FAC species <u>100</u></td> <td>x 3 = <u>300</u></td> </tr> <tr> <td>FACU species <u>94</u></td> <td>x 4 = <u>376</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>198</u> (A)</td> <td><u>684</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.45</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>4</u>	x 2 = <u>8</u>	FAC species <u>100</u>	x 3 = <u>300</u>	FACU species <u>94</u>	x 4 = <u>376</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>198</u> (A)	<u>684</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>4</u>	x 2 = <u>8</u>																	
FAC species <u>100</u>	x 3 = <u>300</u>																	
FACU species <u>94</u>	x 4 = <u>376</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>198</u> (A)	<u>684</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Prunus serotina</u>	<u>10</u>	☒	<u>FACU</u>															
2. <u>Quercus rubra</u>	<u>10</u>	☒	<u>FACU</u>															
3. <u>Carpinus caroliniana</u>	<u>5</u>		<u>FAC</u>															
4. <u>Juniperus virginiana</u>	<u>5</u>		<u>FACU</u>															
5. <u>Viburnum prunifolium</u>	<u>5</u>		<u>FACU</u>															
6. _____	_____		_____															
7. _____	_____		_____															
8. _____	_____		_____															
9. _____	_____		_____															
<u>35</u> = Total Cover 50% of total cover: <u>17.50</u> 20% of total cover: <u>7.00</u>				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Microstegium vimineum</u>	<u>90</u>	☒	<u>FAC</u>															
2. <u>Lonicera japonica</u>	<u>5</u>		<u>FACU</u>															
3. <u>Arisaema triphyllum</u>	<u>3</u>		<u>FACW</u>															
4. <u>Dichanthelium clandestinum</u>	<u>3</u>		<u>FAC</u>															
5. <u>Maianthemum racemosum</u>	<u>2</u>		<u>FACU</u>															
6. <u>Panicum sp.</u>	<u>2</u>		_____															
7. <u>Carex intumescens</u>	<u>1</u>		<u>FACW</u>															
8. <u>Parthenocissus quinquefolia</u>	<u>1</u>		<u>FACU</u>															
9. <u>Rubus argutus</u>	<u>1</u>		<u>FACU</u>															
10. <u>Smilax rotundifolia</u>	<u>1</u>		<u>FAC</u>															
11. <u>Toxicodendron radicans</u>	<u>1</u>		<u>FAC</u>															
<u>110</u> = Total Cover 50% of total cover: <u>55.00</u> 20% of total cover: <u>22.00</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Lonicera japonica</u>	<u>5</u>	☒	<u>FACU</u>															
2. _____	_____		_____															
3. _____	_____		_____															
4. _____	_____		_____															
5. _____	_____		_____															
<u>5</u> = Total Cover 50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>																		
Hydrophytic Vegetation Present? Yes _____ No ☒																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: DP-139

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 4	10YR 5/4	100					Silty Clay Loam	
4 - 12	10YR 4/6	98	7.5YR 4/6	2	C		Silty Clay Loam	
12 - 18	10YR 5/3	80	7.5YR 3/4	20	C		Clay Loam	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-02
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-140
Investigator(s): MS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR or MLRA): P 136 Lat: 36.69331718 Long: -79.481842 Datum: WGS 84
Soil Map Unit Name: 5B3 - Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-140

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																												
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)																																											
2. _____	_____	_____	_____																																												
3. _____	_____	_____	_____																																												
4. _____	_____	_____	_____																																												
5. _____	_____	_____	_____																																												
6. _____	_____	_____	_____																																												
7. _____	_____	_____	_____																																												
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>25</u></td> <td>x 1 = <u>25</u></td> </tr> <tr> <td>FACW species <u>65</u></td> <td>x 2 = <u>130</u></td> </tr> <tr> <td>FAC species <u>30</u></td> <td>x 3 = <u>90</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>130</u> (A)</td> <td><u>290</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.23</u>	Total % Cover of:	Multiply by:	OBL species <u>25</u>	x 1 = <u>25</u>	FACW species <u>65</u>	x 2 = <u>130</u>	FAC species <u>30</u>	x 3 = <u>90</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>130</u> (A)	<u>290</u> (B)																													
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Column Totals: <u>130</u> (A)	<u>290</u> (B)																																														
50% of total cover: _____ 20% of total cover: _____																																															
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ _____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																																															
Herb Stratum (Plot size: <u>5 ft r</u>) <table style="width: 100%;"> <tr> <td>1. <u>Solidago gigantea</u></td> <td style="text-align: center;"><u>35</u></td> <td style="text-align: center;">☒</td> <td style="text-align: center;"><u>FACW</u></td> </tr> <tr> <td>2. <u>Holcus lanatus</u></td> <td style="text-align: center;"><u>30</u></td> <td style="text-align: center;">☒</td> <td style="text-align: center;"><u>FAC</u></td> </tr> <tr> <td>3. <u>Juncus effusus</u></td> <td style="text-align: center;"><u>30</u></td> <td style="text-align: center;">☒</td> <td style="text-align: center;"><u>FACW</u></td> </tr> <tr> <td>4. <u>Carex lurida</u></td> <td style="text-align: center;"><u>25</u></td> <td></td> <td style="text-align: center;"><u>OBL</u></td> </tr> <tr> <td>5. <u>Cerastium fontanum</u></td> <td style="text-align: center;"><u>5</u></td> <td></td> <td style="text-align: center;"><u>FACU</u></td> </tr> <tr> <td>6. <u>Daucus carota</u></td> <td style="text-align: center;"><u>5</u></td> <td></td> <td style="text-align: center;"><u>UPL</u></td> </tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>9. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>10. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>11. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> </table> _____ = Total Cover 50% of total cover: <u>65.00</u> 20% of total cover: <u>26.00</u>				1. <u>Solidago gigantea</u>	<u>35</u>	☒	<u>FACW</u>	2. <u>Holcus lanatus</u>	<u>30</u>	☒	<u>FAC</u>	3. <u>Juncus effusus</u>	<u>30</u>	☒	<u>FACW</u>	4. <u>Carex lurida</u>	<u>25</u>		<u>OBL</u>	5. <u>Cerastium fontanum</u>	<u>5</u>		<u>FACU</u>	6. <u>Daucus carota</u>	<u>5</u>		<u>UPL</u>	7. _____	_____	_____	_____	8. _____	_____	_____	_____	9. _____	_____	_____	_____	10. _____	_____	_____	_____	11. _____	_____	_____	_____
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7. _____	_____	_____	_____																																												
8. _____	_____	_____	_____																																												
9. _____	_____	_____	_____																																												
10. _____	_____	_____	_____																																												
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Woody Vine Stratum (Plot size: <u>30 ft r</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																																															
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																																															

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-140

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 5	10YR 4/3	100					Silt Loam	
5 - 12	10YR 4/1	75	7.5YR 5/8	23	C	PL / M	Silty Clay Loam	
5 - 12			10YR 6/1	2	D	PL	Silty Clay Loam	Secondary Redox feature
12 - 18	10YR 4/1	90	7.5YR 5/8	8	C	PL / M	Silty Clay Loam	
12 - 18			10YR 6/2	2	D	PL / M	Silty Clay Loam	Secondary Redox feature
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-02
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-141
Investigator(s): MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 3
Subregion (LRR or MLRA): P 136 Lat: 36.69333033 Long: -79.48184529 Datum: WGS 84
Soil Map Unit Name: 5B3 - Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-141

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>15</u></td> <td>x 2 = <u>30</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>18</u></td> <td>x 4 = <u>72</u></td> </tr> <tr> <td>UPL species <u>20</u></td> <td>x 5 = <u>100</u></td> </tr> <tr> <td>Column Totals: <u>63</u> (A)</td> <td><u>232</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.68</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>15</u>	x 2 = <u>30</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>18</u>	x 4 = <u>72</u>	UPL species <u>20</u>	x 5 = <u>100</u>	Column Totals: <u>63</u> (A)	<u>232</u> (B)
Total % Cover of:	Multiply by:																	
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UPL species <u>20</u>	x 5 = <u>100</u>																	
Column Totals: <u>63</u> (A)	<u>232</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Vulpia myuros</u>	<u>20</u>	☒	<u>UPL</u>															
2. <u>Solidago altissima</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Dichanthelium clandestinum</u>	<u>10</u>		<u>FAC</u>															
4. <u>Juncus effusus</u>	<u>10</u>		<u>FACW</u>															
5. <u>Solidago gigantea</u>	<u>5</u>		<u>FACW</u>															
6. <u>Lespedeza cuneata</u>	<u>3</u>		<u>FACU</u>															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>63</u> = Total Cover																		
50% of total cover: <u>31.50</u> 20% of total cover: <u>12.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ☒

SOIL

Sampling Point: DP-141

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 5	10YR 4/3	100					Sandy Loam	
5 - 8	10YR 5/3	100					Sandy Loam	
-								
-								
-								
-								
-								
-								
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¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Gravel
 Depth (inches): 8

Hydric Soil Present? Yes ☐ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-03
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-142
Investigator(s): JF, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 3
Subregion (LRR or MLRA): P 136 Lat: 36.691639 Long: -79.48463 Datum: WGS 84
Soil Map Unit Name: 5C3 - Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

Only one of the three wetland parameters (i.e., hydrophytic vegetation) was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present?	Yes _____	No ☒	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No ☒
Water Table Present?	Yes _____	No ☒	Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____	No ☒	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point; only one of the secondary indicators was present.

Sampling Point: DP-142

Tree Stratum (Plot size: <u>30 ft r</u>)				Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Platanus occidentalis</u>	<u>50</u>	☒	<u>FACW</u>		
2.	<u>Liquidambar styraciflua</u>	<u>25</u>	☒	<u>FAC</u>		
3.	<u>Liriodendron tulipifera</u>	<u>10</u>		<u>FACU</u>		
4.						
5.						
6.						
7.						
		<u>85</u>	= Total Cover			
		50% of total cover: <u>42.50</u>			20% of total cover: <u>17.00</u>	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)						
1.	<u>Liquidambar styraciflua</u>	<u>10</u>	☒	<u>FAC</u>		
2.	<u>Acer rubrum</u>	<u>5</u>	☒	<u>FAC</u>		
3.	<u>Lindera benzoin</u>	<u>5</u>	☒	<u>FAC</u>		
4.						
5.						
6.						
7.						
8.						
9.						
		<u>20</u>	= Total Cover			
		50% of total cover: <u>10.00</u>			20% of total cover: <u>4.00</u>	
Herb Stratum (Plot size: <u>5 ft r</u>)						
1.	<u>Onoclea sensibilis</u>	<u>60</u>	☒	<u>FACW</u>		
2.	<u>Microstegium vimineum</u>	<u>45</u>	☒	<u>FAC</u>		
3.	<u>Lonicera japonica</u>	<u>10</u>		<u>FACU</u>		
4.	<u>Dichanthelium clandestinum</u>	<u>5</u>		<u>FAC</u>		
5.	<u>Rubus argutus</u>	<u>1</u>		<u>FACU</u>		
6.						
7.						
8.						
9.						
10.						
11.						
		<u>121</u>	= Total Cover			
		50% of total cover: <u>60.50</u>			20% of total cover: <u>24.20</u>	
Woody Vine Stratum (Plot size: <u>30 ft r</u>)						
1.	<u>Lonicera japonica</u>	<u>25</u>	☒	<u>FACU</u>		
2.						
3.						
4.						
5.						
		<u>25</u>	= Total Cover			
		50% of total cover: <u>12.50</u>			20% of total cover: <u>5.00</u>	

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP-142**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	7.5YR 4/4	95	7.5YR 5/8	5	C	M	Clay Loam	
2 - 18	5YR 5/6	90	10YR 5/4	10	D	M	Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-03
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-143
Investigator(s): JF, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-1
Subregion (LRR or MLRA): P 136 Lat: 36.689687 Long: -79.486621 Datum: WGS 84
Soil Map Unit Name: 5C3 - Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☒ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-143

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Acer rubrum</u>	<u>60</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83.33</u> (A/B)														
2. <u>Nyssa sylvatica</u>	<u>20</u>	☒	<u>FAC</u>															
3. <u>Liriodendron tulipifera</u>	<u>10</u>		<u>FACU</u>															
4. _____																		
5. _____																		
6. _____																		
7. _____																		
<u>90</u> = Total Cover 50% of total cover: <u>45.00</u> 20% of total cover: <u>18.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>10</u></td> <td>x 1 = <u>10</u></td> </tr> <tr> <td>FACW species <u>80</u></td> <td>x 2 = <u>160</u></td> </tr> <tr> <td>FAC species <u>150</u></td> <td>x 3 = <u>450</u></td> </tr> <tr> <td>FACU species <u>27</u></td> <td>x 4 = <u>108</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>267</u> (A)</td> <td><u>728</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.72</u>	Total % Cover of:	Multiply by:	OBL species <u>10</u>	x 1 = <u>10</u>	FACW species <u>80</u>	x 2 = <u>160</u>	FAC species <u>150</u>	x 3 = <u>450</u>	FACU species <u>27</u>	x 4 = <u>108</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>267</u> (A)	<u>728</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>10</u>	x 1 = <u>10</u>																	
FACW species <u>80</u>	x 2 = <u>160</u>																	
FAC species <u>150</u>	x 3 = <u>450</u>																	
FACU species <u>27</u>	x 4 = <u>108</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>267</u> (A)	<u>728</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Lindera benzoin</u>	<u>55</u>	☒	<u>FAC</u>															
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
<u>55</u> = Total Cover 50% of total cover: <u>27.50</u> 20% of total cover: <u>11.00</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Cinna arundinacea</u>	<u>60</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Impatiens capensis</u>	<u>20</u>		<u>FACW</u>															
3. <u>Carex crinita</u>	<u>10</u>		<u>OBL</u>															
4. <u>Microstegium vimineum</u>	<u>8</u>		<u>FAC</u>															
5. <u>Lonicera japonica</u>	<u>5</u>		<u>FACU</u>															
6. <u>Glechoma hederacea</u>	<u>2</u>		<u>FACU</u>															
7. <u>Dichanthelium clandestinum</u>	<u>2</u>		<u>FAC</u>															
8. _____																		
9. _____																		
10. _____																		
11. _____																		
<u>107</u> = Total Cover 50% of total cover: <u>53.50</u> 20% of total cover: <u>21.40</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Lonicera japonica</u>	<u>10</u>	☒	<u>FACU</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. <u>Toxicodendron radicans</u>	<u>5</u>	☒	<u>FAC</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
<u>15</u> = Total Cover 50% of total cover: <u>7.50</u> 20% of total cover: <u>3.00</u>																		
Hydrophytic Vegetation Present? Yes ☒ No _____																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: DP-143

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 4	7.5YR 4/4	95	10YR 4/2	5	D	M	Silty Clay Loam	Manganese concretions
4 - 9	10YR 4/2	80	7.5YR 4/6	20	C	PL / M	Silty Clay Loam	
9 - 18	10YR 5/1	60	7.5YR 4/6	40	C	PL / M	Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-03
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-144
Investigator(s): JF, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-1
Subregion (LRR or MLRA): P 136 Lat: 36.689537 Long: -79.486567 Datum: WGS 84
Soil Map Unit Name: 5C3 - Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

Only one of the three wetland parameters (i.e., hydrophytic vegetation) was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Only one secondary wetland hydrology indicator (i.e., geomorphic position) was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-144

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Acer rubrum</u>	<u>20</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80.00</u> (A/B)																
2. <u>Liquidambar styraciflua</u>	<u>15</u>	☒	<u>FAC</u>																	
3. <u>Nyssa sylvatica</u>	<u>10</u>		<u>FAC</u>																	
4. <u>Carpinus caroliniana</u>	<u>10</u>		<u>FAC</u>																	
5. _____	_____		_____																	
6. _____	_____		_____																	
7. _____	_____		_____																	
<u>55</u> = Total Cover 50% of total cover: <u>27.50</u> 20% of total cover: <u>11.00</u>																				
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Lindera benzoin</u>	<u>60</u>	☒	<u>FAC</u>	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>10</u></td> <td>x 1 = <u>10</u></td> </tr> <tr> <td>FACW species <u>16</u></td> <td>x 2 = <u>32</u></td> </tr> <tr> <td>FAC species <u>238</u></td> <td>x 3 = <u>714</u></td> </tr> <tr> <td>FACU species <u>46</u></td> <td>x 4 = <u>184</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>310</u> (A)</td> <td><u>940</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.03</u></td> </tr> </table> Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)	Total % Cover of:	Multiply by:	OBL species <u>10</u>	x 1 = <u>10</u>	FACW species <u>16</u>	x 2 = <u>32</u>	FAC species <u>238</u>	x 3 = <u>714</u>	FACU species <u>46</u>	x 4 = <u>184</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>310</u> (A)	<u>940</u> (B)	Prevalence Index = B/A = <u>3.03</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>10</u>	x 1 = <u>10</u>																			
FACW species <u>16</u>	x 2 = <u>32</u>																			
FAC species <u>238</u>	x 3 = <u>714</u>																			
FACU species <u>46</u>	x 4 = <u>184</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>310</u> (A)	<u>940</u> (B)																			
Prevalence Index = B/A = <u>3.03</u>																				
2. <u>Carpinus caroliniana</u>	<u>5</u>		<u>FAC</u>																	
3. <u>Fraxinus pennsylvanica</u>	<u>1</u>		<u>FACW</u>																	
4. _____	_____		_____																	
5. _____	_____		_____																	
6. _____	_____		_____																	
7. _____	_____		_____																	
8. _____	_____		_____																	
9. _____	_____		_____																	
<u>66</u> = Total Cover 50% of total cover: <u>33.00</u> 20% of total cover: <u>13.20</u>																				
Herb Stratum (Plot size: <u>5 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Microstegium vimineum</u>	<u>90</u>	☒	<u>FAC</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.																
2. <u>Cinna arundinacea</u>	<u>15</u>		<u>FACW</u>																	
3. <u>Carex crinita</u>	<u>10</u>		<u>OBL</u>																	
4. <u>Dichanthelium clandestinum</u>	<u>10</u>		<u>FAC</u>																	
5. <u>Verbesina alternifolia</u>	<u>5</u>		<u>FAC</u>																	
6. <u>Parthenocissus quinquefolia</u>	<u>5</u>		<u>FACU</u>																	
7. <u>Gallium sp.</u>	<u>2</u>		_____																	
8. <u>Viola sp.</u>	<u>1</u>		_____																	
9. <u>Carpinus caroliniana</u>	<u>1</u>		<u>FAC</u>																	
10. <u>Glechoma hederacea</u>	<u>1</u>		<u>FACU</u>																	
11. _____	_____		_____																	
<u>140</u> = Total Cover 50% of total cover: <u>70.00</u> 20% of total cover: <u>28.00</u>																				
Woody Vine Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Lonicera japonica</u>	<u>40</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Present? Yes ☒ No _____																
2. <u>Toxicodendron radicans</u>	<u>10</u>		<u>FAC</u>																	
3. <u>Amphicarpaea bracteata</u>	<u>2</u>		<u>FAC</u>																	
4. _____	_____		_____																	
5. _____	_____		_____																	
<u>52</u> = Total Cover 50% of total cover: <u>26.00</u> 20% of total cover: <u>10.40</u>																				
Remarks: (Include photo numbers here or on a separate sheet.)																				

SOIL

Sampling Point: DP-144**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 5/6	100					Silty Clay Loam	
3 - 18	7.5YR 4/4	100					Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-06
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-145
Investigator(s): JF, AS, NF, AT Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 0-1
Subregion (LRR or MLRA): P 136 Lat: 36.77071519 Long: -79.40289045 Datum: WGS 84
Soil Map Unit Name: 1C - Nathalie sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No _____	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

Only one of the three wetland parameters (i.e., hydrophytic vegetation) was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	
Water Table Present? Yes _____ No ☒	Depth (inches): _____	
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point; only one of the secondary indicators was present.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-145

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Liriodendron tulipifera</u>	<u>40</u>	☒	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83.33</u> (A/B)														
2. <u>Acer negundo</u>	<u>15</u>	☒	<u>FAC</u>															
3. <u>Ailanthus altissima</u>	<u>5</u>		<u>FACU</u>															
4. <u>Ulmus rubra</u>	<u>5</u>		<u>FAC</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>65</u> = Total Cover 50% of total cover: <u>32.50</u> 20% of total cover: <u>13.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>5</u></td> <td>x 1 = <u>5</u></td> </tr> <tr> <td>FACW species <u>7</u></td> <td>x 2 = <u>14</u></td> </tr> <tr> <td>FAC species <u>115</u></td> <td>x 3 = <u>345</u></td> </tr> <tr> <td>FACU species <u>59</u></td> <td>x 4 = <u>236</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>186</u> (A)</td> <td><u>600</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.22</u>	Total % Cover of:	Multiply by:	OBL species <u>5</u>	x 1 = <u>5</u>	FACW species <u>7</u>	x 2 = <u>14</u>	FAC species <u>115</u>	x 3 = <u>345</u>	FACU species <u>59</u>	x 4 = <u>236</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>186</u> (A)	<u>600</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>5</u>	x 1 = <u>5</u>																	
FACW species <u>7</u>	x 2 = <u>14</u>																	
FAC species <u>115</u>	x 3 = <u>345</u>																	
FACU species <u>59</u>	x 4 = <u>236</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>186</u> (A)	<u>600</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Liquidambar styraciflua</u>	<u>5</u>	☒	<u>FAC</u>															
2. <u>Fraxinus pennsylvanica</u>	<u>2</u>	☒	<u>FACW</u>															
3. <u>Ulmus rubra</u>	<u>2</u>	☒	<u>FAC</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
<u>9</u> = Total Cover 50% of total cover: <u>4.50</u> 20% of total cover: <u>1.80</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Microstegium vimineum</u>	<u>85</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Duchesnea indica</u>	<u>10</u>		<u>FACU</u>															
3. <u>Cinna arundinacea</u>	<u>5</u>		<u>FACW</u>															
4. <u>Glyceria striata</u>	<u>5</u>		<u>OBL</u>															
5. <u>Collinsonia canadensis</u>	<u>2</u>		<u>FAC</u>															
6. <u>Ligustrum sinense</u>	<u>2</u>		<u>FACU</u>															
7. <u>Viola sp.</u>	<u>2</u>		_____															
8. <u>Carex blanda</u>	<u>1</u>		<u>FAC</u>															
9. <u>Oxalis stricta</u>	<u>1</u>		<u>FACU</u>															
10. <u>Parthenocissus quinquefolia</u>	<u>1</u>		<u>FACU</u>															
11. <u>Carex sp.</u>	<u>1</u>		_____															
<u>115</u> = Total Cover 50% of total cover: <u>57.50</u> 20% of total cover: <u>23.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Vitis sp.</u>	<u>10</u>	☒	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
<u>10</u> = Total Cover 50% of total cover: <u>5.00</u> 20% of total cover: <u>2.00</u>																		
Hydrophytic Vegetation Present? Yes ☒ No _____																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: DP-145

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 3/4	100					Clay Loam	
2 - 12	7.5YR 3/4	100					Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock
 Depth (inches): 12

Hydric Soil Present? Yes ☐ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-07
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-146
Investigator(s): JF, AS, NF Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-1
Subregion (LRR or MLRA): P 136 Lat: 36.77367691 Long: -79.40344637 Datum: WGS 84
Soil Map Unit Name: 8A - Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No _____	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes ☒ No _____	

Remarks:

Only two of the three wetland parameters (i.e., wetland hydrology and hydrophytic vegetation) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☒ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-146

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Betula nigra</u>	<u>40</u>	☒	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80.00</u> (A/B)														
2. <u>Acer negundo</u>	<u>15</u>	☒	<u>FAC</u>															
3. <u>Carpinus caroliniana</u>	<u>15</u>	☒	<u>FAC</u>															
4. <u>Ulmus rubra</u>	<u>10</u>		<u>FAC</u>															
5. _____	_____		_____															
6. _____	_____		_____															
7. _____	_____		_____															
<u>80</u> = Total Cover 50% of total cover: <u>40.00</u> 20% of total cover: <u>16.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>45</u></td> <td>x 2 = <u>90</u></td> </tr> <tr> <td>FAC species <u>121</u></td> <td>x 3 = <u>363</u></td> </tr> <tr> <td>FACU species <u>30</u></td> <td>x 4 = <u>120</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>196</u> (A)</td> <td><u>573</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.92</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>45</u>	x 2 = <u>90</u>	FAC species <u>121</u>	x 3 = <u>363</u>	FACU species <u>30</u>	x 4 = <u>120</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>196</u> (A)	<u>573</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>45</u>	x 2 = <u>90</u>																	
FAC species <u>121</u>	x 3 = <u>363</u>																	
FACU species <u>30</u>	x 4 = <u>120</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>196</u> (A)	<u>573</u> (B)																	
<u>90</u> = Total Cover 50% of total cover: <u>45.00</u> 20% of total cover: <u>18.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Lindera benzoin</u>	<u>55</u>	☒	<u>FAC</u>															
2. <u>Ligustrum sinense</u>	<u>15</u>		<u>FACU</u>															
3. <u>Liquidambar styraciflua</u>	<u>10</u>		<u>FAC</u>															
4. <u>Carpinus caroliniana</u>	<u>5</u>		<u>FAC</u>															
5. <u>Fraxinus pennsylvanica</u>	<u>5</u>		<u>FACW</u>															
6. _____	_____		_____															
7. _____	_____		_____															
8. _____	_____		_____															
9. _____	_____		_____															
<u>90</u> = Total Cover 50% of total cover: <u>45.00</u> 20% of total cover: <u>18.00</u>				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Carex sp.</u>	<u>15</u>	☒																
2. <u>Viola pubescens</u>	<u>10</u>	☒	<u>FACU</u>															
3. <u>Viola sp.</u>	<u>10</u>	☒																
4. <u>Ligustrum sinense</u>	<u>5</u>		<u>FACU</u>															
5. <u>Toxicodendron radicans</u>	<u>5</u>		<u>FAC</u>															
6. <u>Lindera benzoin</u>	<u>2</u>		<u>FAC</u>															
7. <u>Microstegium vimineum</u>	<u>2</u>		<u>FAC</u>															
8. <u>Acer rubrum</u>	<u>1</u>		<u>FAC</u>															
9. <u>Carpinus caroliniana</u>	<u>1</u>		<u>FAC</u>															
10. <u>Poa sp.</u>	<u>1</u>																	
11. _____	_____																	
<u>52</u> = Total Cover 50% of total cover: <u>26.00</u> 20% of total cover: <u>10.40</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Vitis sp.</u>	<u>5</u>	☒																
2. _____	_____																	
3. _____	_____																	
4. _____	_____																	
5. _____	_____																	
<u>5</u> = Total Cover 50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>																		
Hydrophytic Vegetation Present? Yes ☒ No _____																		
Remarks: (Include photo numbers here or on a separate sheet.) 																		

SOIL

Sampling Point: DP-146

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 9	7.5YR 3/4	100					Sandy Clay Loam	
9 - 18	5YR 3/4	95	5YR 4/6	5	C	M	Sandy Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-07
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-147
Investigator(s): JF, AS, NF Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-1
Subregion (LRR or MLRA): P 136 Lat: 36.77349161 Long: -79.40344812 Datum: WGS 84
Soil Map Unit Name: 8A - Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☒ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☒ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-147

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Betula nigra</u>	<u>60</u>	☒	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>8</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. <u>Acer rubrum</u>	<u>25</u>	☒	<u>FAC</u>															
3. <u>Platanus occidentalis</u>	<u>25</u>	☒	<u>FACW</u>															
4. <u>Liquidambar styraciflua</u>	<u>10</u>		<u>FAC</u>															
5. _____	_____			Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>2</u></td> <td>x 1 = <u>2</u></td> </tr> <tr> <td>FACW species <u>109</u></td> <td>x 2 = <u>218</u></td> </tr> <tr> <td>FAC species <u>42</u></td> <td>x 3 = <u>126</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>153</u> (A)</td> <td><u>346</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.26</u>	Total % Cover of:	Multiply by:	OBL species <u>2</u>	x 1 = <u>2</u>	FACW species <u>109</u>	x 2 = <u>218</u>	FAC species <u>42</u>	x 3 = <u>126</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>153</u> (A)	<u>346</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>2</u>	x 1 = <u>2</u>																	
FACW species <u>109</u>	x 2 = <u>218</u>																	
FAC species <u>42</u>	x 3 = <u>126</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>153</u> (A)	<u>346</u> (B)																	
6. _____	_____																	
7. _____	_____																	
_____ = Total Cover 50% of total cover: <u>60.00</u> 20% of total cover: <u>24.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Fraxinus pennsylvanica</u>	<u>15</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Carpinus caroliniana</u>	<u>5</u>	☒	<u>FAC</u>															
3. _____	_____																	
4. _____	_____																	
5. _____	_____			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
6. _____	_____																	
7. _____	_____																	
8. _____	_____																	
9. _____	_____			Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
_____ = Total Cover 50% of total cover: <u>10.00</u> 20% of total cover: <u>4.00</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Cinna arundinacea</u>	<u>5</u>	☒	<u>FACW</u>															
2. <u>Carex intumescens</u>	<u>2</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Present? Yes ☒ No _____														
3. <u>Peltandra virginica</u>	<u>2</u>	☒	<u>OBL</u>															
4. <u>Acer rubrum</u>	<u>1</u>		<u>FAC</u>															
5. <u>Boehmeria cylindrica</u>	<u>1</u>		<u>FACW</u>															
6. <u>Commelina communis</u>	<u>1</u>		<u>FAC</u>	Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
7. <u>Impatiens capensis</u>	<u>1</u>		<u>FACW</u>															
8. _____	_____																	
9. _____	_____																	
10. _____	_____			_____ = Total Cover 50% of total cover: <u>6.50</u> 20% of total cover: <u>2.60</u>														
11. _____	_____																	
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____																	
2. _____	_____			_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____														
3. _____	_____																	
4. _____	_____																	
5. _____	_____																	

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL

Sampling Point: DP-147

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 8	7.5YR 5/3	90	7.5YR 4/6	10	C		Clay Loam	
8 - 18	10YR 4/2	85	7.5YR 4/6	15	C		Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-06
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-148
Investigator(s): KZ, LS, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 0-1
Subregion (LRR or MLRA): P 136 Lat: 36.77348608 Long: -79.40230991 Datum: WGS 84
Soil Map Unit Name: 1C - Nathalie sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	_____ True Aquatic Plants (B14)	_____ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	_____ Hydrogen Sulfide Odor (C1)	_____ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	_____ Drainage Patterns (B10)	
_____ Water Marks (B1)	_____ Presence of Reduced Iron (C4)	_____ Moss Trim Lines (B16)	
_____ Sediment Deposits (B2)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Dry-Season Water Table (C2)	
_____ Drift Deposits (B3)	_____ Thin Muck Surface (C7)	_____ Crayfish Burrows (C8)	
_____ Algal Mat or Crust (B4)	_____ Other (Explain in Remarks)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Iron Deposits (B5)		_____ Stunted or Stressed Plants (D1)	
_____ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
_____ Water-Stained Leaves (B9)		_____ Shallow Aquitard (D3)	
_____ Aquatic Fauna (B13)		_____ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes ☒ No _____ Depth (inches): <u>0.5</u>	
Water Table Present?	Yes ☒ No _____ Depth (inches): <u>4</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No _____ Depth (inches): <u>0</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil pit was located outside of the area with surface water.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-148

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Acer rubrum</u>	<u>20</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>9</u> (A) Total Number of Dominant Species Across All Strata: <u>10</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>90.00</u> (A/B)														
2. <u>Carpinus caroliniana</u>	<u>10</u>	☒	<u>FAC</u>															
3. <u>Liquidambar styraciflua</u>	<u>10</u>	☒	<u>FAC</u>															
4. <u>Quercus michauxii</u>	<u>10</u>	☒	<u>FACW</u>															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>5</u></td> <td>x 1 = <u>5</u></td> </tr> <tr> <td>FACW species <u>12</u></td> <td>x 2 = <u>24</u></td> </tr> <tr> <td>FAC species <u>50</u></td> <td>x 3 = <u>150</u></td> </tr> <tr> <td>FACU species <u>2</u></td> <td>x 4 = <u>8</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>69</u> (A)</td> <td><u>187</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.71</u>	Total % Cover of:	Multiply by:	OBL species <u>5</u>	x 1 = <u>5</u>	FACW species <u>12</u>	x 2 = <u>24</u>	FAC species <u>50</u>	x 3 = <u>150</u>	FACU species <u>2</u>	x 4 = <u>8</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>69</u> (A)	<u>187</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>5</u>	x 1 = <u>5</u>																	
FACW species <u>12</u>	x 2 = <u>24</u>																	
FAC species <u>50</u>	x 3 = <u>150</u>																	
FACU species <u>2</u>	x 4 = <u>8</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>69</u> (A)	<u>187</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>25.00</u> 20% of total cover: <u>10.00</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Lindera benzoin</u>	<u>5</u>	☒	<u>FAC</u>															
2. <u>Carpinus caroliniana</u>	<u>3</u>	☒	<u>FAC</u>															
3. <u>Fraxinus pennsylvanica</u>	<u>2</u>	☒	<u>FACW</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>5.00</u> 20% of total cover: <u>2.00</u>				Hydrophytic Vegetation Present? Yes ☒ No _____														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Persicaria hydropiper</u>	<u>5</u>	☒	<u>OBL</u>															
2. <u>Persicaria virginiana</u>	<u>2</u>	☒	<u>FAC</u>															
3. <u>Viola pubescens</u>	<u>2</u>	☒	<u>FACU</u>	Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	_____ = Total Cover 50% of total cover: <u>4.50</u> 20% of total cover: <u>1.80</u>														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____	_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____														
_____	_____	_____	_____															
_____	_____	_____	_____															
_____	_____	_____	_____															

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL

Sampling Point: DP-148

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 8	5Y 4/1	75	7.5YR 4/6	25	C	PL / M	Sandy Loam	
8 - 14	5Y 4/1	60	7.5YR 4/6	15	C	PL / M	Sandy Clay Loam	
8 - 14			2.5YR 3/6	25	D	M	Sandy Clay Loam	Secondary Redox feature
14 - 18	5Y 4/1	70	2.5YR 3/6	25	D	M	Sandy Clay Loam	
14 - 18			7.5YR 4/6	5	C	M	Sandy Clay Loam	Secondary Redox feature
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (LRR N)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (MLRA 147, 148)
- ☐ Thin Dark Surface (S9) (MLRA 147, 148)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ☐ Umbric Surface (F13) (MLRA 136, 122)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 148)
- ☐ Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (MLRA 147)
- ☐ Coast Prairie Redox (A16) (MLRA 147, 148)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-06
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-149
Investigator(s): KZ, LS, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 3-4
Subregion (LRR or MLRA): P 136 Lat: 36.77349607 Long: -79.40229952 Datum: WGS 84
Soil Map Unit Name: 1C - Nathalie sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present?	Yes _____	No ☒	
Wetland Hydrology Present?	Yes _____	No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:	
Surface Water Present? Yes _____ No ☒ Depth (inches): _____	Wetland Hydrology Present? Yes _____ No ☒
Water Table Present? Yes _____ No ☒ Depth (inches): _____	
Saturation Present? Yes _____ No ☒ Depth (inches): _____ (includes capillary fringe)	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Only one secondary wetland hydrology indicator (i.e., geomorphic position) was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-149

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Carpinus caroliniana</u>	<u>20</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)														
2. <u>Liquidambar styraciflua</u>	<u>10</u>	☒	<u>FAC</u>															
3. <u>Acer rubrum</u>	<u>5</u>		<u>FAC</u>															
4. _____	_____		_____															
5. _____	_____		_____															
6. _____	_____		_____															
7. _____	_____		_____															
<u>35</u> = Total Cover 50% of total cover: <u>17.50</u> 20% of total cover: <u>7.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>60</u></td> <td>x 3 = <u>180</u></td> </tr> <tr> <td>FACU species <u>30</u></td> <td>x 4 = <u>120</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>300</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.33</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>60</u>	x 3 = <u>180</u>	FACU species <u>30</u>	x 4 = <u>120</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>90</u> (A)	<u>300</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>60</u>	x 3 = <u>180</u>																	
FACU species <u>30</u>	x 4 = <u>120</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>90</u> (A)	<u>300</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Lindera benzoin</u>	<u>3</u>		<u>FAC</u>															
2. _____	_____		_____															
3. _____	_____		_____															
4. _____	_____		_____															
5. _____	_____		_____															
6. _____	_____		_____															
7. _____	_____		_____															
8. _____	_____		_____															
9. _____	_____		_____															
<u>3</u> = Total Cover 50% of total cover: <u>1.50</u> 20% of total cover: <u>0.60</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Viola biflora</u>	<u>15</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Viola pubescens</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Viola canadensis</u>	<u>10</u>		<u>FAC</u>															
4. <u>Cryptotaenia canadensis</u>	<u>7</u>		<u>FAC</u>															
5. <u>Lindera benzoin</u>	<u>5</u>		<u>FAC</u>															
6. _____	_____		_____															
7. _____	_____		_____															
8. _____	_____		_____															
9. _____	_____		_____															
10. _____	_____		_____															
11. _____	_____		_____															
<u>52</u> = Total Cover 50% of total cover: <u>26.00</u> 20% of total cover: <u>10.40</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____		_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. _____	_____		_____															
3. _____	_____		_____															
4. _____	_____		_____															
5. _____	_____		_____															
6. _____	_____		_____															
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																		

SOIL

Sampling Point: DP-149

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-07
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-150
Investigator(s): KZ, LS, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.77325233 Long: -79.40064524 Datum: WGS 84
Soil Map Unit Name: 8A - Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-150

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Carpinus caroliniana</u>	<u>35</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83.33</u> (A/B)														
2. <u>Betula nigra</u>	<u>8</u>		<u>FACW</u>															
3. <u>Ligustrum sinense</u>	<u>8</u>		<u>FACU</u>															
4. <u>Liquidambar styraciflua</u>	<u>5</u>		<u>FAC</u>															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>26</u></td> <td>x 1 = <u>26</u></td> </tr> <tr> <td>FACW species <u>53</u></td> <td>x 2 = <u>106</u></td> </tr> <tr> <td>FAC species <u>46</u></td> <td>x 3 = <u>138</u></td> </tr> <tr> <td>FACU species <u>22</u></td> <td>x 4 = <u>88</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>147</u> (A)</td> <td><u>358</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.43</u>	Total % Cover of:	Multiply by:	OBL species <u>26</u>	x 1 = <u>26</u>	FACW species <u>53</u>	x 2 = <u>106</u>	FAC species <u>46</u>	x 3 = <u>138</u>	FACU species <u>22</u>	x 4 = <u>88</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>147</u> (A)	<u>358</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>26</u>	x 1 = <u>26</u>																	
FACW species <u>53</u>	x 2 = <u>106</u>																	
FAC species <u>46</u>	x 3 = <u>138</u>																	
FACU species <u>22</u>	x 4 = <u>88</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>147</u> (A)	<u>358</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____	<u>56</u>	= Total Cover																
50% of total cover: <u>28.00</u> 20% of total cover: <u>11.20</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Ligustrum sinense</u>	<u>6</u>	☒	<u>FACU</u>															
2. <u>Lindera benzoin</u>	<u>3</u>	☒	<u>FAC</u>															
3. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____	<u>9</u>	= Total Cover																
50% of total cover: <u>4.50</u> 20% of total cover: <u>1.80</u>				Hydrophytic Vegetation Present? Yes ☒ No _____														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Carex intumescens</u>	<u>25</u>	☒	<u>FACW</u>															
2. <u>Cicuta maculata</u>	<u>14</u>	☒	<u>OBL</u>															
3. <u>Peltandra virginica</u>	<u>12</u>	☒	<u>OBL</u>	Remarks: (Include photo numbers here or on a separate sheet.) <u>No woody vine stratum was observed at this data point.</u>														
4. <u>Boehmeria cylindrica</u>	<u>10</u>		<u>FACW</u>															
5. <u>Impatiens capensis</u>	<u>10</u>		<u>FACW</u>															
6. <u>Viola pubescens</u>	<u>5</u>		<u>FACU</u>															
7. <u>Campsis radicans</u>	<u>3</u>		<u>FAC</u>	Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
8. <u>Parthenocissus quinquefolia</u>	<u>3</u>		<u>FACU</u>															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____	_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____														
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____	_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____	_____	_____	_____															

SOIL

Sampling Point: DP-150

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 10	10YR 5/2	85	7.5YR 4/6	15	C	PL / M	Clay Loam	
10 - 18	10YR 5/4	70	7.5YR 4/6	10	D	M	Clay Loam	
10 - 18			7.5YR 5/8	20	C	M	Clay Loam	Secondary Redox feature
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-07
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-151
Investigator(s): KZ, LS, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 2-4
Subregion (LRR or MLRA): P 136 Lat: 36.77332344 Long: -79.40068109 Datum: WGS 84
Soil Map Unit Name: 8A - Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No _____	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

Only one of the three wetland parameters (i.e., hydrophytic vegetation) was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Only one secondary wetland hydrology indicator (i.e., geomorphic position) was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-151

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Carpinus caroliniana</u>	<u>30</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80.00</u> (A/B)														
2. <u>Acer rubrum</u>	<u>5</u>		<u>FAC</u>															
3. <u>Ligustrum sinense</u>	<u>5</u>		<u>FACU</u>															
4. <u>Liquidambar styraciflua</u>	<u>5</u>		<u>FAC</u>															
5. _____	_____			Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>35</u></td> <td>x 1 = <u>35</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>80</u></td> <td>x 3 = <u>240</u></td> </tr> <tr> <td>FACU species <u>25</u></td> <td>x 4 = <u>100</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>160</u> (A)</td> <td><u>415</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.59</u>	Total % Cover of:	Multiply by:	OBL species <u>35</u>	x 1 = <u>35</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>80</u>	x 3 = <u>240</u>	FACU species <u>25</u>	x 4 = <u>100</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>160</u> (A)	<u>415</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>35</u>	x 1 = <u>35</u>																	
FACW species <u>20</u>	x 2 = <u>40</u>																	
FAC species <u>80</u>	x 3 = <u>240</u>																	
FACU species <u>25</u>	x 4 = <u>100</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>160</u> (A)	<u>415</u> (B)																	
6. _____	_____																	
7. _____	_____																	
_____	<u>45</u>	= Total Cover																
50% of total cover: <u>22.50</u> 20% of total cover: <u>9.00</u>				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Ligustrum sinense</u>	<u>5</u>	☒	<u>FACU</u>															
2. _____	_____																	
3. _____	_____			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. _____	_____																	
5. _____	_____																	
6. _____	_____																	
7. _____	_____			Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____	_____																	
9. _____	_____																	
_____	<u>5</u>	= Total Cover																
50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>				Hydrophytic Vegetation Present? Yes ☒ No _____														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Leersia oryzoides</u>	<u>35</u>	☒	<u>OBL</u>															
2. <u>Smilax rotundifolia</u>	<u>20</u>	☒	<u>FAC</u>															
3. <u>Viola sororia</u>	<u>20</u>	☒	<u>FAC</u>	Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.														
4. <u>Lonicera japonica</u>	<u>15</u>		<u>FACU</u>															
5. <u>Rudbeckia laciniata</u>	<u>15</u>		<u>FACW</u>															
6. <u>Impatiens capensis</u>	<u>5</u>		<u>FACW</u>															
7. _____	_____			Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
8. _____	_____																	
9. _____	_____																	
10. _____	_____																	
11. _____	_____			Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
_____	<u>110</u>	= Total Cover																
50% of total cover: <u>55.00</u> 20% of total cover: <u>22.00</u>																		
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																		

SOIL

Sampling Point: DP-151

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-07
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-152
Investigator(s): JF, AS, NF Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Concave Slope (%): 0-1
Subregion (LRR or MLRA): P 136 Lat: 36.76602329 Long: -79.40958148 Datum: WGS 84
Soil Map Unit Name: 4B - Clifford sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-152

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Liquidambar styraciflua</u>	<u>40</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)														
2. <u>Robinia pseudoacacia</u>	<u>20</u>	☒	<u>FACU</u>															
3. <u>Ailanthus altissima</u>	<u>15</u>	☒	<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>75</u> = Total Cover 50% of total cover: <u>37.50</u> 20% of total cover: <u>15.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Liquidambar styraciflua</u>	<u>15</u>	☒	<u>FAC</u>	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>141</u></td> <td>x 3 = <u>423</u></td> </tr> <tr> <td>FACU species <u>149</u></td> <td>x 4 = <u>596</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>290</u> (A)</td> <td><u>1019</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.51</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>141</u>	x 3 = <u>423</u>	FACU species <u>149</u>	x 4 = <u>596</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>290</u> (A)	<u>1019</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>141</u>	x 3 = <u>423</u>																	
FACU species <u>149</u>	x 4 = <u>596</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>290</u> (A)	<u>1019</u> (B)																	
2. <u>Robinia pseudoacacia</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Diospyros virginiana</u>	<u>5</u>	_____	<u>FAC</u>															
4. <u>Quercus falcata</u>	<u>5</u>	_____	<u>FACU</u>															
5. <u>Rubus argutus</u>	<u>5</u>	_____	<u>FACU</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
<u>45</u> = Total Cover 50% of total cover: <u>22.50</u> 20% of total cover: <u>9.00</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Dichanthelium clandestinum</u>	<u>80</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Lolium arundinaceum</u>	<u>50</u>	☒	<u>FACU</u>															
3. <u>Ligustrum sinense</u>	<u>15</u>	_____	<u>FACU</u>															
4. <u>Lonicera japonica</u>	<u>15</u>	_____	<u>FACU</u>															
5. <u>Rubus argutus</u>	<u>5</u>	_____	<u>FACU</u>															
6. <u>Apocynum cannabinum</u>	<u>2</u>	_____	<u>FACU</u>															
7. <u>Lespedeza cuneata</u>	<u>2</u>	_____	<u>FACU</u>															
8. <u>Smilax rotundifolia</u>	<u>1</u>	_____	<u>FAC</u>															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>170</u> = Total Cover 50% of total cover: <u>85.00</u> 20% of total cover: <u>34.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Hydrophytic Vegetation Present? Yes _____ No ☒																		

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL

Sampling Point: DP-152

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	7.5YR 3/4	100					Clay Loam	
3 - 6	5YR 4/4	100					Clay Loam	
6 - 12	5YR 4/6	100					Clay	
12 - 18	2.5YR 4/6	100					Clay	
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-07
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-153
Investigator(s): JF, AS, NF Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 0-3
Subregion (LRR or MLRA): P 136 Lat: 36.76841015 Long: -79.40845451 Datum: WGS 84
Soil Map Unit Name: 1C - Nathalie sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☒ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-153

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>31</u></td> <td>x 2 = <u>62</u></td> </tr> <tr> <td>FAC species <u>74</u></td> <td>x 3 = <u>222</u></td> </tr> <tr> <td>FACU species <u>28</u></td> <td>x 4 = <u>112</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>133</u> (A)</td> <td><u>396</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.97</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>31</u>	x 2 = <u>62</u>	FAC species <u>74</u>	x 3 = <u>222</u>	FACU species <u>28</u>	x 4 = <u>112</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>133</u> (A)	<u>396</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>31</u>	x 2 = <u>62</u>																	
FAC species <u>74</u>	x 3 = <u>222</u>																	
FACU species <u>28</u>	x 4 = <u>112</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>133</u> (A)	<u>396</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Solidago rugosa</u>	<u>50</u>	☒	<u>FAC</u>															
2. <u>Agrimonia parviflora</u>	<u>30</u>	☒	<u>FACW</u>															
3. <u>Lonicera japonica</u>	<u>25</u>		<u>FACU</u>															
4. <u>Verbesina alternifolia</u>	<u>15</u>		<u>FAC</u>															
5. <u>Toxicodendron radicans</u>	<u>5</u>		<u>FAC</u>															
6. <u>Ambrosia artemisiifolia</u>	<u>2</u>		<u>FACU</u>															
7. <u>Dichanthelium clandestinum</u>	<u>2</u>		<u>FAC</u>															
8. <u>Festuca sp.</u>	<u>2</u>																	
9. <u>Liquidambar styraciflua</u>	<u>2</u>		<u>FAC</u>															
10. <u>Juncus effusus</u>	<u>1</u>		<u>FACW</u>															
11. <u>Rosa multiflora</u>	<u>1</u>		<u>FACU</u>															
<u>135</u> = Total Cover																		
50% of total cover: <u>67.50</u> 20% of total cover: <u>27.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.				Hydrophytic Vegetation Present? Yes ☒ No _____														

SOIL

Sampling Point: DP-153

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 8	7.5YR 4/4	75	7.5YR 4/6	10	C	M	Sandy Clay Loam	
0 - 8			10YR 4/2	15	D	M	Sandy Clay Loam	Secondary Redox feature
8 - 18	7.5YR 4/6	95	5YR 4/6	5	C	M	Sandy Clay Loam	Manganese concretions
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☒ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-07
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-154
Investigator(s): KZ, LS, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.77337075 Long: -79.39849467 Datum: WGS 84
Soil Map Unit Name: 8A - Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded NWI classification: PFO1A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-154

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>100</u></td> <td>x 1 = <u>100</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>100</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.00</u>	Total % Cover of:	Multiply by:	OBL species <u>100</u>	x 1 = <u>100</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>100</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>100</u>	x 1 = <u>100</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>100</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Leersia oryzoides</u>	<u>70</u>	☒	<u>OBL</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. <u>Persicaria hydropiper</u>	<u>20</u>	☒	<u>OBL</u>															
3. <u>Carex lupulina</u>	<u>5</u>		<u>OBL</u>															
4. <u>Carex lurida</u>	<u>5</u>		<u>OBL</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>100</u> = Total Cover																		
50% of total cover: <u>50.00</u> 20% of total cover: <u>20.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		

Remarks: (Include photo numbers here or on a separate sheet.)

No tree, sapling/shrub, or woody vine strata were observed at this data point.

SOIL

Sampling Point: DP-154

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-07
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-155
Investigator(s): KZ, LS, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2-3
Subregion (LRR or MLRA): P 136 Lat: 36.77336893 Long: -79.39874178 Datum: WGS 84
Soil Map Unit Name: 8A - Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded NWI classification: PFO1A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soil) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☒ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☒ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-155

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Acer negundo</u>	<u>30</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80.00</u> (A/B)														
2. <u>Carpinus caroliniana</u>	<u>20</u>	☒	<u>FAC</u>															
3. <u>Acer rubrum</u>	<u>10</u>		<u>FAC</u>															
4. <u>Quercus michauxii</u>	<u>5</u>		<u>FACW</u>															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>3</u></td> <td>x 1 = <u>3</u></td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>105</u></td> <td>x 3 = <u>315</u></td> </tr> <tr> <td>FACU species <u>15</u></td> <td>x 4 = <u>60</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>133</u> (A)</td> <td><u>398</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.99</u>	Total % Cover of:	Multiply by:	OBL species <u>3</u>	x 1 = <u>3</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>105</u>	x 3 = <u>315</u>	FACU species <u>15</u>	x 4 = <u>60</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>133</u> (A)	<u>398</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>3</u>	x 1 = <u>3</u>																	
FACW species <u>10</u>	x 2 = <u>20</u>																	
FAC species <u>105</u>	x 3 = <u>315</u>																	
FACU species <u>15</u>	x 4 = <u>60</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>133</u> (A)	<u>398</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>32.50</u> 20% of total cover: <u>13.00</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Ligustrum sinense</u>	<u>15</u>	☒	<u>FACU</u>															
2. <u>Carpinus caroliniana</u>	<u>12</u>	☒	<u>FAC</u>															
3. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>13.50</u> 20% of total cover: <u>5.40</u>				Hydrophytic Vegetation Present? Yes ☒ No _____														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Viola sororia</u>	<u>30</u>	☒	<u>FAC</u>															
2. <u>Impatiens capensis</u>	<u>5</u>		<u>FACW</u>															
3. <u>Leersia oryzoides</u>	<u>3</u>		<u>OBL</u>															
4. <u>Microstegium vimineum</u>	<u>3</u>		<u>FAC</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____	_____ = Total Cover 50% of total cover: <u>20.50</u> 20% of total cover: <u>8.20</u>														
_____	_____	_____	_____															
_____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		

Remarks: (Include photo numbers here or on a separate sheet.)

No woody vine stratum was observed at this data point.

SOIL

Sampling Point: DP-155

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-08
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-156
Investigator(s): KZ, LS, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 1-3
Subregion (LRR or MLRA): P 136 Lat: 36.77339924 Long: -79.39888019 Datum: WGS 84
Soil Map Unit Name: 8A - Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded NWI classification: PFO1A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____ No ☒
Hydric Soil Present?	Yes _____	No ☒		
Wetland Hydrology Present?	Yes _____	No ☒		

Remarks:

Only one of the three wetland parameters (i.e., hydrophytic vegetation) was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-156

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Carpinus caroliniana</u>	<u>50</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>71.42</u> (A/B)														
2. <u>Acer rubrum</u>	<u>20</u>	☒	<u>FAC</u>															
3. <u>Pinus virginiana</u>	<u>10</u>		<u>UPL</u>															
4. _____																		
5. _____																		
6. _____																		
7. _____																		
<u>80</u> = Total Cover 50% of total cover: <u>40.00</u> 20% of total cover: <u>16.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>10</u></td> <td>x 1 = <u>10</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>100</u></td> <td>x 3 = <u>300</u></td> </tr> <tr> <td>FACU species <u>40</u></td> <td>x 4 = <u>160</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>160</u> (A)</td> <td><u>520</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.25</u>	Total % Cover of:	Multiply by:	OBL species <u>10</u>	x 1 = <u>10</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>100</u>	x 3 = <u>300</u>	FACU species <u>40</u>	x 4 = <u>160</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>160</u> (A)	<u>520</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>10</u>	x 1 = <u>10</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>100</u>	x 3 = <u>300</u>																	
FACU species <u>40</u>	x 4 = <u>160</u>																	
UPL species <u>10</u>	x 5 = <u>50</u>																	
Column Totals: <u>160</u> (A)	<u>520</u> (B)																	
<u>30</u> = Total Cover 50% of total cover: <u>15.00</u> 20% of total cover: <u>6.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Carpinus caroliniana</u>	<u>20</u>	☒	<u>FAC</u>															
2. <u>Ligustrum sinense</u>	<u>10</u>	☒	<u>FACU</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
<u>30</u> = Total Cover 50% of total cover: <u>15.00</u> 20% of total cover: <u>6.00</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Podophyllum peltatum</u>	<u>25</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Leersia oryzoides</u>	<u>10</u>	☒	<u>OBL</u>															
3. <u>Viola sororia</u>	<u>10</u>	☒	<u>FAC</u>															
4. <u>Galium aparine</u>	<u>5</u>		<u>FACU</u>															
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
<u>50</u> = Total Cover 50% of total cover: <u>25.00</u> 20% of total cover: <u>10.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																		

SOIL

Sampling Point: DP-156

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-08
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-157
Investigator(s): NF, JF Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 0-1
Subregion (LRR or MLRA): P 136 Lat: 36.76858904 Long: -79.40859815 Datum: WGS 84
Soil Map Unit Name: 1C - Nathalie sandy loam, 7 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-157

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Acer rubrum</u>	<u>70</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.33</u> (A/B)														
2. <u>Carya tomentosa</u>	<u>10</u>		<u>UPL</u>															
3. <u>Liquidambar styraciflua</u>	<u>10</u>		<u>FAC</u>															
4. <u>Fagus grandifolia</u>	<u>5</u>		<u>FACU</u>															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>83</u></td> <td>x 3 = <u>249</u></td> </tr> <tr> <td>FACU species <u>29</u></td> <td>x 4 = <u>116</u></td> </tr> <tr> <td>UPL species <u>25</u></td> <td>x 5 = <u>125</u></td> </tr> <tr> <td>Column Totals: <u>137</u> (A)</td> <td><u>490</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.57</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>83</u>	x 3 = <u>249</u>	FACU species <u>29</u>	x 4 = <u>116</u>	UPL species <u>25</u>	x 5 = <u>125</u>	Column Totals: <u>137</u> (A)	<u>490</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>83</u>	x 3 = <u>249</u>																	
FACU species <u>29</u>	x 4 = <u>116</u>																	
UPL species <u>25</u>	x 5 = <u>125</u>																	
Column Totals: <u>137</u> (A)	<u>490</u> (B)																	
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>47.50</u> 20% of total cover: <u>19.00</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Fagus grandifolia</u>	<u>20</u>	☒	<u>FACU</u>															
2. <u>Acer rubrum</u>	<u>1</u>		<u>FAC</u>															
3. <u>Rosa multiflora</u>	<u>1</u>		<u>FACU</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____	_____	_____	_____															
_____ = Total Cover 50% of total cover: <u>11.00</u> 20% of total cover: <u>4.40</u>				Hydrophytic Vegetation Present? Yes _____ No ☒														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Quercus montana</u>	<u>15</u>	☒	<u>UPL</u>															
2. <u>Acer rubrum</u>	<u>1</u>		<u>FAC</u>															
3. <u>Lonicera japonica</u>	<u>1</u>		<u>FACU</u>	Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
4. <u>Microstegium vimineum</u>	<u>1</u>		<u>FAC</u>															
5. <u>Parthenocissus quinquefolia</u>	<u>1</u>		<u>FACU</u>															
6. <u>Quercus rubra</u>	<u>1</u>		<u>FACU</u>															
7. _____	_____	_____	_____	_____ = Total Cover 50% of total cover: <u>10.00</u> 20% of total cover: <u>4.00</u>														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____	Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.														

SOIL

Sampling Point: DP-157

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-08
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-158
Investigator(s): JF, NF, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR or MLRA): P 136 Lat: 36.76317731 Long: -79.41435707 Datum: WGS 84
Soil Map Unit Name: 1B - Nathalie sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present?	Yes _____	No ☒	
Wetland Hydrology Present?	Yes _____	No ☒	

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soil) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point; only one of the secondary indicators was present.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-158

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Pyrus calleryana</u>	<u>20</u>	☒	<u>UPL</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>9</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.33</u> (A/B)														
2. <u>Acer negundo</u>	<u>15</u>	☒	<u>FAC</u>															
3. <u>Juniperus virginiana</u>	<u>2</u>		<u>FACU</u>															
4. _____																		
5. _____																		
6. _____																		
7. _____																		
<u>37</u> = Total Cover 50% of total cover: <u>18.50</u> 20% of total cover: <u>7.40</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Prunus serotina</u>	<u>20</u>	☒	<u>FACU</u>	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>40</u></td> <td>x 1 = <u>40</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>61</u></td> <td>x 3 = <u>183</u></td> </tr> <tr> <td>FACU species <u>84</u></td> <td>x 4 = <u>336</u></td> </tr> <tr> <td>UPL species <u>25</u></td> <td>x 5 = <u>125</u></td> </tr> <tr> <td>Column Totals: <u>235</u> (A)</td> <td><u>734</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.12</u>	Total % Cover of:	Multiply by:	OBL species <u>40</u>	x 1 = <u>40</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>61</u>	x 3 = <u>183</u>	FACU species <u>84</u>	x 4 = <u>336</u>	UPL species <u>25</u>	x 5 = <u>125</u>	Column Totals: <u>235</u> (A)	<u>734</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>40</u>	x 1 = <u>40</u>																	
FACW species <u>25</u>	x 2 = <u>50</u>																	
FAC species <u>61</u>	x 3 = <u>183</u>																	
FACU species <u>84</u>	x 4 = <u>336</u>																	
UPL species <u>25</u>	x 5 = <u>125</u>																	
Column Totals: <u>235</u> (A)	<u>734</u> (B)																	
2. <u>Liquidambar styraciflua</u>	<u>15</u>	☒	<u>FAC</u>															
3. <u>Rosa multiflora</u>	<u>15</u>	☒	<u>FACU</u>															
4. <u>Acer negundo</u>	<u>5</u>		<u>FAC</u>															
5. <u>Platanus occidentalis</u>	<u>5</u>		<u>FACW</u>															
6. <u>Pyrus calleryana</u>	<u>5</u>		<u>UPL</u>															
7. <u>Rubus argutus</u>	<u>2</u>		<u>FACU</u>															
8. _____																		
9. _____																		
<u>67</u> = Total Cover 50% of total cover: <u>33.50</u> 20% of total cover: <u>13.40</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Glyceria striata</u>	<u>40</u>	☒	<u>OBL</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Solidago canadensis</u>	<u>25</u>	☒	<u>FACU</u>															
3. <u>Dichanthelium clandestinum</u>	<u>20</u>		<u>FAC</u>															
4. <u>Juncus effusus</u>	<u>20</u>		<u>FACW</u>															
5. <u>Microstegium vimineum</u>	<u>5</u>		<u>FAC</u>															
6. <u>Ambrosia artemisiifolia</u>	<u>1</u>		<u>FACU</u>															
7. <u>Lespedeza cuneata</u>	<u>1</u>		<u>FACU</u>															
8. <u>Liquidambar styraciflua</u>	<u>1</u>		<u>FAC</u>															
9. <u>Rubus flagellaris</u>	<u>1</u>		<u>FACU</u>															
10. _____																		
11. _____																		
<u>114</u> = Total Cover 50% of total cover: <u>57.00</u> 20% of total cover: <u>22.80</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Parthenocissus quinquefolia</u>	<u>10</u>	☒	<u>FACU</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. <u>Lonicera japonica</u>	<u>5</u>	☒	<u>FACU</u>															
3. <u>Rubus flagellaris</u>	<u>2</u>		<u>FACU</u>															
4. _____																		
5. _____																		
<u>17</u> = Total Cover 50% of total cover: <u>8.50</u> 20% of total cover: <u>3.40</u>																		
Hydrophytic Vegetation Present? Yes _____ No ☒																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: DP-158

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-08
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-159
Investigator(s): JF, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR or MLRA): P 136 Lat: 36.76273 Long: -79.414974 Datum: WGS 84
Soil Map Unit Name: 5C3 - Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒ No _____
Hydric Soil Present?	Yes ☒	No _____		
Wetland Hydrology Present?	Yes ☒	No _____		

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☒ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☒ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-159

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. <u>Liquidambar styraciflua</u>	<u>10</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)																
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>5</u> (B)																
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60.00</u> (A/B)																
4. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>5</u></td> <td>x 1 = <u>5</u></td> </tr> <tr> <td>FACW species <u>100</u></td> <td>x 2 = <u>200</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>17</u></td> <td>x 4 = <u>68</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>132</u> (A)</td> <td><u>303</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.29</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>5</u>	x 1 = <u>5</u>	FACW species <u>100</u>	x 2 = <u>200</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>17</u>	x 4 = <u>68</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>132</u> (A)	<u>303</u> (B)	Prevalence Index = B/A = <u>2.29</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>5</u>	x 1 = <u>5</u>																			
FACW species <u>100</u>	x 2 = <u>200</u>																			
FAC species <u>10</u>	x 3 = <u>30</u>																			
FACU species <u>17</u>	x 4 = <u>68</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>132</u> (A)	<u>303</u> (B)																			
Prevalence Index = B/A = <u>2.29</u>																				
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)																
50% of total cover: <u>5.00</u> 20% of total cover: <u>2.00</u> 10 = Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																				
1. <u>Rubus argutus</u>	<u>10</u>	☒	<u>FACU</u>																	
2. <u>Rosa multiflora</u>	<u>5</u>	☒	<u>FACU</u>																	
3. <u>Salix nigra</u>	<u>5</u>	☒	<u>OBL</u>																	
4. <u>Juniperus virginiana</u>	<u>2</u>	_____	<u>FACU</u>																	
5. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.																
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____																
11. _____	_____	_____	_____																	
50% of total cover: <u>11.00</u> 20% of total cover: <u>4.40</u> 22 = Total Cover																				
Herb Stratum (Plot size: <u>5 ft r</u>)																				
1. <u>Scirpus cyperinus</u>	<u>95</u>	☒	<u>FACW</u>																	
2. <u>Juncus effusus</u>	<u>5</u>	_____	<u>FACW</u>																	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____																
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____																
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
50% of total cover: <u>50.00</u> 20% of total cover: <u>20.00</u> 100 = Total Cover																				
Woody Vine Stratum (Plot size: <u>30 ft r</u>)				Hydrophytic Vegetation Present? Yes ☒ No _____																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____																
50% of total cover: _____ 20% of total cover: _____ _____ = Total Cover																				
50% of total cover: _____ 20% of total cover: _____																				
Remarks: (Include photo numbers here or on a separate sheet.)																				
No woody vine stratum was observed at this data point.																				

SOIL

Sampling Point: DP-159

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	7.5YR 4/2	95	7.5YR 4/6	5	C	PL / M	Silty Clay Loam	
2 - 13	7.5YR 5/2	60	5YR 4/6	40	C	PL / M	Clay Loam	
13 - 18	5YR 4/6	80	7.5YR 4/4	20	D	M	Clay	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-08
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-160
Investigator(s): JF, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1
Subregion (LRR or MLRA): P 136 Lat: 36.762835 Long: -79.414857 Datum: WGS 84
Soil Map Unit Name: 1B - Nathalie sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ☒	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

None of the three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, or hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point; only one of the secondary indicators was present.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-160

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Acer negundo</u>	<u>30</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>28.57</u> (A/B)														
2. <u>Salix nigra</u>	<u>15</u>	☒	<u>OBL</u>															
3. <u>Pinus taeda</u>	<u>10</u>		<u>FAC</u>															
4. _____	_____		_____															
5. _____	_____		_____															
6. _____	_____		_____															
7. _____	_____		_____															
<u>55</u> = Total Cover 50% of total cover: <u>27.50</u> 20% of total cover: <u>11.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>15</u></td> <td>x 1 = <u>15</u></td> </tr> <tr> <td>FACW species <u>2</u></td> <td>x 2 = <u>4</u></td> </tr> <tr> <td>FAC species <u>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>202</u></td> <td>x 4 = <u>808</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>269</u> (A)</td> <td><u>997</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.70</u>	Total % Cover of:	Multiply by:	OBL species <u>15</u>	x 1 = <u>15</u>	FACW species <u>2</u>	x 2 = <u>4</u>	FAC species <u>40</u>	x 3 = <u>120</u>	FACU species <u>202</u>	x 4 = <u>808</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>269</u> (A)	<u>997</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>15</u>	x 1 = <u>15</u>																	
FACW species <u>2</u>	x 2 = <u>4</u>																	
FAC species <u>40</u>	x 3 = <u>120</u>																	
FACU species <u>202</u>	x 4 = <u>808</u>																	
UPL species <u>10</u>	x 5 = <u>50</u>																	
Column Totals: <u>269</u> (A)	<u>997</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Rubus argutus</u>	<u>25</u>	☒	<u>FACU</u>															
2. <u>Juniperus virginiana</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Ligustrum sinense</u>	<u>5</u>		<u>FACU</u>															
4. <u>Prunus serotina</u>	<u>2</u>		<u>FACU</u>															
5. <u>Rosa multiflora</u>	<u>2</u>		<u>FACU</u>															
6. <u>Platanus occidentalis</u>	<u>2</u>		<u>FACW</u>															
7. _____	_____		_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
8. _____	_____		_____															
9. _____	_____		_____															
<u>51</u> = Total Cover 50% of total cover: <u>25.50</u> 20% of total cover: <u>10.20</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Solidago canadensis</u>	<u>75</u>	☒	<u>FACU</u>															
2. <u>Lolium arundinaceum</u>	<u>55</u>	☒	<u>FACU</u>															
3. <u>Daucus carota</u>	<u>10</u>		<u>UPL</u>															
4. <u>Lonicera japonica</u>	<u>10</u>		<u>FACU</u>															
5. <u>Rubus argutus</u>	<u>5</u>		<u>FACU</u>															
6. <u>Fagus grandifolia</u>	<u>2</u>		<u>FACU</u>															
7. <u>Parthenocissus quinquefolia</u>	<u>1</u>		<u>FACU</u>															
8. _____	_____		_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
9. _____	_____		_____															
10. _____	_____		_____															
11. _____	_____		_____															
<u>158</u> = Total Cover 50% of total cover: <u>79.00</u> 20% of total cover: <u>31.60</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Lonicera japonica</u>	<u>5</u>	☒	<u>FACU</u>															
2. _____	_____		_____															
3. _____	_____		_____															
4. _____	_____		_____															
5. _____	_____		_____															
<u>5</u> = Total Cover 50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>																		
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes _____ No ☒														

SOIL

Sampling Point: DP-160

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-08
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-161
Investigator(s): JF, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR or MLRA): P 136 Lat: 36.762773 Long: -79.414691 Datum: WGS 84
Soil Map Unit Name: 1B - Nathalie sandy loam, 2 to 7 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

Only one of the three wetland parameters (i.e., hydrophytic vegetation) was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point; only one of the secondary indicators was present.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-161

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Pinus taeda</u>	<u>35</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>62.50</u> (A/B)														
2. <u>Platanus occidentalis</u>	<u>25</u>	☒	<u>FACW</u>															
3. <u>Acer negundo</u>	<u>20</u>	☒	<u>FAC</u>															
4. <u>Acer rubrum</u>	<u>10</u>		<u>FAC</u>															
5. <u>Liquidambar styraciflua</u>	<u>2</u>		<u>FAC</u>															
6. <u>Salix nigra</u>	<u>1</u>		<u>OBL</u>															
7. _____																		
<u>93</u> = Total Cover 50% of total cover: <u>46.50</u> 20% of total cover: <u>18.60</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Acer negundo</u>	<u>15</u>	☒	<u>FAC</u>	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>1</u></td> <td>x 1 = <u>1</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>165</u></td> <td>x 3 = <u>495</u></td> </tr> <tr> <td>FACU species <u>39</u></td> <td>x 4 = <u>156</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>230</u> (A)</td> <td><u>702</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.05</u>	Total % Cover of:	Multiply by:	OBL species <u>1</u>	x 1 = <u>1</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>165</u>	x 3 = <u>495</u>	FACU species <u>39</u>	x 4 = <u>156</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>230</u> (A)	<u>702</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>1</u>	x 1 = <u>1</u>																	
FACW species <u>25</u>	x 2 = <u>50</u>																	
FAC species <u>165</u>	x 3 = <u>495</u>																	
FACU species <u>39</u>	x 4 = <u>156</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>230</u> (A)	<u>702</u> (B)																	
2. <u>Ligustrum sinense</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Rosa multiflora</u>	<u>5</u>		<u>FACU</u>															
4. <u>Prunus serotina</u>	<u>2</u>		<u>FACU</u>															
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
<u>37</u> = Total Cover 50% of total cover: <u>18.50</u> 20% of total cover: <u>7.40</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Microstegium vimineum</u>	<u>80</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Lonicera japonica</u>	<u>5</u>		<u>FACU</u>															
3. <u>Calystegia sepium</u>	<u>2</u>		<u>FAC</u>															
4. <u>Apocynum cannabinum</u>	<u>1</u>		<u>FACU</u>															
5. <u>Parthenocissus quinquefolia</u>	<u>1</u>		<u>FACU</u>															
6. <u>Toxicodendron radicans</u>	<u>1</u>		<u>FAC</u>															
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
<u>90</u> = Total Cover 50% of total cover: <u>45.00</u> 20% of total cover: <u>18.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Lonicera japonica</u>	<u>5</u>	☒	<u>FACU</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. <u>Parthenocissus quinquefolia</u>	<u>5</u>	☒	<u>FACU</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
<u>10</u> = Total Cover 50% of total cover: <u>5.00</u> 20% of total cover: <u>2.00</u>																		
Hydrophytic Vegetation Present? Yes ☒ No _____																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: DP-161

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 18	5YR 4/6	100					Sandy Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.								
² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators:								
☐ Histosol (A1) ☐ Dark Surface (S7)								
☐ Histic Epipedon (A2) ☐ Polyvalue Below Surface (S8) (MLRA 147, 148)								
☐ Black Histic (A3) ☐ Thin Dark Surface (S9) (MLRA 147, 148)								
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)								
☐ Stratified Layers (A5) ☐ Depleted Matrix (F3)								
☐ 2 cm Muck (A10) (LRR N) ☐ Redox Dark Surface (F6)								
☐ Depleted Below Dark Surface (A11) ☐ Depleted Dark Surface (F7)								
☐ Thick Dark Surface (A12) ☐ Redox Depressions (F8)								
☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)								
☐ Sandy Gleyed Matrix (S4) ☐ Umbric Surface (F13) (MLRA 136, 122)								
☐ Sandy Redox (S5) ☐ Piedmont Floodplain Soils (F19) (MLRA 148)								
☐ Stripped Matrix (S6) ☐ Red Parent Material (F21) (MLRA 127, 147)								
Indicators for Problematic Hydric Soils³:								
☐ 2 cm Muck (A10) (MLRA 147)								
☐ Coast Prairie Redox (A16) (MLRA 147, 148)								
☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)								
☐ Very Shallow Dark Surface (TF12)								
☐ Other (Explain in Remarks)								
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.								
Restrictive Layer (if observed):								
Type: _____								
Depth (inches): _____								
Hydric Soil Present? Yes _____ No ☒								
Remarks: 								

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-09
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-162
Investigator(s): JF, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.76230787 Long: -79.41449981 Datum: WGS 84
Soil Map Unit Name: 5C3 - Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

Only one of the three wetland parameters (i.e., hydrophytic vegetation) was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point; only one of the secondary indicators was present.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-162

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>81</u></td> <td>x 3 = <u>243</u></td> </tr> <tr> <td>FACU species <u>22</u></td> <td>x 4 = <u>88</u></td> </tr> <tr> <td>UPL species <u>1</u></td> <td>x 5 = <u>5</u></td> </tr> <tr> <td>Column Totals: <u>104</u> (A)</td> <td><u>336</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.23</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>81</u>	x 3 = <u>243</u>	FACU species <u>22</u>	x 4 = <u>88</u>	UPL species <u>1</u>	x 5 = <u>5</u>	Column Totals: <u>104</u> (A)	<u>336</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>81</u>	x 3 = <u>243</u>																	
FACU species <u>22</u>	x 4 = <u>88</u>																	
UPL species <u>1</u>	x 5 = <u>5</u>																	
Column Totals: <u>104</u> (A)	<u>336</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Dichanthelium clandestinum</u>	<u>80</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Lespedeza cuneata</u>	<u>10</u>		<u>FACU</u>															
3. <u>Dactylis glomerata</u>	<u>5</u>		<u>FACU</u>															
4. <u>Apocynum cannabinum</u>	<u>2</u>		<u>FACU</u>															
5. <u>Carex sp.</u>	<u>2</u>																	
6. <u>Rubus argutus</u>	<u>2</u>		<u>FACU</u>															
7. <u>Daucus carota</u>	<u>1</u>		<u>UPL</u>															
8. <u>Lonicera japonica</u>	<u>1</u>		<u>FACU</u>															
9. <u>Parthenocissus quinquefolia</u>	<u>1</u>		<u>FACU</u>															
10. <u>Rumex crispus</u>	<u>1</u>		<u>FAC</u>															
11. <u>Solanum carolinense</u>	<u>1</u>		<u>FACU</u>															
<u>106</u> = Total Cover																		
50% of total cover: <u>53.00</u> 20% of total cover: <u>21.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

SOIL

Sampling Point: DP-162

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	5YR 4/4	100					Clay Loam	Rock fragments.
2 - 18	5YR 4/6	100					Clay Loam	Rock fragments.
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (**LRR N**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ☐ Umbric Surface (F13) (**MLRA 136, 122**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
- ☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
- ☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

Rock fragments throughout.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-09
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-163
Investigator(s): KZ, LS, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): None Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.77447117 Long: -79.40072713 Datum: WGS 84
Soil Map Unit Name: 8A - Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☒ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-163

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Betula nigra</u>	<u>40</u>	☒	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. <u>Acer negundo</u>	<u>20</u>	☒	<u>FAC</u>															
3. <u>Platanus occidentalis</u>	<u>20</u>	☒	<u>FACW</u>															
4. <u>Acer rubrum</u>	<u>10</u>		<u>FAC</u>															
5. _____	_____			Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>3</u></td> <td>x 1 = <u>3</u></td> </tr> <tr> <td>FACW species <u>62</u></td> <td>x 2 = <u>124</u></td> </tr> <tr> <td>FAC species <u>45</u></td> <td>x 3 = <u>135</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>110</u> (A)</td> <td><u>262</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.38</u>	Total % Cover of:	Multiply by:	OBL species <u>3</u>	x 1 = <u>3</u>	FACW species <u>62</u>	x 2 = <u>124</u>	FAC species <u>45</u>	x 3 = <u>135</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>110</u> (A)	<u>262</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>3</u>	x 1 = <u>3</u>																	
FACW species <u>62</u>	x 2 = <u>124</u>																	
FAC species <u>45</u>	x 3 = <u>135</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>110</u> (A)	<u>262</u> (B)																	
6. _____	_____																	
7. _____	_____																	
_____	<u>90</u>	= Total Cover																
50% of total cover: <u>45.00</u> 20% of total cover: <u>18.00</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Acer negundo</u>	<u>5</u>	☒	<u>FAC</u>															
2. _____	_____																	
3. _____	_____			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
4. _____	_____																	
5. _____	_____																	
6. _____	_____																	
7. _____	_____			Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
8. _____	_____																	
9. _____	_____																	
_____	<u>5</u>	= Total Cover																
50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>				Hydrophytic Vegetation Present? Yes ☒ No _____														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Microstegium vimineum</u>	<u>10</u>	☒	<u>FAC</u>															
2. <u>Leersia oryzoides</u>	<u>3</u>	☒	<u>OBL</u>															
3. <u>Impatiens capensis</u>	<u>2</u>		<u>FACW</u>	Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
4. _____	_____																	
5. _____	_____																	
6. _____	_____																	
7. _____	_____			1. _____ 2. _____ 3. _____ 4. _____ 5. _____														
8. _____	_____																	
9. _____	_____																	
10. _____	_____																	
11. _____	_____			_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____														
Remarks: (Include photo numbers here or on a separate sheet.)																		
No woody vine stratum was observed at this data point.																		

SOIL

Sampling Point: DP-163

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 12	10YR 4/2	80	7.5YR 5/6	20	C	PL / M	Silty Clay Loam	
12 - 18	10YR 4/3	70	7.5R 5/6	25	C	PL / M	Silty Clay Loam	
12 - 18			7.5YR 4/4	5	D	M	Silty Clay Loam	Secondary Redox feature
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-09
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-164
Investigator(s): KZ, LS, MM Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): None Slope (%): 0-2
Subregion (LRR or MLRA): P 136 Lat: 36.77447129 Long: -79.40032262 Datum: WGS 84
Soil Map Unit Name: 8A - Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded NWI classification: Co

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No _____	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

Only one of the three wetland parameters (i.e., hydrophytic vegetation) was observed at this data point .

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☒ FAC-Neutral Test (D5)

Field Observations:	
Surface Water Present? Yes _____ No ☒ Depth (inches): _____	Wetland Hydrology Present? Yes _____ No ☒
Water Table Present? Yes _____ No ☒ Depth (inches): _____	
Saturation Present? Yes _____ No ☒ Depth (inches): _____ (includes capillary fringe)	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point; only one of the secondary indicators was present.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-164

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																																												
1. <u>Acer negundo</u>	<u>60</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A)																																												
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>7</u> (B)																																												
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>85.71</u> (A/B)																																												
4. _____	_____	_____	_____																																													
5. _____	_____	_____	_____																																													
6. _____	_____	_____	_____																																													
7. _____	_____	_____	_____																																													
<u>60</u> = Total Cover 50% of total cover: <u>30.00</u> 20% of total cover: <u>12.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>31</u></td> <td>x 2 = <u>62</u></td> </tr> <tr> <td>FAC species <u>100</u></td> <td>x 3 = <u>300</u></td> </tr> <tr> <td>FACU species <u>15</u></td> <td>x 4 = <u>60</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>146</u> (A)</td> <td><u>422</u> (B)</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>31</u>	x 2 = <u>62</u>	FAC species <u>100</u>	x 3 = <u>300</u>	FACU species <u>15</u>	x 4 = <u>60</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>146</u> (A)	<u>422</u> (B)																														
Total % Cover of:	Multiply by:																																															
OBL species <u>0</u>	x 1 = <u>0</u>																																															
FACW species <u>31</u>	x 2 = <u>62</u>																																															
FAC species <u>100</u>	x 3 = <u>300</u>																																															
FACU species <u>15</u>	x 4 = <u>60</u>																																															
UPL species <u>0</u>	x 5 = <u>0</u>																																															
Column Totals: <u>146</u> (A)	<u>422</u> (B)																																															
<u>11</u> = Total Cover 50% of total cover: <u>5.50</u> 20% of total cover: <u>2.20</u>				Prevalence Index = B/A = <u>2.89</u>																																												
<u>75</u> = Total Cover 50% of total cover: <u>37.50</u> 20% of total cover: <u>15.00</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)																																												
<u>75</u> = Total Cover 50% of total cover: <u>37.50</u> 20% of total cover: <u>15.00</u>				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																												
<u>75</u> = Total Cover 50% of total cover: <u>37.50</u> 20% of total cover: <u>15.00</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.																																												
<u>75</u> = Total Cover 50% of total cover: <u>37.50</u> 20% of total cover: <u>15.00</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>																																												
Herb Stratum (Plot size: <u>5 ft r</u>) <table style="width: 100%;"> <tr><td>1. <u>Impatiens capensis</u></td><td><u>16</u></td><td>☒</td><td><u>FACW</u></td></tr> <tr><td>2. <u>Boehmeria cylindrica</u></td><td><u>15</u></td><td>☒</td><td><u>FACW</u></td></tr> <tr><td>3. <u>Cryptotaenia canadensis</u></td><td><u>15</u></td><td>☒</td><td><u>FAC</u></td></tr> <tr><td>4. <u>Rosa multiflora</u></td><td><u>12</u></td><td>_____</td><td><u>FACU</u></td></tr> <tr><td>5. <u>Microstegium vimineum</u></td><td><u>10</u></td><td>_____</td><td><u>FAC</u></td></tr> <tr><td>6. <u>Smilax rotundifolia</u></td><td><u>7</u></td><td>_____</td><td><u>FAC</u></td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>9. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>10. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>11. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> </table>					1. <u>Impatiens capensis</u>	<u>16</u>	☒	<u>FACW</u>	2. <u>Boehmeria cylindrica</u>	<u>15</u>	☒	<u>FACW</u>	3. <u>Cryptotaenia canadensis</u>	<u>15</u>	☒	<u>FAC</u>	4. <u>Rosa multiflora</u>	<u>12</u>	_____	<u>FACU</u>	5. <u>Microstegium vimineum</u>	<u>10</u>	_____	<u>FAC</u>	6. <u>Smilax rotundifolia</u>	<u>7</u>	_____	<u>FAC</u>	7. _____	_____	_____	_____	8. _____	_____	_____	_____	9. _____	_____	_____	_____	10. _____	_____	_____	_____	11. _____	_____	_____	_____
1. <u>Impatiens capensis</u>	<u>16</u>	☒	<u>FACW</u>																																													
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7. _____	_____	_____	_____																																													
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9. _____	_____	_____	_____																																													
10. _____	_____	_____	_____																																													
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Woody Vine Stratum (Plot size: <u>30 ft r</u>) <table style="width: 100%;"> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> </table>					1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____																								
1. _____	_____	_____	_____																																													
2. _____	_____	_____	_____																																													
3. _____	_____	_____	_____																																													
4. _____	_____	_____	_____																																													
5. _____	_____	_____	_____																																													
Remarks: (Include photo numbers here or on a separate sheet.) No woody vine stratum was observed at this data point.																																																

SOIL

Sampling Point: DP-164

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 6	10YR 4/3	100					Silty Clay Loam	
6 - 18	10YR 4/3	80	7.5YR 5/6	15	C	PL / M	Silty Clay Loam	
6 - 18			10YR 6/2	5	D	M	Silty Clay Loam	Secondary Redox feature
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-09
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-165
Investigator(s): JF, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 1
Subregion (LRR or MLRA): P 136 Lat: 36.76062021 Long: -79.41683044 Datum: WGS 84
Soil Map Unit Name: 5C3 - Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-165

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Quercus phellos</u>	<u>10</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>85.71</u> (A/B)														
2. <u>Pinus virginiana</u>	<u>5</u>	☒	<u>UPL</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>15</u> = Total Cover 50% of total cover: <u>7.50</u> 20% of total cover: <u>3.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>10</u></td> <td>x 1 = <u>10</u></td> </tr> <tr> <td>FACW species <u>32</u></td> <td>x 2 = <u>64</u></td> </tr> <tr> <td>FAC species <u>70</u></td> <td>x 3 = <u>210</u></td> </tr> <tr> <td>FACU species <u>14</u></td> <td>x 4 = <u>56</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>131</u> (A)</td> <td><u>365</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.78</u>	Total % Cover of:	Multiply by:	OBL species <u>10</u>	x 1 = <u>10</u>	FACW species <u>32</u>	x 2 = <u>64</u>	FAC species <u>70</u>	x 3 = <u>210</u>	FACU species <u>14</u>	x 4 = <u>56</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>131</u> (A)	<u>365</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>10</u>	x 1 = <u>10</u>																	
FACW species <u>32</u>	x 2 = <u>64</u>																	
FAC species <u>70</u>	x 3 = <u>210</u>																	
FACU species <u>14</u>	x 4 = <u>56</u>																	
UPL species <u>5</u>	x 5 = <u>25</u>																	
Column Totals: <u>131</u> (A)	<u>365</u> (B)																	
1. <u>Quercus phellos</u>	<u>25</u>	☒	<u>FAC</u>															
2. <u>Liquidambar styraciflua</u>	<u>5</u>	_____	<u>FAC</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
<u>30</u> = Total Cover 50% of total cover: <u>15.00</u> 20% of total cover: <u>6.00</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)														
1. <u>Juncus effusus</u>	<u>30</u>	☒	<u>FACW</u>															
2. <u>Dichanthelium clandestinum</u>	<u>20</u>	☒	<u>FAC</u>															
3. <u>Carex lurida</u>	<u>10</u>	_____	<u>OBL</u>															
4. <u>Lonicera japonica</u>	<u>5</u>	_____	<u>FACU</u>															
5. <u>Microstegium vimineum</u>	<u>5</u>	_____	<u>FAC</u>															
6. <u>Solidago canadensis</u>	<u>5</u>	_____	<u>FACU</u>															
7. <u>Dichanthelium scoparium</u>	<u>2</u>	_____	<u>FACW</u>															
8. <u>Quercus phellos</u>	<u>2</u>	_____	<u>FAC</u>															
9. <u>Rubus argutus</u>	<u>2</u>	_____	<u>FACU</u>															
<u>81</u> = Total Cover 50% of total cover: <u>40.50</u> 20% of total cover: <u>16.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
1. <u>Campsis radicans</u>	<u>2</u>	☒	<u>FAC</u>															
2. <u>Lonicera japonica</u>	<u>2</u>	☒	<u>FACU</u>															
3. <u>Smilax rotundifolia</u>	<u>1</u>	☒	<u>FAC</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
<u>5</u> = Total Cover 50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

Vegetation confined to area in PSS.

SOIL

Sampling Point: DP-165

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 8	7.5YR 4/3	90	7.5YR 4/6	10	C	PL / M	Clay Loam	Manganese concretions
8 - 12	5YR 4/4	95	5YR 4/6	5	C	M	Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (LRR N)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (MLRA 147, 148)
- ☐ Thin Dark Surface (S9) (MLRA 147, 148)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ☐ Umbric Surface (F13) (MLRA 136, 122)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 148)
- ☒ Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (MLRA 147)
- ☐ Coast Prairie Redox (A16) (MLRA 147, 148)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock
Depth (inches): 12

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-09
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-166
Investigator(s): JF, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 1
Subregion (LRR or MLRA): P 136 Lat: 36.7608365 Long: -79.41651246 Datum: WGS 84
Soil Map Unit Name: 5C3 - Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes ☒	No _____
Hydric Soil Present?	Yes ☒	No _____			
Wetland Hydrology Present?	Yes ☒	No _____			

Remarks:

All three wetland parameters (i.e., wetland hydrology, hydrophytic vegetation, and hydric soils) were satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes ☒ No _____
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: DP-166

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>5</u></td> <td>x 1 = <u>5</u></td> </tr> <tr> <td>FACW species <u>15</u></td> <td>x 2 = <u>30</u></td> </tr> <tr> <td>FAC species <u>76</u></td> <td>x 3 = <u>228</u></td> </tr> <tr> <td>FACU species <u>7</u></td> <td>x 4 = <u>28</u></td> </tr> <tr> <td>UPL species <u>4</u></td> <td>x 5 = <u>20</u></td> </tr> <tr> <td>Column Totals: <u>107</u> (A)</td> <td><u>311</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.90</u>	Total % Cover of:	Multiply by:	OBL species <u>5</u>	x 1 = <u>5</u>	FACW species <u>15</u>	x 2 = <u>30</u>	FAC species <u>76</u>	x 3 = <u>228</u>	FACU species <u>7</u>	x 4 = <u>28</u>	UPL species <u>4</u>	x 5 = <u>20</u>	Column Totals: <u>107</u> (A)	<u>311</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>5</u>	x 1 = <u>5</u>																	
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FACU species <u>7</u>	x 4 = <u>28</u>																	
UPL species <u>4</u>	x 5 = <u>20</u>																	
Column Totals: <u>107</u> (A)	<u>311</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Dichanthelium clandestinum</u>	<u>75</u>	☒	<u>FAC</u>															
2. <u>Carex sp.</u>	<u>15</u>																	
3. <u>Juncus effusus</u>	<u>15</u>		<u>FACW</u>															
4. <u>Carex lurida</u>	<u>5</u>		<u>OBL</u>															
5. <u>Danthonia spicata</u>	<u>2</u>		<u>UPL</u>															
6. <u>Duchesnea indica</u>	<u>2</u>		<u>FACU</u>															
7. <u>Lespedeza cuneata</u>	<u>2</u>		<u>FACU</u>															
8. <u>Lonicera japonica</u>	<u>2</u>		<u>FACU</u>															
9. <u>Packera anonyma</u>	<u>2</u>		<u>UPL</u>															
10. <u>Rubus argutus</u>	<u>1</u>		<u>FACU</u>															
11. <u>Smilax rotundifolia</u>	<u>1</u>		<u>FAC</u>															
<u>122</u> = Total Cover																		
50% of total cover: <u>61.00</u> 20% of total cover: <u>24.40</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (Include photo numbers here or on a separate sheet.) Vegetation confined to PEM wetland. Ambrosia artemisiifolia 1%. No tree, sapling/shrub, or woody vine strata were observed at this data point.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP-166

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 1	10YR 3/3	100					Loam	
1 - 9	7.5YR 4/6	95	5YR 4/6	5	C	PL / M	Loam	
9 - 18	7.5YR 4/2	80	5YR 4/6	20	C	PL / M	Clay	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (**LRR N**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
☐ Umbric Surface (F13) (**MLRA 136, 122**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)
☐ Red Parent Material (F21) (**MLRA 127, 147**)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**MLRA 147**)
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Southeast Supply Enhancement Project City/County: Pittsylvania County Sampling Date: 2024-05-09
Applicant/Owner: Transcontinental Gas Pipe Line Company, LLC State: Virginia Sampling Point: DP-167
Investigator(s): JF, AS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR or MLRA): P 136 Lat: 36.76040705 Long: -79.41713019 Datum: WGS 84
Soil Map Unit Name: 5C3 - Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No _____	Is the Sampled Area within a Wetland?	Yes _____	No ☒
Hydric Soil Present?	Yes _____	No ☒			
Wetland Hydrology Present?	Yes _____	No ☒			

Remarks:

Only one of the three wetland parameters (i.e., hydrophytic vegetation) was satisfied at this data point.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial Imagery (B7)		☒ Geomorphic Position (D2)	
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)	
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present?	Yes _____ No ☒ Depth (inches): _____	
Water Table Present?	Yes _____ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No ☒ Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology was observed at this data point; only one of the secondary indicators was present.