Transcontinental Gas Pipe Line Company, LLC

NORTHEAST SUPPLY ENHANCEMENT PROJECT

REQUIREMENT J - ENVIRONMENTAL ASSESSMENT FORM: MODULE S2 - RESOURCE ID & CHARACTERIZATION

PADEP CHAPTER 105/USACE SECTION 404 JOINT PERMIT APPLICATION

August 2025

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A. STANDARD RESOURCE IDENTIFICATION

Resources are identified in the Project Location Map (Requirement G) and Wetland Delineation Report (Enclosure A).

The site is located within or adjacent to the following areas. These items, including any potential impacts to these resources are addressed in Module S3 Section B.

- National, state or local park, forest or recreation area
- State Game Lands
- Areas identified as prime farmland
- Source for a public water supply

B. AQUATIC RESOURCES ON SITE

Aquatic resources present on the Project site are detailed in the Wetland Delineation Report (Enclosure A).

C. THREATENED AND ENDANGERED SPECIES COORDINATION SUMMARY

An updated Pennsylvania Natural Diversity Inventory (PNDI) receipt was obtained for the Project on May 13, 2025 under Project Search ID: PNDI-840101 (Requirement D). Information was requested from the Pennsylvania Department of Conservation and Natural Resources (PDCNR), Pennsylvania Fish and Boat Commission (PFBC), Pennsylvania Game Commission (PGC), and the United States Fish and Wildlife Service (FWS). The PNDI search identified potential protected species managed by PGC, PFBC, and FWS as summarized below in Table C-1. As required by the PNDI, Transco entered the Project information into IPaC to review potential effects on federally listed species. The species list and technical assistance letter from the FWS for Project Code: 2025-0092275 are provided as Exhibit 8.

The application is utilizing a concurrent review of the PNDI coordination. Agency consultations are in progress.

The PNDI records indicate several species may occur within the Project area as outlined in Table C-1.

Table C-1

Threatened or Endangered Species that may occur within the Project Area

Species Group	Species Name	Scientific Name	Agency	Federal Status	State Status
Fish	Chesapeake logperch	*Percina bimaculata*	PFBC	N/A	Threatened
Reptiles/ Amphibians	Bog turtle	*Glyptemis muhlenbergii*	PFBC/ FWS	Threatened	Endangered
Mammals	Northern Long-Eared Bat	*Myotis septentrionalis*	FWS	Endangered	Endangered
	Indiana Bat	*Myotis sodalis*	FWS	Endangered	Endangered

Chesapeake Logperch

The 2025 PNDI Receipt indicated that the Chesapeake Logperch may be present within the Project area.

The Project was screened by the PFBC under the original Water Quality Certification approval, and the PFBC indicated the Chesapeake logperch may be present within the Project area. However, no surveys were requested by the PFBC in a letter dated July 6, 2016. Transco previously consulted with the PFBC regarding stream crossing techniques and mitigation measures that would reduce potential impacts on the Chesapeake logperch. Based on the best management practices and the use of the previously approved erosion and sediment control (E&S) plans, the PFBC determined that the proposed Project would not have a significant impact on the species as indicated in a clearance dated March 7, 2017(Smiles, H, 2017). The PFBC was re-consulted on September 22, 2017, based on the Project revisions related to the construction methodology change at Conowingo Creek. A response was provided on September 27, 2017, indicating the PFBC does not anticipate significant adverse impacts as a result of the Project. Previous consultation with the PFBC is provided as Exhibit 7.

Transco is actively coordinating with PFBC to re-confirm their determination that the Project will not have a significant impact on the species.

Bog Turtle

The 2025 PNDI Receipt indicated that bog turtles may be present within the Project area.

Phase 1 bog turtle habitat surveys revealed seven suitable wetlands within the Quarryville Loop survey area; five of the seven wetlands are within the Quarryville Loop workspace. Phase II Presence/Absence surveys and Phase III Trapping Surveys were completed in the spring of 2017, with no bog turtles found. A letter from the FWS on July 5, 2017 concurred with the results of the bog turtle surveys, indicating the Project will not affect the bog turtle. The FWS was re-consulted on September 22, 2017, based on the Project revisions related to the construction methodology change at Conowingo Creek. Previous consultation with the FWS regarding the Bog Turtle is provided in Exhibit 8.

Transco is actively coordinating with FWS to re-confirm their no effect determination for the Project. In addition, Transco is currently performing proactive due diligence field work by a qualified bog turtle surveyor to re-confirm habitat presence details.

Indiana Bat and Northern Long-eared Bat

The FWS previously indicated that the Project area is within the known range of the Indiana bat and the northern long-eared bat. The FWS indicated that no surveys would be required for the Project because the tree clearing proposed is less than 40 acres (Shellenberger 2016). No known hibernacula, roosts, or swarming areas for these species occur near the Project area (Shellenberger 2016). The FWS did not recommend timing restrictions on forest clearing for the Quarryville Loop (Shellenberger 2016). The lack of known roosts and hibernacula, the limited amount of forested lands to be cleared, and the implementation of Transco's avoidance and minimization measures suggest that the Project's impacts on Indiana bats and northern long-eared bats would not be adverse or result in take. Previous consultation with the FWS regarding bats is provided in Exhibit 8.

Transco is currently performing proactive due diligence coordination with the FWS to re-confirm their previous guidance.

D. AQUATIC RESOURCES CHARACTERIZATION

Aquatic resources present on the Project site are detailed in the Wetland Delineation Report (Enclosure A).

Transcontinental Gas Pipe Line Company, LLC

NORTHEAST SUPPLY ENHANCEMENT PROJECT

REQUIREMENT J – ENVIRONMENTAL ASSESSMENT FORM: RESUMES

PADEP CHAPTER 105/USACE SECTION 404 JOINT PERMIT APPLICATION

August 2025

AVERY MILLER

CONSULTANT, ENVIRONMENTAL SCIENTIST

Years with the firm

2.5 (2023)

Years total

5

Professional registrations

N/A

Trainings

NYSDEC 4-Hr. Erosion & Sediment Control

OSHA 40-Hr. HAZWOPER

First Aid, CPR, and AED Certified

Professional associations

N/A

Languages

English

Office location

Buffalo, New York

EDUCATION

MS, Environmental Science, Rochester Institute of Technology 2022

BS, Environmental Science, Rochester Institute of Technology 2019

PROFESSIONAL EXPERIENCE

— **AES Homer Solar Project, May 2025 – Present**

- Conducted pre-construction invasive species monitoring throughout the Project's proposed footprint and assisted in QAQC of collected data, to contribute to the Project's ORES Compliance Filings.

— **Northeast Supply Enhancement Project Restart, March 2025 – Present**

- Updated project documents and NY/PA permit applications from prior project filing to be consistent with new information and current for the project restart in 2025.
- Lead aquatic resource surveys and wetland delineations within Project boundaries to verify and alter previous delineations where necessary.
- Created a wetland delineation report detailing new field work findings relative to prior project delineations, and summarizing relevant regulatory background.

— **AES Wind Repowering Projects, 10/23/2023 – Present**

- Lead aquatic resource surveys and wetland delineations within Project boundaries while performing quality control on previous mapping and survey efforts across 2023 and 2024.
- Performed quality assurance and quality control on collected data, and contributed to writing and organizing Wetland Delineation Reports for the Projects following delineations.
- Evaluated functions and values of delineated wetlands.
- Conducted stationary avian surveys to evaluate usage of grassland habitats by threatened and endangered raptor species. Organized and uploaded wintering grassland raptor survey data collected in the field for further analysis. Digitized flight paths, perch, and roost locations of threatened and endangered birds to evaluate site usage by these species.
- Created and maintained both internal and external costing spreadsheets for labor and expenses.
- Coordinated and communicated with internal and external project teams to facilitate timely progress on Article VII/Article VIII/94C deliverables and exhibits.

— **Propel NY Energy Project, 7/8/2024 – Present**

- Performed aquatic resource surveys, tree surveys, and wetland delineations within Project boundaries and at Project substations.
- Assisted with various permitting and organizational Project needs.

— **NYPA Smart Path Transmission Line Invasive Species Monitoring, 10/1/2023 – 10/7/2023**

- Conducted post-construction monitoring of invasive species along the length of the NYPA Smart Path transmission line, mapping dense stands and collecting geospatial data regarding abundance of invasive species identified for comparison to pre-construction data.

— **Empire State Line Invasive Species Monitoring, 9/11/2023 – 9/20/2023**

- Conducted post-construction monitoring of invasive species along the length of the Empire State Line transmission line, mapping dense stands and collecting geospatial data regarding abundance of invasive species identified for comparison to pre-construction data.

— **NextEra Solar SWPPP Inspections, 7/13/2023 - Present**

- Conducted weekly/monthly and post-rain SWPPP inspections at five NextEra solar energy project sites at various stages of construction throughout Upstate New York.
- Prepared thorough but concise reports of SWPPP inspection findings to communicate key action items and resolved issues to the client and to relevant worksite personnel.

— **Boralex Solar, Utica NY, 7/3/2023 – 7/10/2023**

- Performed aquatic resource surveys and wetland delineations within Project boundaries.
- Evaluated functions and values of delineated wetlands with a combination of field and office assessment.

— **Invenergy, Verona Solar, Verona NY, 6/26/2023 – 7/2/2023**

- Performed aquatic resource surveys and wetland delineations within Project parcels.
- Prepared an endangered species memorandum following the discovery of a NY endangered plant species on site.
- Evaluated functions and values of delineated wetlands with a combination of field and office assessment.

— **CPNY, Clean Path New York, NY, 2/1/2023 – 5/1/2024:**

- Provided support for a variety of needs for the Clean Path New York project, including work on the Joint Application to USACE, calculating/describing impacts to aquatic resources along the proposed and alternative routes, and contributing to the Project's wetland mitigation plan.
- Performed aquatic resource surveys and wetland delineations along Project access roads and within proposed areas of tree clearing.
- Evaluated functions and values of delineated wetlands with a combination of field and office assessment.

— **Invenergy, Wintering Grassland Raptor Surveys, Wayland NY, 1/9/2023 – 3/30/2023:**

- Conducted stationary and driving avian surveys to evaluate usage of grassland habitats by threatened and endangered raptor species. Organized and uploaded data collected in the field for further analysis. Digitized flight paths, perch, and roost locations of threatened and endangered birds to evaluate site usage by these species.

PREVIOUS EXPERIENCE

RIT & WM, Wetland Scientist & Research Assistant, Perinton, NY, Summers of 2019-2022

— Worked in conjunction with WM to provide and carry out land management recommendations to improve conservation outcomes within a local nature area

- Monitored surface and groundwater levels, surveyed invasive plant species, and performed restoration work within mitigation wetlands
- Assisted environmental science graduate students in conducting research
- Managed multiple years of GIS data used for field work and surveys
- Prepared maps and reports to communicate data and field work results

PUBLICATIONS & PRESENTATIONS

- Impacts of Spatial Resolution and Viewing Angle on Remotely Sensed Estimates of *Spartina alterniflora* Aboveground Biomass, master's thesis on RIT Scholar Works, Rochester, NY, 2021

- Mapping Soil Organic Matter, Total Carbon, and Total Nitrogen in Salt Marshes Using UAS-Based Hyperspectral Imaging, journal article on JGR Biogeosciences, https://doi.org/10.1029/2024JG008421, 2025 June 6

SAMUEL HILLMAN

Consultant, Environmental Scientist

Years with the firm

2 (2023)

Years total

8 (2017)

Areas of practice

Environmental Planning, Natural Resource Management, Erosion and Sediment Control Inspection Enforcement

Languages

English

Office Location

Baltimore, MD

CAREER SUMMARY

Sam Hillman is an Environmental scientist, planner, delineator, inspector, and technician with 8 years of experience on various projects across the United States, including Maryland, Virginia, New York, Pennsylvania, Delaware, and Kentucky. His experience includes wetland, waterway, and forest stand delineations, conducting geomorphic surveys, overseeing sediment control compliance on construction sites, and assisting with permitting issued under the Clean Water Act sections 401 and 404, Maryland Forest Conservation Act, and the Maryland Critical Area Act. He also has inspected/delegated MDE erosion and sediment control devices and has 4 years of construction experience on stream restoration and wetland mitigation projects; interpreting and implementing design plans and laying out structures and grade controls for operators in the field.

Sam is knowledgeable in Federal and MD State environmental regulations with infield experience implementing the regulations. He is proficient in the use and application of GIS software, AutoCAD drafting and site engineering drawings and plans to understand slopes, grades, and historical drainage patterns.

EDUCATION

Bachelor of Arts, Environmental Studies. Salisbury University. Salisbury, MD	2017

ADDITIONAL TRAINING

Basic Wetland Delineation Training (Coastal Resources, Inc./Environmental Concern)	2024
State of Maryland Erosion & Sediment Control Certification/Yellow Card	2023
CSX Roadway Worker Protection Training for Railroad Contractors	
MDOT Certified Flagman/Watchman and OSC	
CPR/First Aid by Heart to Beat, LLC	2021
Certified MDOT Flagger	
OSHA 30 hour	2020
Recipient of an International TEFL Academy Certification - Costa Rica	2018
Certified Project Learning Tree Teacher	2017

PROFESSIONAL EXPERIENCE

Environmental Science, Permitting, and Planning

- **Field Day Solar Project. Oneida County, NY (2024).** Environmental scientist responsible for leading wetland and waterway delineations within an 1,000-acre area for the permitting of a solar project. Sam worked closely with other environmental scientists to complete the wetland and waterway delineation and review documented findings.

- **CSXT BAK 62.44 Bridge Replacement Project. Aberdeen, MD (2024-Present)**: Environmental scientist responsible for aiding the Joint Permit Application (JPA), creating impact plates, and compiling the overall package to submit to the agencies. Sam worked closely with the designers and other environmental scientists to compile and complete the JPA package and submit to the agencies.

- **Washington Suburban Sanitary Commission (WSSC) Little Seneca Reservoir Project. Montgomery County, MD (2024-Present)**: Environmental scientist responsible for compiling multiple wetland, waterway, and forest stand delineation reports and GIS related documentation. Sam worked closely with the designers, project managers, and subconsultants to review and verify field documented findings into one large package for the client. Sam was also tasked with calculating proposed impacts to the floodplain, wetlands, waterways, and trees based on field investigations and GIS mapping.

- **Amtrak Wilkens Project. Baltimore City, MD (2024-Present):** Environmental scientist responsible for creating impact plates, adjacent property owner letters and mapping, and preparing the compiled Joint Permit Application (JPA). Sam also worked on reviewing the tree and floodplain impacts against the proposed Limits of Disturbance (LOD). Sam worked closely with the project managers and other environmental scientists to complete the JPA and other documentation for the client.

- **Project Piano Man (PHL 100). Luxerne County, PA (2024): E**nvironmental scientist worked with other WSP environmental scientists to conduct wetland and waterway delineations for a 1,040 acre site in Luxerne County, PA. Chad was responsible for leading a team of two to delineate wetlands and waterways following the USACE Northcentral and Northeast Regional supplemental manual. Chad was also responsible for creating and leading the updates to the compiled wetland and waterway delineation package. He worked closely with other environmental scientists to complete the project within a fast-tracked timeline.

- **United States Secret Service (USSS), James J. Rowley Training Center (JJRTC), Hyattsville, Maryland (2023-Present):** Environmental scientist that worked with other field members to conduct a wetlands and waterways delineation of the site and draft the wetlands and waterways delineation report. Sam assisted in the drafting efforts for the Joint Permit Application for the project.

- **Federal Law Enforcement Training Center (FLETC). Department of Homeland Security. Prince George's County, MD (2023-Present):** Environmental scientist responsible for conducting natural resource delineations/surveys including wetland and waterway delineations, and forest stand delineations in Prince George's County, MD. Chad was also responsible for creating and updating the wetland, waterway, and forest delineation reports and mapping.

- **Federal Bureau of Prisons, Proposed Federal Correctional Institution and Federal Prison Camp. Letcher County, KY (2023):** The Federal Bureau of Prisons is proposing a new Federal Correctional Institution and Federal Prison Camp in Letcher County, Kentucky. Sam was responsible for conducting the natural resource surveys and the wetland and waterway delineations in the proposed project area. He also led the post-processing of field data and creating the wetland delineation report and jurisdictional determination request package. Sam was also tasked with calculating the environmental impacts of the proposed construction activity.

- **Invenergy Verona Solar Project. Oneida County, NY. (2023):** Verona Solar LLC is proposing a major renewable energy facility in Oneida County, NY. Sam was responsible for over 3 weeks of wetland and waterway delineations within a 1,600 acre area and post processing of field data collection for wetland and waterway mapping and reporting.

- **Rocksdrift Wetland/Waterway Recon. Oneida County, NY (2023):** Sam was responsible for over a week of wetland and waterway delineations and post processing of field data collection for wetland and waterway mapping and reporting.

Erosion and Sediment Control Inspection

- **Fallston Stream Restoration. Fallston, MD (2024-Present):** Sediment control inspector is responsible for weekly site visits to conduct site inspections which include, perimeter sediment controls, sequence of construction, and staying within the Limits of Disturbance (LOD). Chad is also tasked with completing Maryland Department of Environment (MDE) standard inspection forms for the General Permit for Stormwater Associated with Construction Activity.

- **Amtrak Principio Creek Bridge (MP.92) Benchwall Construction & Repair Project. Cecil County, MD (2023-Present):** On-site environmental specialist responsible for being familiar with the project environmental permit requirements to assist Amtrak in maintaining compliance with the project's environmental permits. Sam was responsible for conducting on-going inspections and evaluations of sedimentation and erosion control measures, the protection of resource areas (e.g., wetland resources), and Amtrak work practices and documenting findings and recommendations in daily reports.

- **CSX Philadelphia Bayview North Clearance. Multiple Counties, PA (2023-Present):** CSX is proposing multiple projects in Pennsylvania along existing railroad tracks to lower and provide additional clearance for existing railcars. Sam is responsible for conducting monthly Quality Assurance (QA) site visits.

- **CSX 4th and Lancaster. Williamsburg, DE (2023-Present):** CSX is proposing a project in Delaware along existing railroad tracks to lower and provide additional clearance for existing railcars. Sam is responsible for conducting monthly Quality Assurance (QA) site visits.

- **CSX Bayview, Mt. Winans yard EMPA, and Howard St. Tunnel Track Lowering. Baltimore, MD (2023-Present):** CSX is proposing a project in Maryland along existing railroad tracks to lower and provide additional clearance for existing railcars. Sam is responsible for conducting monthly Quality Assurance (QA) site visits.

- **Powell's Creek Stream Restoration. Prince William County, VA (2023):** Sediment control inspector is responsible for weekly site visits to conduct site inspections which include, perimeter sediment controls, sequence of construction, and staying within the Limits of Disturbance (LOD). Sam was also tasked with completing Stormwater Pollution Prevention Plans (SWPPP) after every major rain event.

Invasive Management and Planning

- **Gwynns Falls at Kingsbury Rd. Baltimore County, MD (2019-2020):** Environmental scientist worked with Water Resources Engineers and other Environmental scientists to survey on-site invasive species and create an invasive management plan. Field visits included plant identification and delineating boundaries for invasive zones. Sam used ArcGIS to depict the zones within the project area. Each zone had a representative number/color that corresponded with the invasive management plan. The plan described each plants identification using the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Plants Database name convention. The invasive management plan documented each plant species with common and scientific names, and best management practices/control methods.

Geomorphic Survey

- **Jennifer Branch Ecological Restoration Project. Baltimore County, MD (2023-Present):** Environmental scientist working with other environmental scientists to conduct habitat assessment plots within the project limits to set a pre-construction score for 5 reaches. The habitat assessment plots are used to show functional

uplift within the stream channel to satisfy permit requirements. Sam was also responsible for working with water resource engineers to complete a geomorphic survey, cross section survey, and pebble count.

PREVIOUS EXPERIENCE

Before joining WSP, Sam's experience included*:*

- **Ecotone, LLC., Ecological Technician in Restoration Design, Forest Hill, Maryland (2022):** Responsibilities included mapping wetland mitigation and stream restoration design in AutoCadd and ArcGIS, post-processing yearly site monitoring protocols, assisting in the preparation of full project prospectuses and phase 1 mitigation assessments, and leading pre-construction site assessment protocols such as BEHI and NBS assessments, pebble counts, macroinvertebrate assessments, soil borings and vegetation plots.

- **Ecotone, LLC., Restoration Technician and Layout I in Stream/Wetland Construction. Forest Hill, Maryland (2019- 2022):** Responsibilities included operation of heavy machinery (ie. Track truck, skid loader, excavator, etc.), ability to read and interpret stream and wetland design plans and layout accordingly to operators, an understanding of stream restoration techniques and structure functions including the construction of imbricated walls, wood drop riffles, beaver dam analogs, log veins, stone toe and toe woods, and experience in design and inspection meetings with counties (Baltimore County, Harford County, Montgomery County, St. Mary's County, Carroll County, Howard County) and clients (McCormick Taylor, Century Engineering) to discuss progress and potential field changes.

- **Century Engineering, Inc., Environmental Scientist Intern. Hunt Valley, Maryland (2016):** Responsibilities included forest stand delineations, wetland delineations, tree surveys, stream surveys (BEHI/NBS), species classification and datasheet completion and experience in ArcGIS and AutoCadd.

LAURA JANE KEMPER

Early Professional, Environmental Science

Years with the firm

<1 (2024)

Years total

1.5 (2022)

Areas of practice

Wildlife Biology

Natural Resources Delineation

Languages

English

CAREER SUMMARY

LJ Kemper is an Early Career Environmental Scientist working out of WSP's Baltimore office. She has experience working as a biological technician on several private industry and government projects concerning wildlife management, wetland delineation, resource mapping, and waterbody classification. She has worked across the southeast and midwestern United States, including Maryland, Tennessee, Virginia, Kentucky, South Carolina, North Dakota, and Montana.

After joining WSP, LJ has gained experience and knowledge surrounding federal and state environmental regulation and permitting processes, including those related to the Clean Water Act section 404.

EDUCATION

Bachelor of Arts in Environment and Sustainability, English.
The University of the South: Sewanee. Sewanee, Tennessee.
Graduated May 2024.

TRAINING AND CERTIFICATIONS

CPR and First Aid Certification, 2024
Responsible Personnel in Erosion and Sediment Control, 2025

PROFESSIONAL EXPERIENCE

Environmental Science, Permitting, and Planning

— **WSP USA**
17-PE General Discharge from the Application of Pesticides Permitting (2025)
Created permit packages for two MDTA stream restoration projects where chemical treatment of invasive species is planned. Conducted a field survey to determine treatment areas, completed 17-PE forms, and created maps of the site.

— **WSP USA**
Environmental Recommendations Memorandum for the Cherokee National Forest (2025)
The USFS has proposed to reconstruct, repair, or replace areas in the Cherokee National Forest that have experienced significant roadway damage. Assisted in the creation of an environmental recommendations memo to identify natural resources, potential impacts to resources, and potential mitigation requirements within proposed project areas.

— **WSP USA**
CSX BAK 62.44 Bridge Replacement Project (2024)
Participated in the creation and compilation of a Joint Permit Application (JPA) and vicinity maps to submit to the Maryland Dept. of Environment for the replacement of a failed railway box bridge.

Wetland and Waterbody Delineation and Classification

- **WSP USA**
  Zeus Solar: Mecklenburg County, VA (2025)
  Conducted wetland and waterway delineations within a 4,500-acre site proposed for the installation of solar facilities. Worked with other environmental scientists to conduct field investigations.
- **WSP USA**
  Iris Solar: Somerset County, PA (2025)
  Conducted wetland and waterway delineations within a 693-acre site proposed for solar and battery storage facilities. Worked closely with other environmental scientists to conduct field investigations and review and compile findings.
- **WSP USA**
  Poseidon Solar: Fayette County, PA (2025)
  Conducted wetland and waterway delineations within a 1,146-acre site proposed for solar and battery storage facilities. Worked closely with other environmental scientists to conduct field investigations and review and compile findings.
- **WSP USA**
  Carsins Run Stream Remediation: Aberdeen, MD (2025)
  Assessed natural resources at a Carsins Run project site for MDTA. Collected forest stand data, delineated and classified water resources, and assessed drainage infrastructure. Assisted in creating a report of the survey findings.
- **Western Ecosystems Technology (WEST)**
  North Plains Connector: Bismarck, ND (2024)
  Worked for WEST as a Biological Technician on the Grid United LLC North Plains Connector transmission project. Conducted field surveys across North Dakota and Montana to determine the presence of wetlands and waterbodies within project boundaries. Classified waterbodies and delineated wetlands in accordance with USACE guidelines for the Great Plains region. All features were mapped and recorded in Survey123 and WildNote.
- **United States Forest Service**
  Timber Parcel Boundaries: Blacksburg, VA (2023)
  Worked for the Forest Service in the George Washington and Jefferson National Forest to classify water resources within proposed timber harvest parcels. Resources were classified according to factors such as plant life, flow, substrate, and the presence or absence of aquatic and terrestrial wildlife.
- **Unites States Forest Service**
  Stream Habitat Evaluation: Clinton, SC (2023)
  Conducted surveys for the U.S. Forest Service in Sumter National Forest to classify streams according to the Rosgen Stream Classification System. Data was gathered to determine viability of stream habitat, assess the health of the watershed, and document erosion.
- **United States Forest Service**
  Stream Pre-Restoration Surveys: Williamsburg, KY (2023)
  Worked alongside Daniel Boone National Forest and University of Kentucky biologists to conduct BVET and electrofishing surveys in a degraded watershed to establish a pre-restoration baseline. The stream and its tributaries were classified according to the Rosgen Stream Classification System and all aquatic life was collected, identified, and documented to create a report and recommendations.

Landscape Inspections

- **WSP USA**
  I-95 Express Toll Lanes Northern Expansion: MD 152 Interchange Construction (2024-Present)
  Assisting in installation, 6-month, and 1-year phase inspection reports for tree and herbaceous installations. Key tasks include tagging new plantings, recording data in Survey123, and evaluating plant health.

Wildlife and Habitat Surveys

- **Western Ecosystems Technology (WEST)**
  Wildlife Habitat Surveys: Bismarck, ND (2024)
  Assessed land use and land cover within the boundaries of the Grid United LLC North Plains Connector transmission project. Project areas were evaluated for the presence of potential Dakota skipper butterfly and northern long-eared bat habitat. The viability of potential habitat was based on vegetation cover and composition.

- **Unites States Forest Service**
  Wildlife Population Surveys: Blacksburg, VA (2023)
  Assisted in American eel and brook trout electrofishing surveys. Animals were sedated and then weighed, measured, and PIT tagged before being re-released.

- **The University of the South**
  Wildlife Population Surveys: Sewanee, TN (2022-2024)
  Salamanders: Aided in a long-term spotted salamander survey. Collected salamanders from drift fences, took measurements, and tagged animals via VIE. Acted in a supervisory position and helped teach volunteers VIE tagging skills.
  Bats: Assisted in the upkeep of acoustic bat monitoring stations and conducted regular vegetation density surveys. Aided Arnold Air Force Base biologists in an annual bat population survey. Helped set up a bridge harp trap, transported animals, and recorded data.
  Turtles: Set up traps in manmade ponds to collect turtle population data. Captured, measured, weighed, and tagged slider, cooter, and musk turtle species. Additionally, traveled to South Carolina to aid in an annual diamondback terrapin survey; used drift nets to capture turtles and assisted in collecting genetic samples.
  Snails: Assisted Dinkins Biological Consulting biologists surveying *Anguispira picta*, an endangered species of snail. Set up survey transects, collected and measured individuals, and recorded data.

CHARLOTTE ROSALIA TAKACSY

ASSISTANT CONSULTANT, BIOLOGY

Years with the firm

1.5 (2024)

Years total

1.5 (2024)

Trainings

40-hr HAZWOPER

Languages

English

French

Office location

Buffalo, New York

CAREER SUMMARY

Charlotte graduated in December 2023 and began working for WSP in February 2024. Charlotte has immediately started gaining experience in the environmental consulting industry. In her short time with WSP, she has already worked on a variety of projects encompassing tasks for 94-c permitting applications, both transmission line upgrading and installation projects, wetland delineations, surveys for wind repowering projects, and soil and groundwater sampling. She has provided several deliverables and participated in progress report meetings with clients. Charlotte has been highly involved in the DPN and has been the lead for several events and an intern "buddy". She is also a member of the Green team, which promotes sustainability through office awareness events.

EDUCATION

BS, Biology (minor in Psychology), University At Albany, NY 2023

PROFESSIONAL EXPERIENCE

Fieldwork

- **Kodak Site Groundwater Sampling, Rochester, New York, $99,999, May 2024 to June 2024:** Charlotte spent just over 5 weeks conducting groundwater sampling at the Kodak site in Rochester, New York. She is now proficient in using various sampling methods including bladder pumps, bailors, and PDB grab sampling. She also gained experience calibrating equipment, writing COCs, filling out logbooks, labelling samples, abiding by PPE, Health and Safety, and decontamination requirements, and utilizing KMZ data to locate wells.
- **Bliss & Wethersfield Wind Repowering Projects, City, State, $99,999,February 2024 to April 2024:** Winter Grassland Raptor surveys were done to assess the impact of wind turbines on target species and other raptors for Bliss and Wethersfield repowering wind projects. Charlotte completed independent stationary surveys throughout Feb.-April 2024, conducting approximately 15 different surveys at varying locations. These surveys included provided identification and detailed description of any raptor sightings and identified incidental species.
- **Stonewall Solar Project, Oneonta, New York, $99,999, June 2024:** Charlotte spent a week onsite in Oneonta, NY conducting 2 days of forest raptor surveys and 3 days of wetland delineations. The forest raptor surveys were conducted using an audio lure and hexagonal gridline methodology for surveying the areas. Data from the delineations was collected using ArcGIS FieldMaps and ArcGIS survey.
- **18 Mile Creek Project, Lockport, New York, August 2024:** Charlotte conducted soil core sample processing. Due to lead contamination and potential radioactive material, proper health and safety and decontamination protocols had to be abided by. Soil was scanned for radioactive levels and soils were then processed and packaged to be taken to the lab. She also participated in core collection on site using augers.

Deliverables & Permitting Work

- **AES Altona Wind Repowering 94-C Permitting Application, City, State, $99,999, 1999-1999:** Charlotte has been participating on the organizational side of the 94-c permitting process by conducting weekly updates and sending emails regarding the action items for Altona, Bliss, and Wethersfield Repowering permit applications. Additionally, she has supported the research for and writing of Exhibits 3, Location of Facility and Surrounding Land Use, and 6, Public Health, Safety, and Security.

- **Orange & Rockland Transmission from Woodbury Falls to West Point Military Academy, City, State, $99,999, 1999-1999:** This project is an upgrading project for the transmission lines from Woodbury Falls to West Point Military Academy. This project had been put on hold for over a year, so Charlotte initially created an inventory table to establish what actions had previously been conducted and what was still incomplete. She then created a Rare, Threatened, and Endangered species table for the client. This table compiled data from Online Databases and previous site surveys for each listed species to provide historical data, survey data, and establish further requirements based on state and federal regulations and was provided and discussed with the Client to ensure proper compliance. Following this, Charlotte drafted a request for review of the site from the New York National Heritage Program to get an updated species and significant communities list.
- **Clean Path New York, Hudson/Harlem/East River, New York, $99,999, 1999-1999:** Clean Path New York is a transmission line project going from Upstate NY to New York City. Charlotte created an impact summary table, which provided the impacts from both construction and operation of the project for each resource mentioned within the application. She also created a Timber Rattlesnake Education and Encounter Plan brochure, required as a deliverable to be provided to all personnel working onsite.
- **BASF ERA Erie, Pennsylvania, $99,999, 1999-1999:** Following the completion of an Environmental Risk Assessment for a site in Erie, PA, Charlotte was tasked with writing an Eco Narrative describing the Ecological Reconnaissance that WSP conducted. This writeup detailed the findings from the Ecological Reconnaissance surveying and the results of online reports that Charlotte received from NYNHP and IPaC. This Eco Narrative was utilized in accompaniment the photolog, species list and habitats figure for the Project.
- **NewLeaf Energy, Honey Ridge Solar 94-C Permitting Application, City, State, $99,999, 1999-1999:** Charlotte created a Project Scope Tracker in Excel within the Project Management Plan. This examined the Project's proposals to find the assumptions and determined the corresponding Exhibits. This organizational tool was utilized by the team to track the completion status of each task.
- **NewLeaf Energy, Moss Ridge Solar 94-C Permitting Application, City, State, $99,999, 1999-1999:** Charlotte recreated the Project Management Plan utilizing Honey Ridge's as a template. Charlotte was also assigned as the lead on the Values Table. This Excel table went through the specific application requirements for each Exhibit and identified if/where in the project's Exhibit drafts they were provided. This was done to ensure data consistency and the Client's regulatory compliance throughout the Exhibits.
- **USCG Sail Buffalo Site Contamination, City, State, $99,999, 1999-1999:** Charlotte wrote a Records Review Report based on research she collected from the ERIS historical records. This Report was provided to the client as a deliverable.

DPN Involvement

- **Habitat for Humanity Build Day, September 2024:** Charlotte was Co-Build Day Champion for the Buffalo office. Planning for this event took place over the course of several months and involved marketing to coworkers along with clients. Correspondence also had to take place with Habitat for Humanity representatives. She worked with the other lead to plan the event and ensure that the volunteer event was successful.
- **Spaghetti Stadium Competition, August 2024:** Event Champion for the global WSP Stadium competition as a part of the WSP Olympics. This involved planning the event, submitting funding requests, and setting up and documenting the event.

— **Spring Sweep Volunteer Event, April 2024:** Charlotte lead the WSP Buffalo Spring Sweep event. This involved coordinating and marketing the event to the office and registering the team along with planning Happy Hour following the event.

PREVIOUS EXPERIENCE

Before joining WSP, Charlotte's experience included:

— **AmeriCorps Fellow at Radix Ecological Sustainability Center, Albany, New York, May 2023 to August 2023:** AmeriCorps Fellow. Taught community members practical skills that can be applied to create environmental and economic sustainability. Managed farming systems including compost, CSA shares, chickens, and aquacultures. Built and implemented a floating treatment wetland. Completed soil and dust samples for contaminants in low-income housing area.

PUBLICATIONS & PRESENTATIONS

Presentations

— "ElevateU Discussion on Life Shifts & Nutrition," DPN/RJP Webinar, Virtual, 05 2024.