



**Shannon Rattigan – Staff Environmental Scientist II**

***SKILLS AND EXPERIENCE***

Ms. Rattigan is an environmental scientist at Capital Environmental Consultants, Inc. with 5 years of experience conducting wetland and ecological investigations at properties throughout the five boroughs of New York City, Long Island, and the Lower and Mid-Hudson Valley. Her areas of expertise include all aspects of federal, state, and local wetland analysis including freshwater and tidal delineation, permitting, and mitigation planning specializing in comprehensive determinations for routine, atypical, and problem wetlands. Shannon’s other areas of specialization are Natural Resource Investigations including vegetation identification and wildlife surveys, threatened and endangered species surveys, and State Environmental Quality Review/Environmental Impact Statements (SEQR/EIS) reviews. Shannon has extensive experience providing project planning assistance to architects and project planners involved in agency negotiations with USACE, NYSDEC, NYSDEC, NYSDOS, NYDCDP, NYCDEP and local municipalities.

***EDUCATION***

- University of Scranton, Bachelor of Science, Biology, 2020

***CONTINUING PROFESSIONAL EDUCATION***

**Rutgers University**

- ArcGIS Introduction

**Rutgers University - Wetland Delineator Program**

- Methodology for Delineating Wetlands
- Hydric Soils
- Vegetation Identification
- Wetland Construction

**NYSDEC Certificate of Erosion and Sediment Control Training**

**Cornell Cooperative Extension of Orange County - The Practicing Institute of Engineering, Inc.**

- When it Rains - Stormwater Hydrology
- Maintenance and the New MS4 Permit
- Constructed Wetlands
- The New Blue 2 - New E&SC Practices/2016 Edition of Blue Book

***AFFILIATIONS***

- New York State Wetlands Forum

## **EXPERTISE**

### **Wetlands**

- Delineation
- Permitting
- Mitigation Planning

### **Ecological Assessments**

- Natural Resource Inventories
- Vegetation Identification
- Wildlife Surveys
- Threatened & Endangered Species Surveys
- Ecological Community Assessment

## **REPRESENTATIVE PROJECTS**

### ***Wetland Delineation and Jurisdictional Determination, Route 9W. Orangetown, New York***

Ms. Rattigan performed a wetland delineation for the 106-acre site encompassing a wide variety of environments, watercourses, and waterbodies and secured jurisdictional determinations from both the NYSDEC and USACE. Wetland evaluation consisted of identifying vegetation, hydric soil morphology, and hydrological indicators within a historically developed site and surrounding woodlands. Wetland evaluation also consisted of assessing onsite watercourses for the presence of riparian areas.

### ***Wetland Delineation and Jurisdictional Determination, Willow Lake Drive. Fishkill, New York***

Ms. Rattigan performed a wetland delineation for the 105-acre site encompassing a wide variety of environments, watercourses, and waterbodies and secured a jurisdictional determination from the NYSDEC. Wetland evaluation consisted of identifying vegetation, hydric soil morphology, and hydrological indicators within a historically developed site and surrounding woodlands. Wetland evaluation also consisted of assessing onsite watercourses for the presence of riparian areas.

### ***Wetland Delineation & Jurisdictional Determination, Morefar Golf Course, Brewster, NY & Danbury, CT***

Ms. Rattigan performed a wetland delineation for the 500-acre site encompassing a wide variety of environments, watercourses, and waterbodies and secured jurisdictional determinations from the NYSDEC. Wetland evaluation consisted of identifying vegetation, hydric soil morphology, and hydrological indicators within a historically developed site and surrounding woodlands. Wetland evaluation also consisted of assessing onsite watercourses for the presence of riparian areas. Further, wetland evaluation within the portion of the property within Connecticut entailed assessing hydric soil mapping.

***Wetland Delineation and Permitting, Cheevers Lane. Staten Island, New York.***

Ms. Rattigan carefully reviewed the development plans to determine applicability of the NYSDEC Freshwater Wetland General Permit and received the NYSDEC permit authorizations in the most efficient manner.

***Wetland Delineation Confirmation. Monroe, New York***

Ms. Rattigan performed confirmation of previously delineated wetland lines for the Town of Monroe. Ms. Rattigan confirmed that the previously delineated wetland lines accurately represented the limits of the existing onsite wetlands and watercourses. With the confirmed wetland lines, the Town of Monroe was able to accurately assess wetland and watercourse impacts resulting from a proposed project.

***Wetland Delineation and Permitting, Cannon Avenue. Staten Island, New York.***

Ms. Rattigan performed a wetland delineation for a residential site. Ms. Rattigan coordinated with team members to ensure the freshwater wetland permit was secured from the NYSDEC in a timely and efficient manner.

***Wetland Delineation. Krumville Road. Olivebridge, New York.***

Ms. Rattigan performed a wetland delineation for the 29-acre site encompassing a wide variety of environments, wetlands, and watercourses. Wetland evaluation consisted of identifying vegetation, hydric soil morphology, and hydrological indicators throughout the subject property.

***Wetland Delineation. Route 300. Newburgh, New York.***

Ms. Rattigan performed a wetland delineation for the 60-acre site encompassing a wide variety of environments, wetlands, and watercourses. Wetland evaluation consisted of identifying vegetation, hydric soil morphology, and hydrological indicators throughout the subject property.

***Wetland Delineation and Permitting, Woodvale Avenue. Staten Island, New York.***

Ms. Rattigan performed a wetland delineation for a residential site adjacent to a NYCDEP Bluebelt. Ms. Rattigan coordinated with team members to ensure the freshwater wetland permit was secured from the NYSDEC in a timely and efficient manner. The NYSDEC freshwater wetland permit approved construction of a three-house residential development. As part of the NYSDEC freshwater wetland permit, Ms. Rattigan prepared a mitigation plan to compensate for unavoidable impacts to regulated areas.

***Wetland Delineation. Equinox Drive. Queensbury, New York***

Ms. Rattigan performed a wetland delineation for the 67-acre site encompassing a wide variety of environments, wetlands, and watercourses. Wetland evaluation consisted of identifying vegetation, hydric soil morphology, and hydrological indicators throughout the subject property. Wetland evaluation also consisted of assessing onsite watercourses for the presence of riparian areas.

***Threatened and Endangered Species Evaluation, Kings Highway. Orangeburg, New York.***

Ms. Rattigan conducted a desktop review of the subject property for listed threatened and endangered species. Ms. Rattigan then conducted a site visit to assess potential onsite habitat for the listed threatened and endangered species. Based on the results of the site visit, Ms. Rattigan advised the project team on next steps to ensure a potential project would avoid impacts to threatened and endangered species.

***Wetland Delineation and Permitting, Richmond Terrace. Staten Island, New York.***

Ms. Rattigan performed a tidal wetland delineation and secured a jurisdictional determination for a historically disturbed site adjacent to the Kill Van Kull. Ms. Rattigan coordinated with team members to comply with a NYSDEC consent order and associated tidal wetland permit for a commercial waterfront development. The project design and mitigation involved the removal of shoreline debris, rebuilding of rip-rap, and enhancement of tidal wetlands along the shoreline of the parcel.

***Wetland Delineation and Permitting, Edgegrove Avenue. Staten Island, New York.***

Ms. Rattigan performed a wetland delineation for a residential site adjacent to a NYCDEP Bluebelt. Ms. Rattigan coordinated with team members to ensure the freshwater wetland permit was secured from the NYSDEC in a timely and efficient manner.

***Wetland Delineation & Natural Resources. Chemical Lane. Staten Island, NY***

Ms. Rattigan performed a tidal wetland delineation for the 68-acre site consisting of various wetland types and secured tidal wetland jurisdictional determinations from the NYSDEC. The tidal wetland delineation occurred along the shoreline that consisted of a rip-rap revetment and mudflats. Ms. Rattigan also designed and implemented a natural resource inventory for the characterization of ecological communities. Surveys were conducted over four seasons to assess the native flora and fauna and presence of threatened and endangered species.

***Wetland Delineation and Jurisdictional Determination, Walkill, New York.***

Ms. Rattigan performed a wetland delineation for the 200+-acre site including upland and wetland environments, watercourses and waterbodies and secured jurisdictional determinations from USACE. Wetland evaluation consisted of identifying vegetation, hydric soil, and hydrological indicators and assessing flow paths throughout the site and surrounding woodlands to traditional navigable waters.

***Wetland Delineation, Permitting, and Mitigation Design, Rocky Hill Road. New Paltz, New York***

Ms. Rattigan delineated the onsite wetlands, for the 66-acre property consisting of a variety of ecological communities, watercourses, and waterbodies and secured the Town of New Platz freshwater wetland permit. Ms. Rattigan inventoried and characterized the wetland communities. The wetland data obtained from the delineation and inventory were compiled and used to create a mitigation plan to compensate for prior wetland impacts on the project site and meet municipal standards for permit issuance.

***Wetland Delineation. Ramapo, New York.***

Ms. Rattigan reconfirmed the wetland delineation for the 200-acre site encompassing a wide variety of environments, watercourses and waterbodies and secured jurisdictional determinations from both the NYSDEC and USACE. Wetland delineation reconfirmation consisted of assessing the previously delineated wetland line to ensure that wetland line accurately represented the limits of hydrophytic vegetation, hydric soil morphology, and hydrological indicators within a historically disturbed site and surrounding woodlands.

***Natural Resources & Wetland Permitting, Novartis Campus. Suffern, New York***

Ms. Rattigan performed a natural resource inventory for the characterization of ecological communities. Surveys were conducted over four seasons to assess the native flora and fauna and presence of threatened and endangered species. The data obtained from these surveys were compiled and used to compose the Natural Resources section of the Environmental Impact Statement (EIS) that was developed for the project to meet municipal and SEQR standards. Ms. Rattigan also secured the standard Individual permit from the USACE and the water quality certification from NYSDEC.

***Wetland Permitting. Glenn Road, Staten Island, New York.***

Ms. Rattigan coordinated with team members to secure a freshwater wetland permit from the NYSDEC in a timely and efficient manner. The NYSDEC tidal wetland permit approved construction of a twenty-eight-house residential development. As part of the NYSDEC freshwater wetland permit, Ms. Rattigan prepared a mitigation plan to compensate for unavoidable impacts to regulated areas.

***Wetland Permitting. Tennyson Drive. Staten Island, New York.***

Ms. Rattigan coordinated with team members to secure a tidal wetland permit from the NYSDEC in a timely and efficient manner. The NYSDEC tidal wetland permit approved construction of a thirty-house residential development. As part of the NYSDEC tidal wetland permit, Ms. Rattigan assisted in preparing a mitigation plan to compensate for unavoidable impacts to regulated areas and thorough alternative analysis.

***NYCDEP and NYSDEC Construction SWPPP. East 149<sup>th</sup> Street, Bronx, New York***

Ms. Rattigan prepared a construction SWPPP, inclusive of phased sediment and erosion control plans, for the redevelopment of a disturbed site with a multi-story warehouse, a parking garage, and associated parking located within the Bronx watershed, in accordance with the NYSDEC SPDES GP-0-20-001, 2015 NYS SMDM, and 2019 New York City Stormwater Design Manual. The project was subject to site constraints including, but not limited to, insufficient permeability for infiltration practices and a high groundwater table. Stormwater management practices proposed an underground infiltration system within an extremely limited area and included an alternative plan for implementation of an intensive green roof. Following NYSDEC and NYCDEP approvals, development plans were altered, and Ms. Rattigan assisted with updating the SWPPP and obtaining the subsequent NYCDEP modification approval.

***NYCDEP and NYSDEC Construction SWPPP. Grand Avenue, Maspeth, New York***

Ms. Rattigan prepared a construction SWPPP, inclusive of phased sediment and erosion control plans, for the construction of a one-story warehouse facility, associated parking, and loading docks located within the Lower Hudson watershed. The stormwater management practices required several deviations from the technical manuals due to site constraints including, but not limited to, insufficient permeability for infiltration practices, a high groundwater table, and structural constraints. The engineered solution entailed excavation of the insitu low-permeability soils, installation of the underground infiltration system, and backfill with engineered, permeable soil. Proposed deviations were reviewed by both NYSDEC and NYCDEP staff and deemed equivalent to the technical standard. Following coverage under NYSDEC SPDES GP-0-20-001 and receipt of the NYCDEP stormwater construction permit, Ms. Rattigan assisted with updating the SWPPP and obtaining the subsequent NYCDEP modification approvals.

***NYCDEP and NYSDEC Construction Stormwater Pollution Prevention Plan (SWPPP). Richmond Avenue, Staten Island, New York***

Ms. Rattigan prepared a construction SWPPP, inclusive of phased sediment and erosion control plans, for the construction of a three-story ambulatory care facility and associated parking located within the Sandy Hook-Staten Island watershed, in accordance with the NYSDEC State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity General Permit Number (GP-0-20-001), 2015 New York State Stormwater Management Design Manual (NYS SMDM), and 2022 New York City Unified Stormwater Rule and NYC Stormwater Manual. The project location posed a significant site constraint as the project was landlocked and was unable to discharge to a wetland, waterbody, or sewer. Ms. Rattigan determined sufficient infiltration rates existed to efficiently manage the 100-year, 24-hour rainfall event, satisfying both NYSDEC and NYCDEP permitting requirements and obtaining the necessary permit approvals.

***Wetland Delineation & Jurisdictional Determination. Dolsontown Road. Waywayanda, New York.***

Ms. Rattigan performed a wetland delineation for the 18-acre site encompassing a wide variety of environments, inclusive of current and historical agricultural fields, wetlands, and watercourses, and secured jurisdictional determinations from the USACE. Wetland evaluation consisted of identifying vegetation, hydric soil morphology, and hydrological indicators within a currently and historically disturbed agricultural site.

***Natural Resources. Arthur Kill Road. Staten Island, New York.***

Ms. Rattigan designed and implemented a natural resource inventory for the characterization of ecological communities. Surveys were conducted over four seasons to assess the native flora and fauna and presence of threatened and endangered species.

***Wetland Delineation & Natural Resources. Matrix Global Logistics Park West Campus. Staten Island, New York.***

Ms. Rattigan reconfirmed the wetland delineation for the 438-acre site encompassing a wide variety of environments and secured freshwater and tidal wetland jurisdictional determinations from both the NYSDEC and USACE. Ms. Rattigan also designed and implemented a natural resource inventory for the characterization of ecological communities. Surveys were conducted over four seasons to

assess the native flora and fauna and presence of threatened and endangered species. The data obtained from these surveys were compiled and used to compose the Natural Resources section of the Environmental Impact Statement (EIS) that was developed for the project to meet CEQR standards.

***NYSDEC Industrial SWPPP, LMC Trucking Corp. Chelsea Road, Staten Island, NY***

Ms. Rattigan prepared an industrial SWPPP in accordance with the NYSDEC SPDES General Permit for Stormwater Discharges Associated with Industrial Activity (GP-0-17-004), under Sector P – Land Transportation and/or Warehousing facilities. The industrial SWPPP outlines the required erosion and sediment controls, best management practices, and semi-annual and quarterly monitoring protocols required to remain in compliance with GP-0-17-004. Ms. Rattigan continued to aid via oversight of the monitoring program, discharge monitoring reporting, and annual compliance reporting.

***NYSDEC Industrial SWPPP, Richmond Precast, Inc. Chelsea Road, Staten Island, NY***

Ms. Rattigan prepared an industrial SWPPP in accordance with the NYSDEC SPDES GP-0-17-004, under Sector E – Glass, Clay, Cement, Concrete and Gypsum Products. The industrial SWPPP outlines the required erosion and sediment controls, best management practices, and semi-annual and quarterly monitoring protocols required to remain in compliance with GP-0-17-004. Ms. Rattigan continues to aid the facility during NYCDEP inspections and with the oversight of the monitoring program, discharge monitoring reporting, and annual compliance reporting.

***NYSDEC Industrial SWPPP, Richmond Ready Mix, Chelsea Road, Staten Island, NY***

Ms. Rattigan prepared an industrial SWPPP in accordance with the NYSDEC SPDES GP-0-17-004, under Sector E – Glass, Clay, Cement, Concrete and Gypsum Products. The industrial SWPPP outlines the required erosion and sediment controls, best management practices, and semi-annual and quarterly monitoring protocols required to remain in compliance with GP-0-17-004. Ms. Rattigan continues to aid the facility during NYCDEP inspections and with the oversight of the monitoring program, discharge monitoring reporting, and annual compliance reporting.