

MITIGATION SERVICES

Amy S. Greene Environmental Consultants, Inc. has been a leader in wetland mitigation project design and implementation since the firm's inception in 1986, **ASGECI** has extensive experience in providing **tidal and freshwater wetland and riparian zone mitigation and stream restoration services**. Services provided include: wetland delineation; wetland functional assessment; hydrological monitoring; soil analysis; stream assessment; identification of suitable mitigation sites; hydrological budget development; and design of wetland mitigation, riparian zone compensation and stream restoration plans; environmental permitting; construction oversight; native plant installation; invasive species control; herbivory control; monitoring; and post-construction monitoring. **ASGECI** is experienced in environmental permitting and compliance with State Environmental Protection and U.S. Army Corps of Engineers mitigation regulations.

ASGECI has provided professional environmental services for Federal, State and local public agencies; and private sector clients in 11 states to facilitate and expedite planning, design, permitting and construction. **ASGECI** is a Woman-Owned Small Business, certified with multiple agencies. **ASGECI** has an excellent reputation for quality work with local, State and Federal agencies.

Our Services Include:

- ◆ Wetland delineation, functional assessment and permitting
- ◆ Wetland mitigation design, installation and construction and post-construction monitoring
- ◆ Endangered and threatened vegetation and wildlife species surveys and biological assessments
- ◆ Flood Hazard Area, CAFRA, Pinelands and Waterfront Development Permitting
- ◆ Stream, streambank and riparian corridor restoration design and construction monitoring
- ◆ Habitat restoration, reforestation and management plans
- ◆ Environmental Impact Assessments and Impact Statements - NEPA, State and Local
- ◆ Aquatic, Marine and Terrestrial ecological surveys and Wildlife surveys
- ◆ Soil Erosion and Sediment Control Planning and Monitoring
- ◆ GIS mapping and analysis/GPS mapping
- ◆ Design Build Wetland Mitigation Projects
- ◆ Native Plant Installation
- ◆ Environmental Construction Monitoring



ASGECI holds a GSA Schedule in the following Special Item Numbers:

- ◆ 899-1: Environmental Planning Services and Documentation
- ◆ 899-7: Geographic Information Services

ASGECI project experience includes transportation (rail, highway, bridge, port and airport); military; dredging; flood control; parks and recreation; government facilities including police and correctional buildings; energy generation and transmission; residential; commercial, industrial and religious development; educational facilities; contaminated site remediation; solid waste facilities; water supply and wastewater facilities; and stormwater management.

Our staff maintains professional certifications including: USACE Certified Wetland Delineator, Society of Wetland Scientist Professional Wetland Scientist; ESA Senior Ecologist; US Fish and Wildlife Service (USFWS) Habitat Evaluation Procedures; Federal Wetlands Evaluation Technique; Certified Tree Expert; ISA Certified Arborist; NJ State Approved Forester; Certified Soil Scientist; Certified Soil Erosion and Sediment Control Specialist; NJDEP Ornithologist and Aquatic Biologist; and U.S. Fish and Wildlife Service Recognized Qualified Bog Turtle Surveyor. Our scientists are also OSHA HAZWOPER trained.

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REPRESENTATIVE PROJECT EXPERIENCE

- **Developing an Indicator of Wetland Status, Mitigation Sites Assessment, Statewide, NJ.** *New Jersey Department of Environmental Protection, Division of Science, Research and Technology.* ASGECI developed and applied a method to assess the quality and function of wetland mitigation projects throughout the State. Application of the methodology and data collection to evaluate over 140 wetland mitigation sites was performed and a detailed peer reviewed report was submitted to NJDEP. The methodology included sampling of vegetation, soils and hydrology and assessment of wetland functions. Recommendations in the report were adopted by NJDEP staff to review mitigation proposals and to evaluate constructed Wetland Mitigation sites.
- **NJ Turnpike Authority Interchange 6-9 Widening Project Wetland Mitigation and Riparian Zone Restoration, Westampton Twp, Burlington Co., NJ.** ASGECI was responsible for site selection, project management, design, construction oversight and post construction monitoring and maintenance for the 25 wetland mitigation credits and 29 riparian compensation credits as well as vernal habitat creation required in the NJDEP Individual Wetlands Permit and Flood Hazard Area permit for the NJTA Interchange 6 to 9 Widening Program. The Project was a complete Design-Build Mitigation Project including property acquisition, compensatory wetland mitigation and riparian buffer design, pre-construction data collection, regulatory agency meetings and approvals, permit applications, construction bid preparation, construction oversight, wetland construction and stream restoration, specialized seeding and stabilization, wetland and riparian buffer planting and 5-year post construction maintenance and monitoring. The project designed by ASGECI and approved by NJDEP involves enhancement of 50 acres of modified agricultural wetlands; creation of 20 acres of forested wetlands; relocation of 700 feet of stream channel and associated riparian buffers; restoration of 1700 feet of stream channel; creation and enhancement of 4 acres of vernal breeding pools; and restoration of 11 acres of upland forest habitat. Grading, stream restoration and planting is complete. Post construction monitoring and maintenance is ongoing.
- **Laurel Hill Park Hackensack River Wetland Restoration Project, Town of Secaucus, Hudson County, NJ.** *Hudson County/Boswell Engineering.* ASGECI designed a tidal wetland restoration project in degraded tidal wetlands adjacent to the Hackensack River in the NJ Meadowlands. Services included wetland delineation, soil sampling and testing, aerial photo interpretation, habitat mapping, “biological benchmark” data collection, salinity testing, tidal surface water monitoring, compilation of hydrologic data and model development, development of grading plans, planting plans and construction specifications. The data from the tidal monitoring wells and benchmark data were used in development of the hydrologic budget for the site and the design of the wetland restoration plan. Planting and grading plans and project specifications were developed as well as preliminary cost estimates.
- **Meadowmere and Warnerville Wetland Mitigation Project, Borough of Queens, New York City, NY.** *NYCDEP/Hazen and Sawyer.* ASGECI mapped wetlands and identified permit requirements for installation of sanitary sewers. To comply with NY State and Federal USACE wetland permit requirements, ASGECI performed a wetland mitigation site search and identified suitable sites; delineated wetlands on the selected mitigation site; established “biological benchmark” elevations within adjacent tidal marsh communities; and prepared a preliminary and final wetland mitigation design. ASGECI provided environmental construction monitoring services. The project is complete.
- **Global Landfill Superfund Site. Old Bridge Twp., Middlesex Co., NJ.** *Golder Associates.* To facilitate closure of the 58 acre landfill ASGECI delineated onsite tidal and freshwater wetlands and prepared a wetland and coastal NJDEP permit equivalency application to authorize 3.96 acres of wetlands disturbance. ASGECI performed a wetland mitigation site search and evaluated 60 sites in WMA 12. ASGECI designed a tidal wetland mitigation project to restore native salt marsh and scrub-shrub brackish habitat on a 9 acre site and obtained NJDEP approval. ASGECI also prepared an application for a monetary donation to NJ Wetland Mitigation Council for the balance of the mitigation. ASGECI oversaw mitigation site construction, which entailed invasive species control, herbivory controls, site grading, tidal channel construction and wetland planting. Post Construction mitigation monitoring and maintenance was performed. NJDEP issued final acceptance of the mitigation project.
- **Holiday Brook Flood Response/Stream Restoration, Town of Colchester, Delaware County, NY.** *New York City Department of Environmental Protection/Hazen & Sawyer, P.C.* ASGECI monitored all aspects of stream construction including stream diversion, excavation, grading, installation of structures, sediment and erosion control and planting. Approximately 2000 feet of stream was restored to establish grade control, maintain channel capacity, reduce streambank erosion, and enhance fish habitat. Structures installed include four (4) rock cross vanes, four (4) double rock cross vanes, four (4) straight rock vanes, two (2) channel blockers and stacked retaining walls for bank stabilization and an adequate 10-year floodplain throughout the stream length. The stream corridor was stabilized through hydroseeding and was planted with native riparian vegetation including trees, shrubs, and live stakes.

