



Soil and Water Conservation District
5 Park Lane
Highland, New York 12528
(845) 883-7162

Job Type: Full-time with benefits position

Job Title: Water Resources Engineer

Application Deadline: March 7, 2025

Fill Date: April 7, 2025

Job Description: This position provides engineering design, project oversight, project management support, and technical expertise for water resources related projects undertaken by Ulster County Soil & Water Conservation District (UCSWCD). The work involves shared responsibility for managing and directing the development and implementation of the Ashokan Watershed Stream Management Program (AWSMP) among three program partners which include the Ulster County Soil and Water Conservation District (UCSWCD), the New York City Department of Environmental Protection (DEP) and the Cornell Cooperative Extension of Ulster County (CCEUC). As part of an agreement between the UCSWCD and the DEP, in support of the New York City Water Supply Filtration Avoidance Determination, the incumbent will oversee UCSWCD's daily activities related to stream restoration project design and implementation in the Ashokan Reservoir Watershed, which is part of the New York City Water Supply. Primary duties include stream restoration design and review, engineering approval and construction oversight of stream stabilization/restoration projects and road-stream crossings. The position will also help manage the work of consultants and contractors performing design work on behalf of UCSWCD.

Major duties include:

- Stream restoration design development and review of outside consultant designs
- Design and implementation of stream restoration and flood hazard mitigation projects; the preparation of implementation packages for bid – said work includes securing all necessary permits and access easements or license agreements
- Supporting and overseeing technical aspects related to the implementation of Ashokan Basin stream management plans, local flood analysis plans, annual workplans and biennial action plans
- Coordinating and overseeing the process of identifying, selecting, surveying, designing, constructing, monitoring and reporting on water quality stream projects
- Reporting and updating information needed to summarize New York City's Filtration Avoidance Determination (FAD) and contract deliverables progress
- Supporting the acquisition of license agreements from landowners for access to properties for field assessments, construction and monitoring phases of the projects
- Coordinating and tracking of all permit applications and environmental reviews ensuring compliance
- Hydraulic modeling including coordination of staff in collecting field measurements and analysis to support hydrologic and hydraulic computations and modeling for project design
- Coordinate and supervise construction activities during implementation of stream restoration and BMP designs, including construction staging, regulatory compliance, survey control, project layout and record drawings
- Measure, analyze, interpret and report on data utilizing a variety of engineering survey techniques and standards, modeling, professional judgment and experience
- Provide technical support for landowners, local municipalities and highway managers in planning, designing, and maintaining BMPs on public and private lands
- Assist in development of monitoring plans for stream restoration projects to evaluate performance of designs and methods and development of monitoring reports for program partners and fulfilling permit requirements
- Attend and participate in public meetings when necessary for project advancement
- Write and edit design reports as needed
- Provide oversight and training of staff in assisting with project design, construction supervision, and data collection and analysis methods

Required skills:

- Thorough knowledge of the principles, practices, and theories of environmental and water resources engineering
- Thorough knowledge of federal, state, and local laws, rules and requirements relating to watershed and water conservation programs
- Expertise in hydrologic modeling using HEC-HMS, TR-55, HydroCAD, and other methods; expertise in hydraulic modeling with HEC-RAS and experience with other hydraulic modeling software programs
- Proficient with design and mapping software such as AutoCAD, Civil3D and ArcGIS
- Proficient skills and knowledge in culvert/bridge hydraulic modeling, sediment transport, stream restoration and streambank stabilization including bioengineering techniques and natural channel design principles and applications
- Ability to establish cooperative relationships with public officials, staff, contractors, consultants, landowners, and partner agencies
- Ability to communicate effectively on technical subjects (verbal and written) to a variety of audiences and communicate clearly on guidance and instructions to staff, contractors, and landowners

Agency/Program Description: The Water Resources Engineer will work as a team member with Ulster County Soil & Water Conservation District staff to develop and deliver stream restoration and bioengineering projects at the Ashokan Watershed Stream Management Program (AWSMP). The AWSMP is a cooperative program of Ulster County Soil and Water Conservation District, Cornell Cooperative Extension of Ulster County, and the New York City Department of Environmental Protection. The position is supervised by the UCSWCD Executive Director, there is direct oversight/supervision/collaboration with the UCSWCD Project Manager and the duty location is at the AWSMP office in Shokan, NY. For more information on AWSMP, the watershed programs and the Ulster County Soil and Water Conservation District, visit www.ashokanstreams.org, www.catskillstreams.org and ucswcd.org.

Minimum Qualifications:

- BA/BS or MA/MS in relevant engineering discipline
- New York State License as a Professional Engineer
- 1-3 years work experience in natural resources, watershed management, stream restoration, environmental management, construction, engineering or related field
- Experience in preparation and implementation of engineering designs and subsequent contractor oversight

Salary Range: \$90,000-\$118,450/year , plus social security, medical/dental, NYS Retirement, NYS Deferred Compensation and sick/vacation time

Fields of interest: Engineering, Water Resources Engineering, Fluvial Geomorphology, Watershed Management

Other information/requirements: A valid NYS driver's license or equivalent.

How to apply: email resume and cover letter to contact below.

Additional Note: This is a Civil Service position for which the initial appointment will be as a provisional (pending examination). The incumbent will be required to take and pass a Civil Service examination and to achieve a high enough exam score to be reachable for appointment from the exam eligible list.

Contact: Jake Wedemeyer, Executive Director

Address: 5 Park Lane, Highland, N.Y. 12528

Phone: 845-883-7162, x 6082; **Email:** jake.wedemeyer@ny.nacdn.net