TITLE: ENVIRONMENTAL ANALYST

EMPLOYER: NEIWPCC, Wannalancit Mills, 650 Suffolk Street, Suite 410, Lowell, MA 01854.

LOCATION: New York State Department of Environmental Conservation (NYSDEC), 625 Broadway, Albany, NY 12233-3507.

SALARY: Grade and Step dependent upon level of experience and qualifications.

ADDITIONAL INFORMATION: Benefits provided but not included in salary range: vacation, personal and sick leave, health, dental, disability and life insurance, retirement plan. This position requires the incumbent to work five days a week, 7½ hours per day, except for approved compensatory time. Candidate must be able to work additional hours.

Funding is approved for one year with anticipated renewals for each of the following three years for a total of four years of funding.

BACKGROUND INFORMATION: NEIWPCC is a regional commission that helps the states of the Northeast preserve and advance water quality. We engage and convene water quality professionals and other interested parties from New England and New York to collaborate on water, wastewater, and environmental science challenges across the regions, ecosystems, and areas of expertise.

The primary goal of the next generation of Source Water Protection in New York State is to develop and implement source water protection measures for public water systems throughout the State. Source water protection strategies are most effective when implemented at the local community level. As such, NEIWPCC professionals will team with staff from NYSDEC.

JOB SUMMARY: This position will involve development of data output, input, and display interfaces, sampling and office activities associated with the three major Division of Water lake monitoring programs run by the Lake Monitoring and Assessment Section (LMAS), encompassed in the Bureau of Water Assessment and Management division (BWAM) - the Lake Classification and Inventory (LCI) survey, the New York Citizens Statewide Lake Assessment Program (CSLAP), and the New York Harmful Algal Bloom (HAB program). The work will have a strong emphasis on attention to detail, accuracy and timeliness.

DUTIES AND RESPONSIBILITIES: The incumbent will assist with the following:

- Conduct multiple activities related to the LCI, CSLAP, and HABs programs, including:
  - Develop process, within the confines of DEC information technology protocols and procedures, to add the lake section’s water quality data to the DOW Water Quality Portal ArcGIS online map and document procedures for annual upload.
  - Work with LMAS staff, BWAM staff and the Bureau of Water Resource Management, when applicable, to expand the Professional External Evaluations of Rivers and Streams (PEERS) program collection methods to include HAB monitoring, and assist the NYSDEC Source Water Protection Program to expand PEERS to lake methods/protocols that would option to help support municipalities to collect monitoring data on their source waters.
In collaboration with the CSLAP program staff, develop an ArcGIS online dashboard containing program resources and a digital survey to collect field observations by volunteer citizen scientists.

- Under the supervision of LMAS and BWAM staff, assist with data analysis, data interpretation, GIS mapping, and database outputs, to meet outreach and reporting needs of the LCI, CSLAP and HABs programs; including:
  - Develop an automated system to produce public reports for CSLAP, LCI or other BWAM programs that may be published on DEC’s Info Locator.

- Assist LMAS staff to prepare for the start of the lake sampling field season for the LCI, CSLAP and HABs programs, including:
  - Sample site access approval (LCI)
  - Preparation of sampling kits (all programs)
  - Calibration, maintenance and repair (as needed) of sampling equipment and vessels (LCI)
  - Sampling trip planning and coordination with DEC staff (LCI)
  - Coordinating quality control activities (all programs)

- Assist LMAS field operations as necessary, including:
  - Conduct sampling of lakes selected for the LCI program, including collection of water quality samples, field measurements, aquatic invasive species and bloom information, bathymetric surveys, and aquatic plant identifications
  - Assist LMAS staff in LCI off-season activities, including equipment and prep room inventories and maintenance, equipment and supplies orders, and transcription of field information into database-ready formats

- Assist LMAS staff to fulfill HABs Program reporting
  - Generate daily bloom reports using R scripting
  - Respond to public emails about HABs and lake questions
  - Identify HABs reports submitted to NYSDEC, coordinate with NYSDOH and update NYHABs

- Provide program support for other LMAS, SMAS, and BWAM activities, including:
  - Assist LMAS staff in developing papers for peer-reviewed publication by summarizing findings from the LMAS monitoring and assessment programs
  - Assist SMAS staff as needed and available in water quality and macro invertebrate sampling in support of Division of Water stream monitoring programs
  - Participate in all training necessary to conduct sampling, operate vessels, and use DOW databases
  - Assist LMAS staff in other LMAS initiatives as needed

The satisfactory performance of the above duties and responsibilities requires the incumbent to have a thorough understanding of NEIWPCC's programs, organization, and policies, to exercise initiative and resourcefulness in complicated situations, and to be able to work effectively with state and federal contacts at both staff and top management levels, and with varied professional backgrounds. The ability to organize workload, and perform tasks in an accurate, conclusive and timely manner is required.
SUPERVISORY CONTROLS: Incumbent operates with some independence of action within their area of activity. This position is contained within the Division of Water (DOW), Bureau of Water Assessment Management within the NYSDEC. Job performance is evaluated by Stephanie June, Research Scientist, NYSDEC, and in consultation with the NEIWPCC Project Manager.

The incumbent will rely on their ability, expertise, and commitment to excellence. They will also build NEIWPCC’s culture which focuses on honesty, ethical behavior, personal integrity, respect for others, transparency, hard work, and collaborative teamwork.

Based on assignment, incumbents of positions at this level may exercise direct supervision (i.e., not through an intermediate level supervisor) over, assign work to, and review the performance of 1-5 technical or professional personnel; may exercise indirect supervision (i.e., through an intermediate level supervisor) over 6-15 technical or other personnel; and/or may exercise functional supervision (i.e., over certain but not all work activities, or over some or all work activities on a temporary basis) over 1-5 technical or professional personnel.

RECOMMENDED QUALIFICATIONS:
A bachelor’s degree in engineering, environmental sciences, geography, computer science, or related field preferred.

**Experience**
Applicants must have at least (A) three years of full-time, or equivalent part time, technical or professional experience in the field listed above, of which (B) at least one year must have been in a professional capacity, or (C) any equivalent combination of the required experience and the following substitutions.

**Substitutions**
I. An associate’s degree with a major in any of the field listed above may be substituted for a maximum of one year of the required (A) experience.*

II. A bachelor’s degree with a major in any of the fields above may be substituted for a maximum of two years of the required (A) experience.*

III. A graduate degree with a major in any of the fields above may be substituted for a maximum of three years of the required (A) experience and one year of the required (B) experience.*

*Education towards such a degree will be prorated on the basis of proportion of the requirements actually completed.

**Special Knowledge and Skills**
- Previous water quality sampling is preferred
- Previous work with relational databases, including database development, coding, and generating database outputs
- Experience working with water quality data, analysis, and reporting is preferred. More specifically:
  - Proficiency with Geographic Information Systems (GIS)
Experience and expertise with R scripting or other comparable statistical computing software
- Proficiency in Microsoft Excel, Word, and PowerPoint

- Willingness to work long days and participate in overnight trips
- Ability to swim
- Ability to carry for short distances 50 pounds of gear across uneven terrain
- Excellent interpersonal and oral communication skills; comfortable with public speaking.
- Ability to write concisely, express thoughts clearly and develop ideas in logical sequence.
- Comfortable in group settings and welcomes effective collaboration.
- Ability to work in an organized and independent manner, and naturally prone to action with a focus toward continuous improvement.

**Environmental Factors**
Duties will be performed largely in an office setting, but with need for travel for which a valid driver’s license and private means of transportation must be available. Occasional day and overnight travel is necessary, particularly between June and October.

**Requirements**
Attendance in the Lowell office for a one-day orientation during the first two weeks of employment and attendance at the annual All Staff Meeting is mandatory.