**Organization:** U.S. Geological Survey, New England Water Science Center

**Job:** Hydrologic Technician

**Location:** Northborough, MA (relocation expenses will not be paid)

**Key Requirements:** U.S Citizen. Suitable for Federal employment, as determined by background investigation. Valid state driver’s license and safe driving record.

**Duties and Responsibilities**

The U.S. Geological Survey, New England Water Science Center is in search of an entry level (recent graduate, 0-2 years’ experience) scientist to join our Surface Water Quality Studies Section. The scientist will provide field and laboratory support for numerous projects.

*Duties will include providing support for:*

- Preparation of equipment and other supplies for use in the field and laboratory, including readying meters.
- Collection of samples of water, sediment, and other environmental media, as well as taking measurements of stream flow.
- Design and installation of various water monitoring platforms to support data collection.
- Processing, storage, and shipment of samples for analysis.
- Making laboratory determinations of water quality parameters using predetermined methods.
- Performing field site equipment installations and operations and maintenance.
- Processing data collected in the field.

Field work can be extensive at times, and often during harsh weather and environmental conditions. Applicants must be willing to work long hours, early mornings and weekends as needed, as well as be available for overnight trips.

*Duties may also include:*

- Background research and literature review.
- Collection, analysis, and integration of data from various sources.
- Basic data analyses.
- Preparation of graphical and tabular data summaries for inclusion in reports and presentations.
- Writing and contribution to technical reports.

**Qualifications**

The candidate must have a strong interest in being an active participant in water quality field operations, including processing samples in the laboratory; and demonstrate ability to perform these functions through past experience with water quality field work. The preferred candidate will have a professional demeanor, be highly motivated, and possess excellent quantitative, problem-solving, and written and oral communication skills. Excellent organizational skills are a must, with strong attention to details. The preferred candidate will be able to work on multiple projects concurrently, meet tight
deadlines, and work well both independently and as a member of a team. Candidates must have demonstrated experience and knowledge of the theories, principles, practices, and techniques of limnology, aquatic chemistry, and hydrology. Degree(s) in the aquatic, environmental, ecological, or natural sciences are required.

Although not required, ideal candidates may also have one or more of the following in addition to the requires experience with field and laboratory operations:

- Working knowledge of electronics and be familiar with common construction practices to participate in the design and installation of various water monitoring platforms.
- Strong data management and analysis skills.
- Experience applying statistical and other quantitative techniques to water quality data, including the development of sound findings and conclusions following analysis.
- Training and/or experience with R, or other programming language data analysis software with the ability to quickly learn R.
- Experience with Microsoft Excel/Word macros and Visual Basic for Applications (VBA) programming.
- Proficient in the ESRI suite of ArcGIS software and geoprocessing tools.
- An understanding of watershed and water quality models, their limitations, and their applicability.
- An understanding of watershed-based planning and watershed management principles; and demonstrated knowledge of the Federal and State Water Quality Management Programs.