

**Internship Program Opportunity
U.S. Environmental Protection Agency
Philadelphia, Pennsylvania**

Project # EPA Water 2008-103

Aquatic Resource Assessment: An Integrated Watershed Approach

An internship project is available at the U.S. Environmental Protection Agency's (EPA) Region 3 Office of Environmental Programs (OEP) in Philadelphia, Pennsylvania.

Project Description: The intern will be located in the Environmental Assessment and Innovation Division (EAID), Office of Environmental Programs (OEP). The intern will be trained by OEP's Permits and Enforcement Team (PET) which is responsible for the implementation of programs to protect wetlands and aquatic resources. OEP has program and regulatory responsibilities under several statutes, including the Clean Water Act (CWA), Rivers and Harbors Act (RHA), and the Marine Protection, Research, and Sanctuaries Act (MPRSA). Under Section 404 of the CWA, EPA is responsible for working jointly with the U.S. Army Corps of Engineers (Corps) to review and comment on applications for Section 404 permits in accordance with Guidelines promulgated by EPA under Section 404(b)(1). The permits can be issued under a variety of general categories for small impacts, or as individual permits for larger, more complex activities. However, currently most approaches to permitting do not allow for a consideration of impacts and any required mitigation on a broad, watershed scale. Watershed-based planning is a process that emphasizes addressing all stressors within a hydrologically-defined drainage basin rather than addressing individual requests on a site by site basis.

Watershed-based planning and assessment can encompass a variety of activities ranging from synchronizing permits within a basin to developing water quality-based permit conditions using a multiple discharger modeling analysis. The type of activity will vary depending on the unique characteristics of the watershed and the sources of pollution impacting it. The ultimate goal of this effort is to facilitate local, state, and Federal decisions which better protect entire watersheds.

Specific Tasks: The intern will learn about 1) laws, regulations, and standards related to the CWA Section 404 program, and 2) will also learn how to apply GIS and other computer based planning tools to facilitate improved approaches to decision-making in the pilot watersheds. The intern will have the opportunity to participate in an interagency team effort which explores the use of watershed-based planning tools and their application to regulatory and other environmental decisions made by all levels of government. The project will investigate the possibility of using a watershed-based planning approach under CWA Section 404 within an EPA Region 3 watershed(s) to stimulate a more efficient and effective approach to planning and permitting by focusing program efforts on protecting and enhancing the most important aquatic resources in a given watershed. As part of this internship, one or more watersheds in Region 3 will be selected by the program for a demonstration pilot. The selected intern will be involved in regional efforts to advance this initiative in conjunction with external agencies and organizations. Finally, the intern will interact with a variety of staff and management within EPA and other federal and state agencies.

Expected Results: This internship will provide an opportunity for thorough understanding of the current challenges facing wetlands and aquatic resource protection efforts on a regional level; exposure to a broad range of environmental and policy issues involving wetlands ecosystems; and exposure to individuals both within and external to government agencies who are working to protect aquatic systems. The intern will be provided an opportunity to help shape and implement an innovative approach to protecting water resources.

Intern Qualifications and Skills: The applicant should have received a bachelor's or master's degree in engineering, environmental science, physical sciences, or a related field within four years of the desired starting date. The ability to understand and organize scientific issues and develop written materials based on their interpretation is critical. Computer experience using word processing, spreadsheet, and presentation software is desirable, as is an understanding of geospatial tools including GIS. Excellent oral and written communication skills are essential. The intern must have the ability to perform under tight deadlines and on multiple projects.

The program is open to all qualified individuals without regard to race, sex, religion, color, age, physical or mental disability, national origin, or status as a Vietnam era or disabled veteran. U.S. citizenship or lawful permanent resident status is preferred (but can also hold an appropriate visa status, however, an H1B visa is not appropriate).

Stipend and Length of Appointment: The appointment will initially be full-time for a one-year period and may be renewed for one additional year depending on the availability of funding. The annual stipend will be up to \$40,000. **The intern does not become an EPA employee.**

The EPA contact person for this project is Tom Slenkamp. He can be contacted at slenkamp.tom@epa.gov or at (215) 814-2750.

The Internship Program for EPA Water is administered by the Oak Ridge Institute for Science and Education (ORISE). Please reference Project # EPA Water 2008-103 when calling or writing for information. For additional information and application material contact: Internship Program - EPA Water, Attn: Betty Bowling - MS 36, ORISE, P.O. Box 117, Oak Ridge, Tennessee 37831 Phone: (865) 576-8503 Fax: (865) 241-5219 e-mail: betty.bowling@ornl.gov.

Sam Bryant serves as the EPA Office of Water internship program coordinator. His e-mail address is bryant.samuel@epa.gov.

An application can be found at <http://www.ornl.gov/orise/edu/EPA/app-gugrgpd.pdf>.