

United States Environmental Protection Agency
Office of Water / Office of Science and Technology
2018 Summer Intern Program
Washington, D.C.

The Environmental Protection Agency is seeking several student volunteers (uncompensated interns) in the Office of Science and Technology within the Office of Water for internships between May 15 and September 30. You should be motivated, hard-working and interested in environmental issues.

We are accepting applications from students who are enrolled at least half-time (e.g., six credits per semester for undergraduates) in an accredited junior college or community college, a four-year college or university, or any other accredited educational institution.

Time commitment: We accept full or part time students. You should expect to work Monday through Friday, 9:00 a.m. to 5:30 p.m. Some exceptions will be made if you have class or program requirements.

Compensation: Student volunteers are **unpaid**; however, we will provide you with an office phone and computer. Student volunteers are eligible for a transit subsidy.

Application Schedule:

	Summer 2018
Applications Accepted	March 26, 2018
Application Deadline	April 27, 2018
Start Date	May 14 – June 18, 2018
End Date	September 14 - 28, 2018

To apply please send your resume, cover letter and the Division(s) of interest to Yulia Kalikhman (Kalikhman.Yulia@epa.gov).

About the Office of Science and Technology (OST)

The mission of the Office of Science and Technology (OST) is to analyze and apply the latest scientific knowledge and technologies with states and tribes so that together we can assure clean and safe water for all communities. OST collaborates with EPA Regional Offices, partners with States and Tribes and works with stakeholders to develop the foundational elements of the Clean Water Act (CWA) and Safe Drinking Water Act (SDWA).

Participating Divisions and Descriptions of Opportunities

The students(s) selected for projects may support a variety of work in the Engineering and Analysis Division (EAD) or the Health and Ecological Criteria Division (HECD) depending on their background and professional interests.

Engineering and Analysis Division

EAD is responsible for developing national standards for the discharge of pollutants in industrial wastewater to water bodies and for developing and validating analytical test methods for all types of pollutants. You may contribute to one or more of the following projects:

- Improve your understanding of analytical chemistry by supporting the analytical methods team in evaluating how the CWA methods program can improve the efficiency of existing processes for developing, validating and approving analytical test methods.
- Learn about EPA regulations that limit industrial pollution to water bodies by assisting the EAD Web Team in the development of new web content that conveys key information that regulated community need to know in order to comply with the law.
- Learn about survey design and technologies for controlling nutrient pollution by helping the National Study of Nutrient Removal and Secondary Technologies team identify and contact participating facilities.
- Learn how EPA evaluates whether certain industries may require new Effluent Guideline regulations and help the division make use of new data streams from various sources to support this analysis and decision-making process.
- Get hands-on experience with a hedonics valuation project to better understand the impact various stormwater projects can have on housing values.

Desired Qualifications:

Depending on your interest in the projects described above, the ideal student(s) should have education and skills in one or more of the following areas:

- Engineering, Analytical Chemistry, Statistics, Biological Science, Policy Analysis, or Communications.
- Strong communication & writing skills.
- The ability to work independently and as part of a group.
- Strong investigative research and organizational skills.

Health and Ecological Criteria Division

HECD is responsible for developing national aquatic life and human health criteria as well as drinking water health advisories. You may contribute to one or more of the following projects:

- You may explore and analyze surface water quality data using the R statistical software package. You will analyze water quality parameters (e.g., nutrients, dissolved oxygen, water clarity, chlorophyll-a) across a variety of waterbody types (e.g., rivers, streams, lakes, estuaries) and examine how differences in the scales of the data, both temporal and spatial, influence the estimation of certain statistics, such as estimates of central tendency and variation. You may also be asked to contribute to the creation of a user interface in R (called RShiny) that is tailored to a specific water quality model developed in R.
- You may conduct literature searches for toxicity data focused on cancelled pesticides and published national and international eco-benchmarks for Pharmaceuticals and Personal Care Products (PPCPs) reported in the open literature. These eco-benchmarks will be compiled into a report describing each eco-benchmark, including the benchmark value, the source, and a synopsis of how each benchmark was derived. This information will be

helpful for understanding national and international efforts focused on PPCPs and provide insight into the potential effects of these emerging contaminants on aquatic biota.

- You may help respond to Harmful Algal Blooms (HABs) by finishing the list of frequently asked questions and web resources on HABs and cyanobacterial toxins to help the EPA Regions provide interested stakeholders and members of the public with a basic understanding of HABs and issues pertaining to HABs as well as links to resources. You may also help keep track of information needed to help EPA Regions respond to bloom events. You may also help organize a Department of Agriculture focused webinar series on HABs and nonpoint sources.
- You may use the recently updated web-based [Ecotoxicology Knowledgebase \(ECOTOX\)](#) tool to perform literature searches for chemicals found in biosolids. ECOTOX includes data on more than 11,000 chemicals and 12,000 species. This information is critical in performing screens and risk assessments of potential pollutants found in biosolids to determine whether they are posing harm to humans or the environment. Identification of additional toxic pollutants for potential regulation is required under the CWA section 405(d)(2)(C).

Desired Qualifications:

Depending on your interest in the projects described above, the ideal student(s) should have education and skills in one or more of the following areas:

- Biology, Ecology, Chemistry, Public Health, or Environmental Studies.
- Strong communication & writing skills.
- The ability to work independently and as part of a group.
- Strong investigative research and organizational skills.
- Working knowledge of Excel.
- One project requires working knowledge of “R” statistical software.