

Hiring: Water Resources Internships

Two paid internships are available for the spring/summer of 2024.

The Interstate Commission on the Potomac River Basin's (ICPRB) mission is to enhance, protect, and conserve the waters and associated land resources of the Potomac River basin and its tributaries through regional and interstate cooperation. ICPRB has openings for up to two interns for the spring and summer semesters. The start and end dates are negotiable, approximately March to August, 2024. All internships will be completed no later than August 30, 2024. These are paid, part-time, temporary positions with flexible working hours. Pay is \$17/hr. ICPRB is located in Rockville, Maryland. Learn more at www.PotomacRiver.org.

Minimum Education: Undergraduate juniors or seniors majoring in a relevant environmental science or engineering field. Graduate students majoring in environmental science, environmental engineering, water resources or a related field preferred.

The primary tasks of these internships are to review literature and prepare data for Spatial Statistical Network (SSN) model development, use remote sensing data to improve drought operations, revise and enhance the existing water quality data sources inventory, convert historic water quality data to electronic format, and/or archive ICPRB photographs and reports. The following projects and associated tasks will be divided between two interns based on skill sets, interests, and project needs. Modifications may occur based on project needs and to create a positive experience for the interns.

[Spatial Statistical Network \(SSN\) Model](#) – ICPRB staff work collaboratively with basin jurisdictions to better understand and quantify watershed processes. Assistance is needed obtaining and preprocessing geospatial data in ArcGIS for use in SSN (R package) models. This task may also involve conducting a related literature review on SSN model development.

[Remote Sensing](#) – The ICPRB Section for Cooperative Water Supply Operations on the Potomac (CO-OP) helps manage the Washington metropolitan area water supply system during droughts. Because groundwater constitutes a substantial portion of hydrological stores and fluxes during low-flow periods, appropriate representation of groundwater processes in CO-OP modeling tools is essential. The intern's tasks will involve retrieving and analyzing remotely sensed water storage change data from GRACE (Gravity Recovery And Climate Experiment) to improve hydrological modeling and forecasting during low flows in the Potomac basin.

[Water Quality Data Sources Inventory](#) – As part of the implementation of the Potomac Basin Comprehensive Water Resources Plan, ICPRB maintains an inventory of water quality data sets available through many agencies and organizations throughout the basin. Internship tasks may include updating information currently contained in the inventory and obtaining data for additional sources.

[Electronic Water Quality Data](#) – Some historic water quality data sets held by ICPRB are available only in hard copy, making it difficult to use these data in analyses. The intern may assist ICPRB in making these historic water quality data sets available in electronic format.

[Photograph and Report Archival](#) – ICPRB maintains a large library of reference material including photographs and staff reports. Assistance is needed to print, bind, and catalog the reports and scan and tag Commission photographs for electronic storage and easy retrieval.

Proficiency with Microsoft Excel, Access, ArcGIS, and/or R preferred. The interns will be able to work either from the convenience of their own remote office using their own computer or from ICPRB's offices in Rockville, Maryland. The interns are expected to participate in regular meetings with their supervisor and project teams. Must be authorized to work in the United States.

Submit an electronic cover letter and resume to info@icprb.org by January 12, 2024. Please include in your cover letter where you saw this internship announcement.

ICPRB is an Equal Opportunity Employer that strives to maintain a diverse workforce. No applicant or employee will be discriminated against on the basis of race, sex, gender identity, age, religion, national origin, veteran status, political affiliation, disability, or any other non-job related factors.