

Water Resources Fellow

The Interstate Commission on the Potomac River Basin (ICPRB) is an interstate compact commission authorized by an Act of Congress in 1940, whose mission is to protect the water and associated land resources of the Potomac basin. The Potomac River supplies drinking water to approximately 5 million people across Washington, DC and surrounding suburbs in Maryland and Virginia. It is the sole source of drinking water for the nation's capital. ICPRB's Section for Cooperative Water Supply Operations on the Potomac (CO-OP) provides support to the three major water suppliers in the Washington, DC, metropolitan area, in long-term planning and in coordination of water supply operations during droughts.

ICPRB seeks a talented problem-solver for a Water Resources Fellow position in its Section for Cooperative Water Supply Operations on the Potomac (CO-OP). This is an exciting opportunity to contribute to the development of drought management and water supply planning tools, including cutting-edge river flow forecasting models, real-time decision support tools for drought operations, and reservoir operation simulation and optimization models. This individual will collaborate with a wide range of stakeholders, ICPRB member jurisdictions, and regional water suppliers, and will serve as a member of CO-OP's real-time drought operations team during drought events.

The successful candidate will have excellent technical skills, the ability to communicate effectively and collaborate with partners, and past involvement in efforts consistent with ICPRB's mission.

Required qualifications:

- Demonstrated understanding of hydrologic principles and concepts
- Strong quantitative and computational modeling skills, such as experience developing and applying models for complex systems
- Experience with hydrologic and/or water resources modeling
- Experience with statistical analysis and uncertainty quantification
- Proficiency in a scientific programming language such as R or Python
- Excellent written and verbal communication skills
- Demonstrated commitment to environmental stewardship and collaborative management of resources

Preferred qualifications:

- Experience developing and maintaining reproducible, well-documented code, and familiarity with version control (e.g., Git)
- Familiarity with database systems (PostgreSQL or similar) and the Linux operating system
- Experience with machine learning methods
- Experience with probabilistic methods such as ensemble modeling and/or risk-based assessment

Required education:

PhD in water resources, hydrology, environmental engineering, applied mathematics, statistics, physics, or a related discipline; or a master's degree in the same field with three or more years of experience.

Details:

This is a full-time position. The initial appointment is for 2 years, with the potential for conversion to a permanent position. The expected salary range is \$75,000-\$90,000, depending upon education and experience. New graduates are encouraged to apply. ICPRB provides an excellent benefits package, including retirement benefits and a generous telework and leave policy. ICPRB is an Equal Opportunity Employer that strives to maintain a diverse workforce.

Please send a cover letter, resume to info@icprb.org by 5 PM on May 7, 2026. Please indicate where you learned about the position. ICPRB's office is located in Rockville, Maryland. Learn more at www.potomacriver.org.