

Okanagan Water Demand Model Technician

Location: Kelowna, BC

Terms: Full-time Term Position 6-8 months, start time flexible between July and September.

Information:

The Okanagan Basin Water Board (OBWB) is seeking a highly motivated individual with excellent interpersonal, research, writing and organization skills to fill the position of <u>Water Demand Model Technician</u>, reporting to the Executive Director. We offer a competitive wage, based on qualifications. This position is made available through a Green Jobs initiative of Agriculture and Agri-Food Canada (AAFC), and is open to early-career professionals, <u>up to age 30 years</u> old.

The OBWB is a local government agency, providing leadership on water issues in the Okanagan. Beginning in 2006, the BC Ministry of Agriculture and AAFC, with the OBWB, developed a Water Demand Model to estimate the needs of different crops, given the different irrigation systems throughout the valley. Okanagan agriculture depends on irrigation, and the water demands for irrigated agriculture will increase with climate change. At the same time, a growing population also requires more water, and the flows in Okanagan streams must be protected for sensitive salmon populations and environmental needs. Water must be carefully managed to avoid conflict in times of shortages.

Using a GIS-based model with a land use inventory, climate projections, soils, and other data, the water demand model helps local communities and provincial agencies develop irrigation plans, agricultural plans, environmental stream flow studies and many areas of research. The basic model design has been replicated in other areas of B.C., but the Okanagan is the pilot for improvements and new approaches.

For this project, we seek a research technician to work with the developers of the Okanagan Water Demand Model to test and make improvements to the base data sets - incorporating new BC Assessment codes, land use change, estimates of indoor water use, the accuracy of landscape irrigation estimates, water purveyor sources and delivery boundaries, and ways to better delineate demand on groundwater vs. surface water sources. Depending on skills and experience, the intern will also help incorporate down-scaled climate layers, and be trained to run the model. This is an opportunity to gain experience with a tool that is being used throughout BC, and this experience will be in demand in the future province-wide.

The successful candidate will have:

- Post-secondary education in geography or related field;
- Excellent interpersonal, phone and written communication skills;
- Ability to work independently with limited supervision;
- Accurate and detail-oriented, with excellent organizational and time-management skills;
- Extensive experience and proficiency in data handling (Excel, MS Access), GIS (ArcMap), Google Maps/Google Earth, as well as independent research;
- Valid Drivers License;
- Experience with coding a plus; and
- Knowledge of water management, and irrigation practices a plus.

For additional information, contact Anna Warwick Sears, OBWB Executive Director, at 250-469-6251 or <u>anna.warwick.sears@obwb.ca</u>. For more information on the OBWB, visit <u>www.obwb.ca</u>.

Resumes/expressions of interest will be accepted until June 21, 2017 and final decision will be made by June 30, 2017.