

The Water Survey of Canada

Informing Canadian Water Resource Managers Since 1908



Canada

Experience You Can Trust

Environment Canada's Water Survey of Canada (WSC) has a history that dates back to 1908, when Canada set out to determine the extent of the nation's vast water resources.

Since then, and in partnership with provinces, territories and other agencies, WSC has installed and operated hydrometric gauges to meet a wide variety of water resource data—often in extremely remote areas.

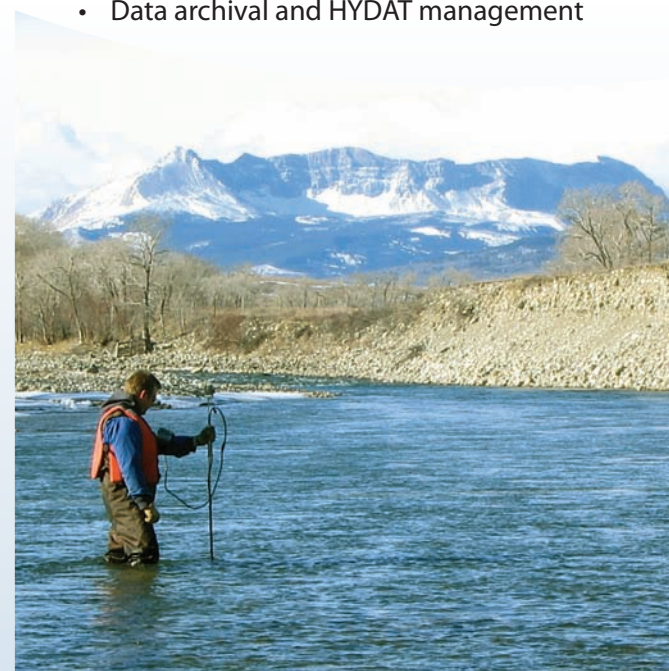
Water management is a shared responsibility, so the federal government entered into cost-sharing agreements with the provinces and territories in 1975 to collaboratively assess water resources across the country. These bilateral agreements have recently been modernized to reflect current realities, mandates and evolving Canadian needs.

Today, WSC remains the national authority responsible for the collection, interpretation and dissemination of standardized Canadian water resource data and information. Canada's expertise in this field is internationally recognized and sought after by agencies in other countries.

What We Do

WSC uses state-of-the-art monitoring equipment and methods to provide a substantial suite of hydrometric services, including:

- Site reconnaissance
- Gauging station installation and operation under all Canadian geographic, hydraulic and climatic conditions
- Measurement, monitoring, and modelling techniques and assessments
- Rating curve development
- Real-time water-level and streamflow conditions reporting
- Automated near-real-time monitoring systems (e.g., hydroacoustic sampling)
- Responding to special data and information requests
- Data archival and HYDAT management



How Our Data Are Used

We support the activities of all levels of government, industry and other stakeholders through long- and short-term data-collection programs that inform decision-makers in such traditional and emerging areas as:

- Water-sharing across provincial/territorial and international borders
- Environmental assessment and pollution monitoring
- Scientific studies of water availability, water quality, sediment transport and climate variability
- Integrated snow and water monitoring
- Industrial development and operation (mining, oil/gas, forestry, agriculture, etc.)
- Recreational activities planning
- Safety and economic planning activities (e.g., flood forecasting, hydro-electric reservoir development and operation, commercial and recreational navigation, fisheries and forestry management, and infrastructure engineering design)



Focus on Human Resources

WSC relies on a talented, multidisciplinary team of employees to collect, interpret and disseminate our valuable data. Our technologists follow a 3½ year training program of extensive technical and occupational health and safety instruction. This includes up-to-date training in water quantity and quality sampling techniques, data interpretation and production, and meteorological equipment sensor installation and operation.



Meeting Today's Needs While Preparing for Tomorrow

Canadians are increasingly concerned about the protection and preservation of our national water resources today and for future generations.

The Government of Canada is committed to ensuring that all Canadians have access to clean, safe and healthy water, that there is a reliable and secure supply of water, and that our water resources are used wisely—both economically and ecologically. WSC supports this commitment through water quantity monitoring, which is a key factor in understanding the effects of and extent of pollution, ensuring water quality and availability, and informing water use decision-makers.

WSC, with the important contribution of the provincial and territorial partners, continually modernizes its monitoring infrastructure in order to remain a reliable source of information in a time of increasing global emphasis on real-time water management to preserve a precious resource and avoid *natural* disasters. To ensure we deliver the high-quality service demanded by our partners and clients, MSC is ISO 9001:2000-registered.

The success of Canada's hydrometric program flows from our strong partnerships with provinces, territories, federal agencies, utilities and local stakeholders. As we have since 1908, WSC will continue our proud tradition of providing high-quality water resource data collection, interpretation and dissemination services to meet the needs of Canadians both today and in the future.

Find Out More

Many WSC products are available to the public through our federal government website. There, you will find near-real-time data for more than 1400 hydrometric stations, as well as historical water level, flow and sediment data for more than 8000 current and discontinued stations. Each year, we publish data for more than 2700 currently operating stations. For more information, please visit:

www.wsc.ec.gc.ca

