# UNDERSTAND THE QUALITY & QUANTITY OF OUR WATER

One of the keys to integrating water management is the sound knowledge of our provincial water resources. This includes understanding how watersheds work, the impacts of activities on water, how much water the province has, how it's being used, and what effect climate change will have.

Recent studies across Canada show that a lack of knowledge and access to information is a large barrier to managing water resources effectively. Better information is needed, not just for government decision making but for businesses making decisions as well. We have identified ways that will help to build this critical understanding.

#### Actions for Today

- Enhance the system for receiving and sharing water quality and quantity information with government and the public.
- Continue to build, support, and integrate existing water-monitoring networks to bolster baseline data and assessment tools, and to identify stresses on quality and quantity.
- Identify ecologically significant water resources, such as wetlands and critical groundwater recharge areas.
- Assess surface and groundwater in watersheds to develop water budgets on a priority basis.
- Engage with post-secondary institutions, industry, and communities in order to improve knowledge about water-related issues across the province.
- Undertake work to determine what impacts climate change will have on Nova Scotia's water cycle.

## Directions for the future

Watersheds and ecosystems are constantly evolving. This can be from natural environmental processes or from constant human activities. Because of this, we will need to support and invest in science and research to understand future changes. This can include enhancing tools and systems for sharing and analysing data, such as Geographic Information Systems (GIS).

### WATER BUDGETS

Water budgets are a tool used to compare the water that is naturally available versus the water that is currently being used in a watershed or aquifer. These budgets can help managers make decisions about what kind of activities can take place in a watershed, as well as identify when and where water shortages or other problems might occur.

## **CCME WATER QUALITY GUIDELINES**

The Canadian Council of the Ministers of the Environment (CCME) has created the Canadian Environmental Quality Guidelines, which provide nationally endorsed science-based goals for the quality of aquatic, atmospheric, and terrestrial ecosystems. These will help us better manage water by providing

- national benchmarks to assess potential or actual threats to water quality
- a scientific basis for the development of criteria, guidelines, objectives or standards indicators for reporting
- science-based goals or performance indicators

For more information, go to www.ccme.ca.