### Ministry of Natural Resources



## Drought/Low Water: What you need to know

# Where has all the water gone? What you need to know about drought and low water in your community.

Many Ontario residents have from time to time noticed a significant drop in river levels and flows, or lake or water well levels. You may notice cottage docks left high and dry, dam outflows running at a trickle, and dry ponds in farmers' fields where livestock once watered. Increased demand and our changing climate may result in low water levels becoming more common.

The Ministry of Natural Resources (MNR) actively works with other ministries, municipalities and Conservation Authorities to respond to, and make recommendations on, the long-term management of this potentially serious situation. The *Ontario Low Water Response* program's aim is to ensure we are all prepared.

#### A backgrounder on drought and low water

- Drought cannot be defined by a single term it is characterized by below-normal rainfall for an extended period of time (3 months or more), potentially aggravated by increased evaporation brought on by the warmer temperatures.
- The lack of rain and increased evaporation result in lower water levels in lakes, streams and rivers, and reduce soil moisture and groundwater.

- Drought conditions become more pronounced as our demand for water increases. Impacts include:
  - Declines in the water quality
  - Declines in tourism, recreation, shipping
  - Reduced hydro-electric production
  - Industry shut-downs
  - Loss of fish and wildlife habitat
  - Increased costs to agricultural production

#### Water Response Teams

At the local level, *Water Response Teams* comprised of local stakeholders and provincial/conservation authority staff, work with local water users and provincial and local water management agencies. Water Response Teams focus on reacting to current low water conditions.

#### Stages of Low Water Conditions

In order to recognize and measure the severity of low water conditions, precipitation, stream flow and water levels are monitored regularly by Conservation Authorities and the MNR. Conditions are described as one of three increasingly severe levels of low water. These are:

- **Level I.** The potential for water supply problems is identified.
- **Level II.** Minor water supply issues are encountered.
- Level III. Supply no longer meets demand. Social and economic impacts are experienced.

#### What you can do about drought

#### If you are a homeowner

We should always conserve water, but it is especially important when water levels are low. Here are just a few of the easy steps we can all take.

- Repair all leaks in taps and toilets, install low consumption toilets, dishwashers, shower heads, etc.
- Follow municipal water use restrictions (e.g. lawn water, car washing).
- Install rain barrels to collect rain water from roofs which can be used to water gardens.
- Choose drought-resistant trees and plants.
- Wash only full loads of laundry or dishes.

#### If you are a farmer

With such a wide range of crops grown in Ontario, there are numerous irrigation systems used and must be dealt with according to their specific needs.

- Irrigation systems should be regularly checked for leaks.
- Irrigate later in the day or evening when temperatures are lower and there is less evaporation loss.
- Avoid irrigating during windy conditions.
- Use rain gauges to measure how much water crops are receiving
- Ensure the irrigation system does not apply water faster than the ground can absorb it.

#### If you work in industry

As a major user of water, industry has an important responsibility to practice water conservation. By reducing their use of water, industries can protect the environment and gain a competitive edge by reducing their own cost of doing business. Because industries differ greatly and employ a wide variety of processes, no one list of steps can apply to all operations.

- Set up a water conservation program
- Survey plant operations
- Determine ways to increase efficiency

For more information on MNR emergency management roles and information on this and other hazards go to MNR, Conservation Authority and Emergency Management Ontario; Ministry of the Environment; and Ministry of Agriculture, Food and Rural Affairs websites.

Go to: ontario.ca/emergencymanagement