

# Minnesota Water Conservation and Efficiency Program Overview

## Minnesota Statewide Water Conservation Goals and Objectives

The Great Lakes Compact § 4.2.2 calls for each state to develop goals and objectives. Minnesota's water conservation goals and objectives are the same as the Compact's goals and the Council's objectives and satisfy this aspect of Compact § 4.2.2.

### Water conservation goals

Adopted in Minnesota Statutes 103G.801. These goals include:

1. Ensuring improvement of the Waters and Water Dependent Natural Resources;
2. Protecting and restoring the hydrologic and ecosystem integrity of the Basin;
3. Retaining the quantity of surface water and groundwater in the Basin;
4. Ensuring sustainable use of Waters of the Basin; and
5. Promoting the efficiency of use and reducing losses and waste of Water.

### Water conservation objectives

Great Lakes Compact Section 4.2.1 have been adopted in Minnesota policy. These objectives include:

1. Guiding programs toward long-term sustainable water use;
2. Adopting and implementing supply and demand management to promote efficient use and conservation of water resources;
3. Improving monitoring and standardizing data reporting among state and provincial water conservation and efficiency programs;
4. Developing science, technology, and research; and
5. Developing educational programs and information sharing for all water users.

Minnesota statutes require the Department of Natural Resources to develop and manage water resources to assure an adequate supply to meet long-range seasonal requirements for domestic, municipal, industrial, agricultural, fish and wildlife, recreational, power, navigation, and quality control purposes from waters of the state (M.S. 103G.265).

Water conservation plays a critical role in balancing the development and protection of Minnesota's water resources. Minnesota's water conservation programs include water supply planning, annual water conservation reporting, implementation of measures to improve water use efficiencies, and placing prohibitions or limits on wasteful or inefficient uses of water. These programs guide the review of applications for the use and appropriation of waters of the state.

## Water Conservation Program Elements

The Minnesota Water Conservation Program is implemented through various mandatory and voluntary elements.

### Water Appropriation Permits

A permit is required for all groundwater or surface water withdrawals that exceed in 10,000 gallons per day or one million gallons per year. Applicants for water appropriation permits must evaluate alternatives to the actions proposed in the permit application including conservation measures to improve water use efficiencies and reduce water demand.

A [preliminary well construction assessment](#) from the DNR is required before drilling a well that will need a water appropriation permit. The DNR informs the applicant whether the anticipated water use request is likely to meet the applicable requirements in law. This process helps prospective well owners to make informed decisions by providing relevant information prior to their financial investment in equipment and well construction.

Once an application for a water appropriation permit is submitted, DNR staff begin reviewing and evaluating the application materials prior to issuing a permit. A staff guidance document on the Decision Making Standard of the Great Lakes Compact provides additional criteria for all permit requests in the Lake Superior watershed.

*The Decision-Making Standard of the Great Lakes Compact lists five criteria that must be met:*

1. All water withdrawn shall be returned to the source watershed less an allowance for consumptive use;
2. The use will result in no significant adverse impacts to the quantity or quality of the waters or water dependent natural resources of the applicable source watershed;
3. The use will incorporate environmentally sound and economically feasible water conservation measures;
4. The use will comply with all applicable municipal, state, federal laws as well as regional interstate and international agreements; and
5. The use is reasonable. Compact § 4.11.

### Measuring Withdrawals

Water users must measure water volumes appropriated within 10% accuracy. Flow meters are required but other methods, such as timers or electrical use meters, can be approved for smaller water users.

### Water Use Reporting

Permit holders are required to submit annual water use reports and fees based on the volume of water appropriated. The annual water use reporting fee schedule is intended to encourage conservation.

### **Demand reduction measures**

Public water suppliers serving more than 1,000 people are required to prepare a [Water Supply Plan](#) every ten years that is approved by the DNR. In these plans, suppliers identify water demand projections, development plans, water sources, and demand reduction and conservation measures.

### **Water Use Priorities**

Minnesota statutes establish water use priorities. Nonessential uses are the lowest priority and are subject to restrictions to protect higher priority uses.

### **Low Flow Suspensions**

Surface water use can be during low flow periods in Minnesota. [Published procedures](#) lay out when surface water users will be suspended.

## **Water Conservation Reporting System**

The new statewide Water Conservation Reporting System was initiated in 2018. All water suppliers serving over 1,000 people completed water accounting data entry and reported their water conservation actions completed in 2017 and 2018. During a 4-year rollout period, all water permit holders will begin conservation reporting.

## **Critical Water Deficiency Ordinance**

The League of Minnesota cities and the MN Rural Water Association, developed a [model ordinance](#) that all cities are now adopting and customizing for their individual circumstances.

## **Statewide Drought Plan**

This plan provides a framework of conservation measures and water use priorities for responding to drought.

**Landscape Irrigation Systems.** Automated irrigation systems are required to have technology that inhibits or interrupts operation during periods of sufficient moisture.

**Wastewater.** Applicants for wastewater discharge permits are required to evaluate potential reuses of the discharged wastewater [[Minnesota Statutes, section 115.03](#), subdivision 1, item (e), sub. item (10)].

## **Prohibited or Limited Uses**

The use of groundwater for augmenting surface water basins and groundwater use for once-through heating ventilation and air conditioning (HVAC) systems.