

Do I need a DNR permit?



The short answer is **PROBABLY NOT**.

The Minnesota Department of Natural Resources (DNR) regulates water use in Minnesota. According to the DNR's website, a permit would only be needed if you are irrigating more than about 1.4 acres of lawn. To put that into perspective, the area of a football field (including the end zones) is about 1.3 acres.

For more information, contact City staff at (952) 447-9896 or visit the DNR website at:

dnr.state.mn.us/permits/water/answers.html#irrigation_non-crop

Example Irrigation System Kit

LawnPump.com of New Hope, MN



No More Watering Restrictions!

After you install a system to pump water from a lake to irrigate your property, you will be **exempt** from City watering restrictions that limit timing and number of watering days for the disconnected portion of the property.

Other Considerations

- **Site applicability:** The information in this brochure applies only to lots adjacent to lakes within the City of Prior Lake.
- **Existing sprinkler heads:** All lake water pump systems must have a substantial filter to prevent clogging of existing irrigation lines. Frequent filter maintenance is critical.
- **Intake placement:** Pump intakes with proper filters have a large surface area that prevents harming fish. Place the intake where the filter will not become clogged with weeds or sediment.

Working Together to Protect Our Quality of Life

Irrigation Alternatives:



Using Lake Water

Get your lawn off the grid!

Demand on the City's water system is nearly **3 times higher in the summer** than in the winter. This is mostly because of lawn irrigation. You can save money and help cut down on future City infrastructure costs and rate increases by installing a lake water irrigation system.



How do I get my lake water irrigation system up and running?

Getting set up with a lake water irrigation system is **easy**. Here's what you need to do:

1. **Purchase pump kit.** Price should be around \$1,000 for a kit from a reputable company.
2. **Safety First.** Contact Gopher State One Call if your project will involve digging:
Gopherstateonecall.com or **(651) 454-0002**.
3. **Hook pump to irrigation system.** A licensed plumber can easily make a connection to your existing system—just make sure the City water line is then **completely and permanently disconnected** from the lake irrigation system. If you don't have an existing system, you can install one or use a garden hose and sprinklers. Call the City at 952-447-9896 to verify disconnection. A City permit may be required.
4. **Plug it in.** For existing in-ground systems, you need to have an electrician install a simple pressure switch on the pump.

Help is Available!

- Contact City staff at (952) 447-9896 for help with setup, permit, or operation questions.
- The Prior Lake-Spring Lake Watershed District (PLSLWD) may offer financial assistance to residents who install lake water irrigation systems. Contact them at (952) 447-4166, or visit www.plslwd.org.



Irrigating With Lake Water

Statistically Speaking

Water use costs, by the numbers

Many residential irrigation systems run every other day, watering up to 4 times the amount needed for a green lawn (about 1 inch per week is needed)

COST Example - City Water

(estimated 60,000 gal per bill cycle)

COST of first 10,000 gal = \$34.00

COST of next 10,000 gal = \$40.80

COST of next 10,000 gal = \$53.00

COST of last 30,000 gal = \$238.80

That's a total cost of \$367 every 2 months (more than \$700 per season)

Compare that to the cost of running your own lake water irrigation system that eliminates the need to use City water:

COST Example - Lake Water

Initial purchase & setup = \$1,500
(pump kit, installation)

Operation costs (annual) = \$150

Your lake water irrigation system could pay for itself in 2-3 years

For more information on water rates:

City of Prior Lake—Utility Billing
(952) 447-9844
4646 Dakota Street SE



The Benefits of Using Lake Water

- **Lake water is rich in nutrients.** Excess phosphorus in the lake causes algae blooms. Using phosphorus-containing fertilizer is illegal in Minnesota. Turn your lawn green instead of the lake...using lake water phosphorus is legal!
- **Short-term cost savings.** Save money every month by not paying to water your lawn with treated drinking water. Water from the lake whenever you want.
- **Long-term cost savings.** Winter water demand on the City's wells is 1.5 million gallons per day. Summer demand often spikes to 6 million gallons per day. As water demand nears the maximum capacity of existing City facilities, new wells, treatment facilities, and storage will be considered—and new facilities have an impact on the rates we all pay for our water. Please help us to cut peak summer water demand.
- If all lakeshore lot owners used City water for irrigation at the recommended rate (1 inch per week), the water demand from these lots could be about **900,000 gallons** per day. This amounts to **108 million gallons** of water each summer!

