

# FACT SHEET: Prior Lake Outlet Channel

**The Prior Lake Outlet Channel (PLOC)** resulted from a citizen petition for an outlet to carry stormwater from the landlocked Prior and Spring Lakes. Flooding has historically been an issue in the area and was a main cause for establishment of the Prior Lake-Spring Lake Watershed District in 1969. The outlet channel, completed in 1983, works to address high lake level issues on Prior Lake and as a trunk stormwater system for the City of Prior Lake, the City of Shakopee, and the Shakopee Mdewakanton Sioux Community.

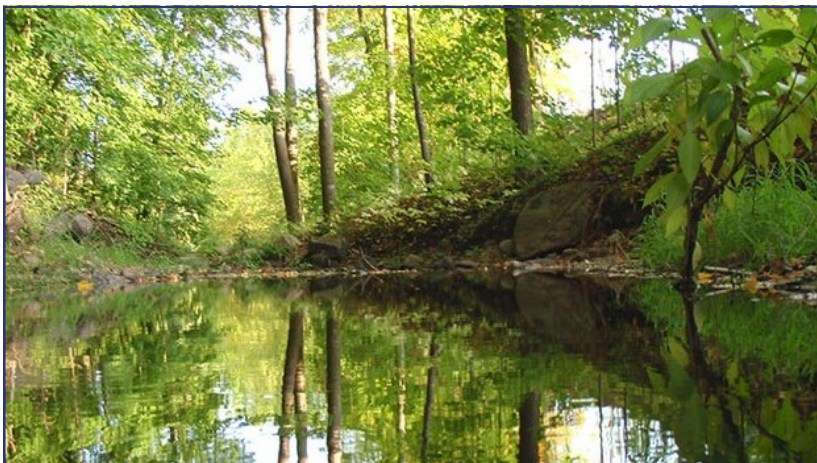


*A look at the accordion-shaped fixed crest weir located inside the outlet structure on Prior Lake.*

## Outlet Structure:

The outlet structure was updated in 2010 and includes an accordion-shaped fixed crest weir (see photo on left) with a low flow gate to allow manual discharge of water.

The current structure allows water to naturally fall over the weir when the lake surpasses 902.5 feet, providing a consistent flow of water through the channel.



*Segment 1 of the PLOC near Jeffers Pond Elementary.*

## FAST FACTS

- **Watershed Area:**  
42 square miles
- **Ordinary High Water Elevation:**  
Prior Lake 903.9 feet  
Spring Lake 912.8 feet
- **Peak Lake Elevations 2014:**  
Prior Lake 906.17 feet (June 30)  
Spring Lake 913.30 feet (June 21)
- **Maximum Flow of Outlet Structure:**  
65 cubic feet per second
- **Outlet Channel Length:**  
7 miles

## The Channel:

The Prior Lake Outlet Channel (PLOC) is approximately 7 miles long and is divided into 8 management segments. Segment 1 is on the southern end beginning at the Prior Lake Outlet Structure, while Segment 8 is on the northern end and flows into the Minnesota River in Shakopee. Channel placement was designed to follow natural flow of water north.

There are above and below-ground portions of the channel. In above-ground sections the PLOC appears as a stream and borders or traverses multiple properties. The watershed district holds easements for access and maintenance of the channel on many of these properties.

## Local Partnership:

A Joint Powers Agreement/Memorandum of Agreement (JPA/MOA) exists between the Prior Lake-Spring Lake Watershed District, the Cities of Prior Lake and Shakopee, and the Shakopee Mdewakanton Sioux Community for the operation, maintenance, and use of the Prior Lake Outlet Channel. This group of operators oversees the operation of the PLOC, while the watershed district administers the day to day operations.

PRIOR LAKE  
SPRING LAKE  
WATERSHED DISTRICT



Map of the Prior Lake Outlet Channel (PLOC). The PLOC receives water from Lower Prior Lake and the surrounding watershed and discharges into the Minnesota River.

## 2014 Flood:

A major flood event occurred in 2014 leading to the highest recorded water elevation of 906 feet on Prior Lake since the outlet system was first installed. It is estimated that the lake level could have reached approximately 912 feet without the outlet structure.

Record high water levels created unavoidable damage in several sections along the channel. Extreme velocity and duration of flow during the flood caused bank erosion to the entire length of the channel, causing over 20,000 feet of bank erosion and trees to fall into the channel. Repair efforts to be taken in 2015-2016 include:

- tree and woody debris removal
- sediment removal
- streambank stabilization
- culvert replacements.

Monitor the level of Prior Lake on the District's Website at

[www.plslwd.org/waterbodies/](http://www.plslwd.org/waterbodies/)

PRIOR LAKE – SPRING LAKE  
WATERSHED DISTRICT

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Mission: to manage and preserve the water resources of the Prior Lake-Spring Lake Watershed District to the best of our ability using input from our communities, sound engineering practices, and our ability to efficiently fund beneficial projects.