

# Canisteo Mine Pit Water Outlet Construction

## Frequently Asked Questions

### What is the Canisteo Mine Pit?

A legacy mine pit is one that was mined and subsequently abandoned prior to the adoption of the Mineland Reclamation Rules. One such pit is the Canisteo Legacy Mine Pit (Canisteo) in Itasca County, which is a large pit complex made up of smaller inactive iron ore pits near Coleraine, Bovey, and Taconite. Since active mining and pit dewatering ceased, pit water levels have risen naturally from groundwater and precipitation.

### How have Canisteo water levels been managed so far?

In 2022, the Iron Range Resources and Rehabilitation Board funded a contingency pumping project overseen by the DNR. Over two winter seasons, more than 4.7 billion gallons of water were pumped from Canisteo into nearby Holman Lake and a wetland complex. Winter pumping kept water levels below 1,318 feet, ensuring that the Bovey drain tile system continued to divert groundwater away from residential structures in Bovey. Seasonal pumping between 2022 and 2024 has controlled Canisteo water levels until an engineered outlet is permanently in place.

### Why is the DNR constructing a water outlet at Canisteo?

Water naturally rises in the pit due to rainfall, snowmelt, and groundwater. Now that no company is actively dewatering the pit for mining operations, the DNR Lands and Minerals Division is closely monitoring both the Canisteo water level and the surrounding groundwater levels. This monitoring provides valuable insight into how the pit water level increases over time. The information collected by DNR staff indicates that we need an engineered outlet structure. Winter pumping has been a short-term solution to control the water levels at Canisteo. Now that we've secured funding from the legislature, we are breaking ground on a state-of-the-art permanent water outlet. This will allow us to manage Canisteo water levels year-round and prevent water from overtopping the pit without relying on pumping.

### How is the water outlet construction funded?

In 2023, the Minnesota legislature approved \$8.875 million in a General Fund appropriation for constructing an outlet at Canisteo.

### How will the water outlet function?

The outlet is a seasonal gravity outflow system into an open ditch. It will require temperature and water level monitoring and seasonal outflow management, but it is a simplified design that minimizes long-term maintenance costs. Water from Canisteo will ultimately flow into the Prairie River during the winter months when water temperatures are cold and zebra mussel filtration is not needed.

## What construction work is happening now?

Construction crews have been working at the outlet of the Canisteo, near Itasca County Highway 61.

## What about access or recreation near the construction site?

Mine pits are unique features created by mining and aren't natural lakes, which means they might be reopened for mining activities in the future. The future uses of the complex of inactive mine pits in the Canisteo area are still uncertain. If mining resumes here, keeping the site closed is best for private landowners and public safety. While building the permanent water outlet, you might see contractors using public roads to get to Canisteo and nearby areas. If you're outdoors, keep an eye out for construction equipment or crews in that area. And don't forget — make sure to get permission from landowners if you're thinking of exploring any nearby spots.

## When will the permanent outlet be completed?

Construction on the water outlet system is expected to be completed in the fall of 2026.

## How will Canisteo water levels and temperatures be monitored after the outlet is completed?

The DNR will continue to monitor water levels in Canisteo, West Hill, and Lind Pits, along with Prairie River streamflow. Regular water monitoring and flow management ensures minimal changes and relatively stable water quality in the receiving waters. Canisteo water temperature monitoring and biological sampling will occur to determine when Canisteo seasonal water flow can begin and must end. The flow route of the Canisteo will be monitored for any blockages, preventing possible flooding at culverts or outlet sites.