

The Problem

During high lake levels, water is pumped from Lake Pulaski into nearby Buffalo Lake. Lake Pulaski has no natural outlet so lake levels rely on a pumping system. In 2022, invasive zebra mussels were identified in Lake Pulaski suspending pumping operations to Buffalo Lake until pumping could occur without the transport of zebra mussels per State Statute requirements. Without summer pumping, 28 homes and the City of Buffalo sewer system are at a high risk of flooding. This is a shovel ready project with time of the essence.

The Solution

Design and construct a permanent filtration system, pumping station improvements, and SCADA (supervisory control and data acquisition system) monitoring updates.

Funding

The project provides environmental, economical and recreational benefit. The project will prevent flooding of properties around Lake Pulaski, prevent damage to the shoreline, prevent flooding of the City sewer system, and prevent Aquatic and Invasive Species (AIS) from being transported from Lake Pulaski into Buffalo Lake and the North Fork Crow River. By resuming pumping and managing lake levels, it will allow the Lake to be utilized for recreational purposes such as boating without damage to over 200 residential shorelines and properties. Without the project, summer pumping can't be completed and chance of flooding would significantly increase.

Regional Significance

There are over 4,000 boat launches per year in Lake Pulaski, half of which are from outside Buffalo. The spring fed, very clear lake is heavily used for both recreation and fishing by people from the city of Buffalo and people in the surrounding region. The filtration system will prevent the pumping station from transporting zebra mussels to the already zebra mussel infested Buffalo Lake and all water bodies connected to the Crow River downstream of Buffalo.

Legislative Contacts

Marion Rarick (R) - MN House 29B
Bruce Anderson (R) - MN Senate 29

City Contact

Taylor Gronau, City Administrator
763-684-5406
taylor.gronau@ci.buffalo.mn.us



Flood of the homes around the lake and in the City of Buffalo.



Army Corps of Engineers installed the pumping station.



Ongoing - Boat inspections performed on all boats entering Lake Pulaski - paid for by Lake Pulaski Improvement District and the City.



Invasive zebra mussels are found and the MnDNR suspended the permit for spring, summer, and fall pumping until a filter system can be installed to remove zebra mussels prior to discharging the water into Buffalo Lake.



Research and select filtration system - discussions with DNR on requirements.



Far below average precipitation led to the lake not requiring pumping - no damage to property.



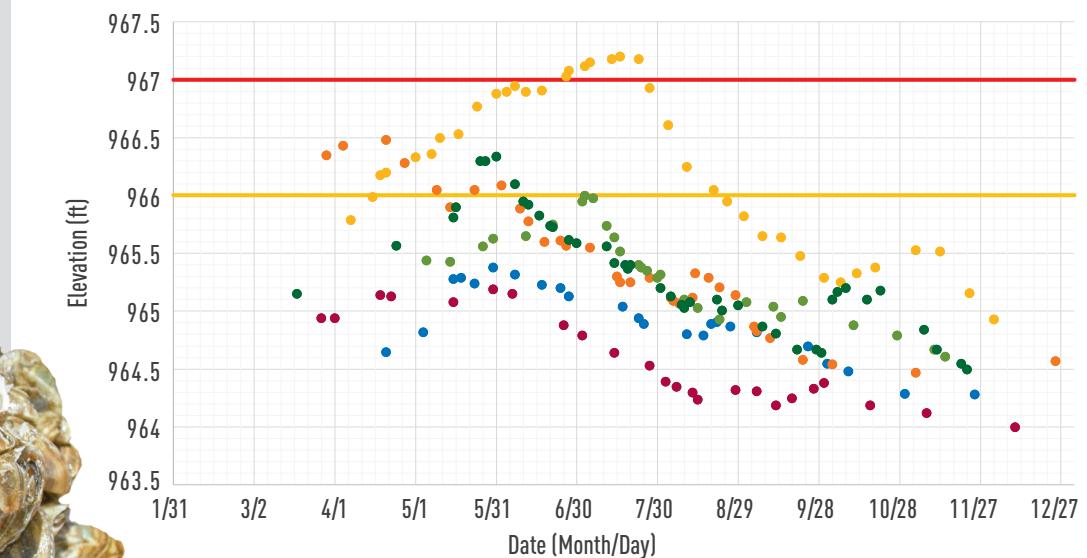
Funding request made and design of permanent filtration system complete.



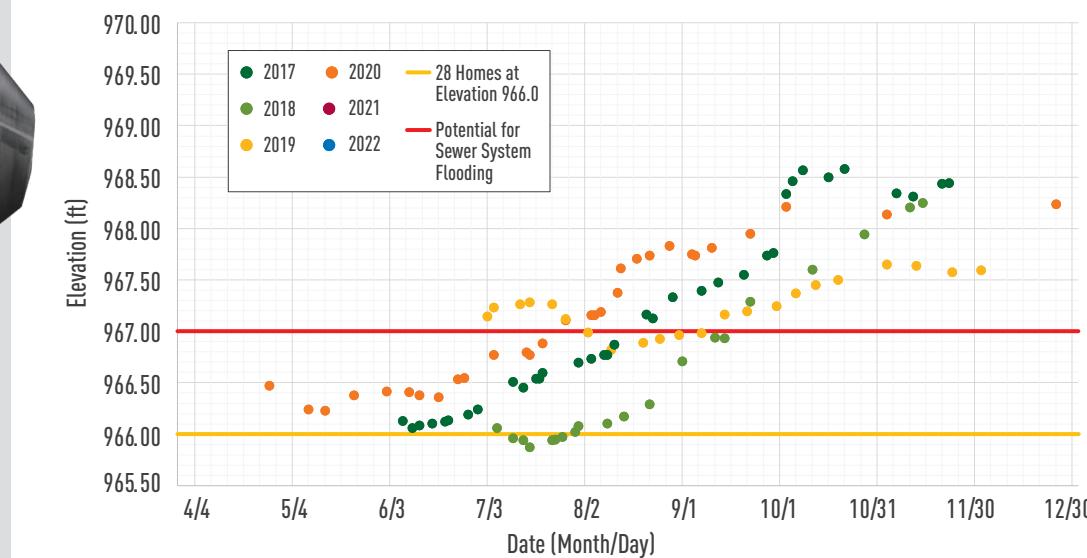
Construction of filtration system



Lake Pulaski - Actual Elevations - 2017 to 2023



Lake Pulaski - Projected Elevations without Pumping - 2017 to 2023



1984

1986

2013

2022

2022

2022/2023

2023

2024/2025