2017 Prairie View Golf Course Pond Modification Project Report

The Grant

The Okabena-Ocheda Watershed District received a $428,000 Clean Water Land and Legacy grant from the Minnesota Board of Water and Soil Resources in 2017 to expand the ponds and filter water at Worthington's recently closed Prairie View Links Golf Course. When completed, the project will reduce phosphorus pollution to Lake Okabena by about 30 percent.

The grant was made possible by an engineering study paid for by the City showing that nutrient and sediment pollution entering Lake Okabena would be significantly reduced by building the project.

The grant will pay up to 75% of the project's engineering and construction costs with Worthington paying the remaining costs. The grant is administered by the watershed district.

Worthington issued an easement to the watershed district allowing it to build the project on City owned property. The watershed district will operate and maintain the pond and filters in the future.

Project Construction

Construction began on the project in August. Approximately 42,000 yards of soil were excavated to enlarge the surface area of the existing southern pond and build a spillway structure to increase the normal depth of the ponds.

Two sand filter benches were built on the sides of the southern pond. During normal flow conditions, all water leaving the ponds will pass through the sand filters.

An emergency spillway was constructed in early October to allow high water flows to pass over the structure. The

Addressing Lake Okabena's Algae Problem

High phosphorus levels in Lake Okabena lead to summer algae blooms. The Minnesota Pollution Control Agency states that the lake's recreational opportunities are impaired by high concentations of the nutrient.

Phosphorus is moved into the lake by runoff from the basin's watershed. Cleaning up the runoff water before it enters the lake will reduce the number and severtiy of future alage blooms.

The expanded pond and sand filter benches under construction at Worthington's Prairie View property are designed to do this. After completion, the project will annually remove 945 pounds of phosphorus pollution. The pond and filters will have the added benefit of preventing 123,000 pounds of sediment pollution each year.

Construction of the project began in 2017 and will be completed during summer 2018.

emergency spillway was tested the week after completion when the area received about 6.3 inches of rain.

After the October's big rain, it was discovered that the sand filters were not draining the pond as designed. The filters' sand layers will be removed in 2018 and replaced with a more porous sand mix.

Native prairie grasses and flowers were seeded in November on the areas disturbed during construction. It will take a few years for the vegetation to be fully established.

Project Costs

Construction and onsite engineering costs of the Prairie View pond and sand filter benches will total about $552,000. The Clean Water Land and Legacy grant from the Minnesota Board of Water and Soil Resources will pay $428,000 of the eligible costs with Worthington paying the balance.

In addition, Worthington spent approximately $70,000 to do the engineering needed to show the project was feasible and would significantly protect Lake Okabena before applying for the grant.

The project was built on City owned property. Worthington granted a permanent easement to the watershed district to operate and maintain the ponds and filters. Future maintenance costs will likely be split by the watershed district and City.

A full accounting of the project costs will be posted on this website when it is completed in 2018.

For More Information Contact:

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PRAIRIE VIEW PROJECT CONSTRUCTION, 2017

Construction begins in August.

Sand filter benches installed in September.

Emergency spillway completed a few days before October's big rain.

Site seeded in November and December. Filter benches will be completed in 2018.