

Northwest Regional Excess Flow Facility

Round Lake Beach



Public Works & Transportation
Committee Presentation

May 4th, 2016

By David Humbert, P.E.

NW Regional Excess Flow Facility

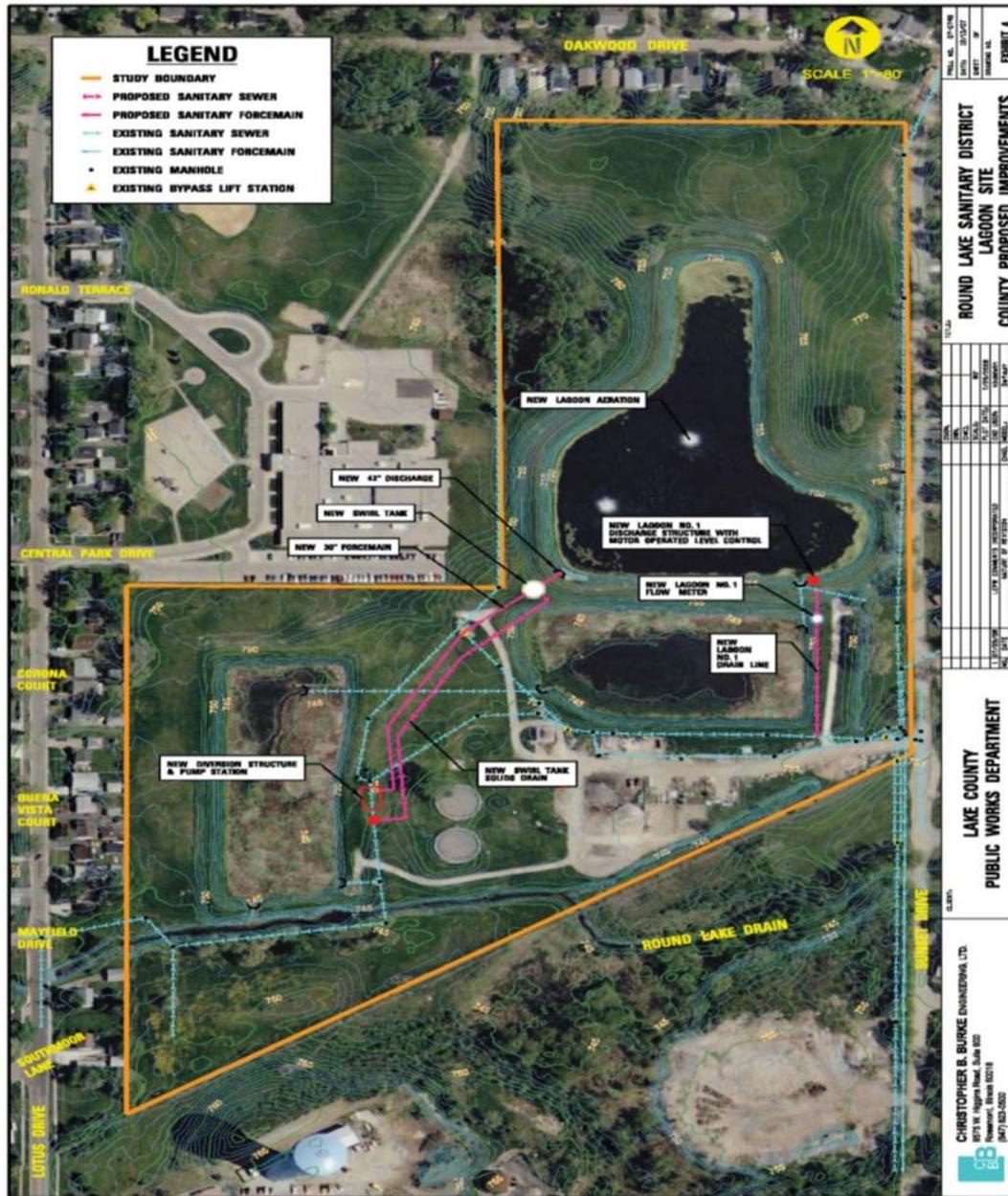


The renovated 38-acre site features a new pump station, swirl tank, other automated equipment and improvements to the three existing lagoons allowing for 20 million gallons of primary treated wastewater to be temporarily stored at the site.

The improvements will help reduce basement backups during times of significant rainfall for residents and will reduce sanitary sewer overflows.

The \$7.5 Million dollar project is a joint effort and partnership between Lake County and the Villages of Round Lake, Round Lake Beach, Round Lake Heights, Round Lake Park, Hainesville, Lake Villa, Fox Lake, the Lakes Region Sanitary District, the Round Lake Sanitary District and Harbor Ridge Utilities.

The project has been funded by a low interest IEPA Loan that is being repaid by a \$1.50 / month surcharge fee collected from all users of the system.



NW Regional Excess Flow Facility



The following photos illustrate the progression of work to construct the new pump station at the site from April to October 2015.

The new pump station allows us to divert up to 20 million gallons per day of excess flow into the three lagoons at the site.

The photos illustrate the pump station, valve vault, meter vault and related piping and electrical work.



Pump Station Excavation



Interceptor Pipe and Pump Station



Valve Vault and Pump Station





Pump Station Piping



08.07.2015



Pump Station Wet Well



Pumps





Completed Pump Station

NW Regional Excess Flow Facility



The following photos illustrate the progression of work to construct the new vortex swirl tank at the site from May to December 2015.

The new swirl tank mechanically removes solids and floating objects from the flows diverted to the lagoons at the site.

Swirl Tank Foundation





Swirl Tank Walls



Swirl Tank





Swirl Tank Siphon





Swirl Tank



Completed Swirl Tank

NW Regional Excess Flow Facility



Lagoons
April 2016



Lagoon 1



Lagoon 2





**Lagoon 3 and
Fencing**



Celebrate the Completion of the Northwest Regional Excess Flow Facility!

May 11, 2016



Please join us as we celebrate the completion of the Northwest Regional Excess Flow Facility, and thank the partners who made it happen.

This \$7.5 million renovation was the result of a partnership between Lake County and the Villages of Round Lake, Round Lake Beach, Round Lake Heights, Round Lake Park, Hainesville, Lake Villa, Fox Lake and the Lakes Region Sanitary District.

This renovated site features a new pump station, equipment, and a lagoons system capable of storing 20 million gallons of primary treated wastewater. The site will help reduce basement backups (during times of significant rainfall) for residents, and it will reduce sanitary sewer overflows in all areas served by the partnership members.

Join us for lunch and a tour of the site!

DATE: Wednesday, May 11, 2016

TIME: 12 - 1:30 p.m.



Entrance