



Melvina Ditch Reservoir Expansion



Project Overview

The Metropolitan Water Reclamation District of Greater Chicago's (MWRD's) expanded Melvina Ditch Reservoir will alleviate flooding in Burbank and Oak Lawn. The reservoir expansion project will more than double the reservoir's holding capacity to 117.3 million gallons and reduce the risk of flooding for 430 residential properties in Burbank and Oak Lawn.

Project Description

The Melvina Ditch Reservoir, located at 6500 W. 87th St., Burbank, was constructed in 1965 based on 1960s rainfall data. In 2013 and 2014, the reservoir filled to capacity, highlighting the need to increase stormwater storage and to manage more intense rainfall events. Through public meetings, consensus was reached to expand the reservoir within the existing reservoir footprint on MWRD property and by acquiring 15 nearby properties around the perimeter of the reservoir. The expansion increases the reservoir's holding capacity by nearly 64 million gallons. The MWRD removed more than 80,000 tons of dirt to expand the reservoir.

The project modifies the pumping station to accommodate the expansion, including rehabilitating existing storm pumps and lengthening their impellers to accommodate the deepened reservoir. A new emergency overflow weir was also installed to prevent the reservoir from overtopping.

The water from the reservoir is conveyed to an underground culvert that stretches from 87th Street to 95th Street where it empties into the Melvina Ditch. The \$20-million project, funded primarily by the MWRD, also received a grant from the state of Illinois through its Build Illinois Bond Fund.

Melvina Ditch Reservoir Expansion, *cont.*



Project impact

The reservoir expansion represents the culmination of an engaging public process that relied on the input of Burbank and Oak Lawn residents to work toward a solution to mitigate flooding in their communities. The MWRD also worked with the surrounding municipalities and Stickney Township to ensure multiple partners' flooding concerns were addressed. Combining that community outreach with highly skilled engineering work and support from the General Assembly, the project moved forward to make a critical difference in the quality of life for residents who have in years past dealt with flooded basements and streets. Downstream communities, such as Bridgeview, Chicago Ridge, Worth and Stickney Township, will also benefit indirectly from the reservoir. The ex-



panded reservoir makes a positive regional impact and addresses local and regional government initiatives to mitigate flooding in these communities. As a result, approximately 430 residential properties will have a reduced risk of flooding during storms.