IEPA Officials Cut Ribbon on Thornton Composite Reservoir

Dubbed the “Grand Canyon of the South Suburbs,” the Thornton Composite Reservoir presents a larger than life view from above with a larger than life purpose for the region. Now connected to a tunnel system and prepared to hold up to 7.9 billion gallons of water, the reservoir will reduce flooding in the area while preventing pollution in Chicago area waterways.


"To the naked eye, it’s a gigantic hole in the ground surrounded by 400 million-year-old limestone rock, but to the people who live in the surrounding communities it symbolizes hard work, diligence and hope for a better tomorrow in our pursuit to mitigate flooding and clean our waterways," said Senator Durbin. "This project didn’t happen overnight, but tomorrow and for decades to come the residents of the south suburbs and Chicago’s south side will benefit from the flood protection it offers. Thank you to the Metropolitan Water Reclamation District and the Army Corps for working together to complete this enormous undertaking."

The reservoir, tantamount to 12 Soldier Fields in size, is part of the MWRD’s Tunnel and Reservoir Plan (TARP), also known as the “Deep Tunnel,” consisting of more than 100 miles of tunnels deep below the surface of the Chicago region and three reservoirs designed to capture and hold stormwater and sewage for treatment at water reclamation plants. Together with the Thornton Reservoir, the Gloria Alitto Majewski Reservoir (350 million gallons) in the northwest suburbs, the yet to be completed McCook Reservoir (10 billion gallons) in the west suburbs, and 109 miles of tunnels (2.3 billion gallons), TARP will accommodate for 20.55 billion gallons of water.

The Thornton Composite Reservoir will benefit 556,000 people in 14 communities throughout the south side of Chicago and south suburbs. It will protect 182,000 homes, businesses and other facilities and improve water quality in the Calumet Rivers and Calumet-Sag Channel by collecting combined sewer overflows before entering waterways. The new reservoir’s capacity holds these overflows before pumping the water back to the Calumet Water Reclamation Plant to be treated.

Beyond mining the large reservoir, the other challenge was properly sealing the reservoir to contain the water much like a bathtub. A dam, made of 32,000 cubic yards of roller compacted concrete, was constructed below the Tri-State Tollway (I-80/1-294) to separate the reservoir and its contained water from reaching the main lobe of the quarry. Two mining haul tunnels at lower elevations were also plugged with concrete.

The total cost of TARP is $3.8 billion, about half of which came from federal money. The total cost of Thornton is projected at $429 million. “We commend the MWRD on this project and the investment of time and resources from federal and local officials. These investments will pay significant dividends locally in terms of flood reduction, but also help clean the regional waterways,” said Congressman Quigley. “This is another positive step in the right direction for our waterways. As River’s Executive Director Margaret Frisbie. “We thank our elected officials, the MWRD and many partners who have made a commitment to cleaner waterways.”