Metropolitan Water Reclamation District *of* Greater Chicago

Press Release

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Behold McCook Reservoir: A 21st century icon for water quality and flood protection

The McCook Reservoir was formally unveiled today when the Metropolitan Water Reclamation District of Greater Chicago (MWRD) and project partner, the U.S. Army Corps of Engineers (USACE), joined U.S. Sen. Dick Durbin, U.S. Rep. Mike Quigley (5th), U.S. Rep. Dan Lipinski (3rd), municipal leaders and officials with the U.S. EPA and Illinois EPA to celebrate cleaner water and protection from flooding for 3.1 million area residents.

Stage I of the McCook Reservoir can hold 3.5 billion gallons of storage capacity and will protect residents of Chicago and 36 suburban communities from flooding. It can provide an estimated $114 million per year in flood reduction benefits, while also capturing untreated water that formerly overflowed into waterways in rainy weather. This stored water will be pumped from the reservoir to water reclamation plants to be cleaned and released when the treatment plant has capacity to treat the water after significant rain events.

"We are excited to announce the completion of Stage I of the McCook Reservoir and this immense public works infrastructure that will help millions of people in Cook County," said MWRD President Mariyana Spyropoulos. "We could not have accomplished this Herculean project on our own and therefore thank our partners, the U.S. Army Corp of Engineers, U.S. Senator Durbin, our congressional leaders in Washington D.C. as well as the contractors and neighboring communities that were instrumental in helping us complete this project."

Funded by the MWRD and the USACE, McCook Reservoir is located along the Stevenson Expressway between the Des Plaines River and Chicago Sanitary and Ship Canal. It is part of the MWRD's Tunnel and Reservoir Plan (TARP), one of the country's largest public works projects for pollution and flood control. TARP covers a 375-mile area that includes Chicago and 51 suburbs that rely on a combined collection system that conveys both stormwater and used water.

"The completion of Stage I of the McCook Reservoir is critically important for the quality of our waterways and the safety of millions of people and structures in areas prone to flooding," Senator Durbin said. "I'm proud to have helped secure funding for this project and will continue working to ensure that MWRD and the U.S. Army Corps of Engineers have the federal resources needed for construction to stay on track."

Stage I of the McCook Reservoir is complete and ready to take on 3.5 billion gallons of water to prevent pollution in local waterways and flooding in streets and basements.

The "Deep Tunnel" systems, which can capture 2.3 billion gallons of water 150 to 300 feet below ground, total 109 miles and connect to one of three reservoirs as an outlet for the TARP water. The tunnels were completed in 2006 and have been in operation since the mid-1980s, keeping polluted water out of area waterways and basements. The tunnels were followed by the completion of the 350-million-gallon Majewski Reservoir in 1998 in the northwest suburbs and the 7.9-billion-gallon Thornton Composite Reservoir in 2015 in the south suburbs. With McCook Stage I now in service, the MWRD has increased its storage volume to more than 14 billion gallons.

"Because of the topography of our city and the impacts of changing weather patterns in our region, Chicago residents and businesses are uniquely vulnerable to the costly and devastating effects of urban flooding," said Rep. Quigley. "The McCook Reservoir is a key component in the now decades-old plan to address this problem, and it will meaningfully benefit the city of Chicago and 36 suburbs by aiding flood mitigation. As the only Illinois member of the House Appropriations committee, I'm proud of the funding I've been able to secure for the Army Corps of Engineers and for the McCook project to help protect local homes and businesses from damaging flooding. I also congratulate MWRD on this *(continued)*

Behold McCook Reservoir: A 21st century icon, *continued*

accomplishment and look forward to continuing the effort to ensure that the next phase of the important flood abatement reservoir moves forward effectively."

"This is a great day for my constituents because completion of this project will prevent flooded basements and will also reduce pollution in Lake Michigan," said Rep. Lipinski. "I'm proud to have worked with my colleagues in Congress to provide the funding to make this possible and I thank the Metropolitan Water Reclamation District and the Army Corps of Engineers for their work."

The region has seen tremendous ecological recovery of the waterways during the implementation of TARP. Since the tunnels were completed in 2006, the number of CSO events per year have been cut in half. Since Thornton was placed in service in 2015, CSO events have been nearly eliminated in the Calumet River System. When Stage I of McCook Reservoir is placed into service, officials expect further improvements to area waterway quality.

"The McCook Reservoir is a nationally significant engineering marvel," said Col. Aaron Reisinger, Commander, U.S. Army Corps of Engineers, Chicago District. "The U.S. Army Corps of Engineers is proud to deliver this project with our partners at the Metropolitan Water Reclamation District. The project will provide flood risk reduction benefits and improve water quality for Chicago and 36 suburbs, an area with 1.5 million structures and 5 million people."

As a result of TARP and other water quality enhancements, Chicago area residents now see the river system as a major asset. Marinas, riverfront trails and riverside restaurants abound; river recreation and tourism are booming; waterfront real estate values have soared and game fish have returned to the Chicago Area Waterway System. Prior to the launch of TARP in the early 1970s, there were only two fish species in the river system, whereas today MWRD fish monitoring has documented more than 70.

"The McCook Reservoir is a major step forward in protection of the Chicago River and our Great Lakes," said Robert Kaplan, acting regional administrator for USEPA Region 5. "Many years of hard work and dedication went into this project. EPA is proud to have been a part of it."

When completed in 2029, the final phase of the reservoir will add an additional 6.5-billion-gallon holding capacity for a total of 10 billion gallons, the equivalent of 200 million rain barrels, surpassing Thornton Composite Reservoir as the largest of its kind in the world. Stages I and II of McCook Reservoir will provide an estimated total of $143 million per year in flood reduction benefits. The reservoir is 300 feet deep and 3,000 feet long.

To mine the reservoir, the MWRD began working with Vulcan Construction Materials in 2003 to create a rough hole and allowed Vulcan to sell the rock through their existing McCook Quarry, which has been in business for more than 100 years. Aggregate is used in many types of construction projects in the Chicago area, such as road and building construction. But in order to find a home for much of the earthwork pulled from the hole, the MWRD had to be creative.

More than 9.4 million cubic yards of overburden and dirt were removed from the site to expose the top of rock and reused to create two man-made hills along the Centennial Trail in the Columbia Woods Forest Preserve further southwest along the canal. That ingenuity led to several local and national honors. The MWRD was named winner of the Best Innovation in Mining category of the National Association of State Land Reclamationists (NASLR) and received a mined land reclamation award from the Illinois Department of Natural Resources and the Interstate Mining Compact Commission's Kenes C. Bowling National Mine Reclamation Award.

Four tunnels were constructed, spanning from a new underground chamber replete with a series of giant gates and valves to control the flow in and out of the reservoir and to and from the MWRD's nearby Mainstream Pumping Station. Finally, an aeration system was installed to oxygenate the water stored in the reservoir to minimize odors.

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