

TARP PROJECT FIELD TOURS – APRIL 11, 2019

Morning tour – 8 am to 11:45 am

Afternoon tour – 1 pm to 4:45 pm (note: if there is sufficient interest, one bus will stop at Lagunitas Brewing Company, returning to the hotel approximately 6:15 pm.

Each tour will visit the Thornton Composite Reservoir and McCook Reservoir, features of the Chicago's TARP project. At Thornton, participants will visit an overlook where they'll see the reservoir, rock dam, RCC dam and gate shaft. At McCook Reservoir, participants will see the mining operation under construction in Phase 2, and the reservoir, completed in 2017 as part of Phase 1. Engineers from the Metropolitan Water Reclamation District of Greater Chicago will be on the motor coaches and at each project site to explain the project and answer questions.

The \$3.6-billion Tunnel and Reservoir Plan (TARP) Project in Chicago is a mega-project - one of the largest civil engineering projects ever undertaken in terms of scope, cost and timeframe. TARP was conceived to reduce pollution and flooding in the metropolitan Chicago area, and to reduce the harmful effects of flushing raw sewage and other contaminated water into Lake Michigan by diverting storm water and sewage (combined sewer overflow, CSO) into temporary holding reservoirs until it can be pumped to existing plants for treatment. Commissioned in the mid-1970s, the project is managed by the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC). Completion of the system is not anticipated until 2029 though substantial portions of the system have already been opened and are currently operational. The 2019 USSD Conference field tour will visit the Thornton Composite Reservoir (TCR) and McCook Reservoir.

The TCR is located in the former north lobe of the Thornton Quarry and is estimated to provide \$40 million per year in flood damage reduction benefits to 556,000 people in 56 communities. This 7.9 billion gallon capacity CSO reservoir serves the Calumet System south of Chicago and has been in operation since November 2015. A 2,700-ft long and 300-ft high Rock Dam separates the north lobe from the active portion of the quarry and supports Interstate I-80/294, a key highway within the Tri-State region. In the center of the Rock Dam, is a 109-foot-high roller compacted concrete (RCC) gravity dam, called the Gap Dam. The RCC Gap Dam spans a former haul route through the Rock Dam to complete the full height water barrier between TCR and the active main lobe of the quarry. A double-row grout curtain was constructed around the perimeter of the TCR to prevent exfiltration of reservoir waters into the surrounding areas.

McCook Reservoir is being developed in two phases to serve the Mainstream and Des Plaines Systems, approximately 252 square miles of Chicagoland surface area. Phase I was completed at the end of 2017 and Phase II is under construction with mining underway to form the reservoir. The total capacity of the reservoir will be 10 billion gallons and bring an estimated \$90 million per year in flood damage reduction benefits to 3.1 million people in 37 communities.