



McCook Reservoir



McCook Reservoir is located between the Chicago Sanitary and Ship Canal (left) and the Des Plaines River (right).

Tucked under the shadows of the Stevenson Expressway (I-55) and wedged in between the Des Plaines River and Chicago Sanitary and Ship Canal in Bedford Park, Ill., the McCook Reservoir is making a giant imprint across the Chicago area. The McCook Reservoir is being built in two stages by the Metropolitan Water Reclamation District of Greater Chicago (MWRD), as part of its famed Tunnel and Reservoir Plan (TARP), also known as the “Deep Tunnel.” The first stage, designed to contain up to 3.5 billion gallons, was completed in late 2017. The second stage currently being excavated will add another 6.5 billion gallons of capacity for a total of 10 billion gallons, making it the largest reservoir of its kind, passing only the MWRD’s Thornton Composite Reservoir (7.9 billion gallons) in size. McCook Reservoir will be so large that more than 11 Soldier Field stadiums can fit inside it, enough storage to fill 182 million rain barrels that could circle Earth 4.6 times. To make this happen, the MWRD is excavating enough rock to fill the Willis Tower 31 times.

TARP is designed to reduce flooding, improve water quality in Chicago area waterways and protect Lake Michigan from pollution caused by sewer overflows. Serving 3.1 million people living in 37 communities, including central Chicago, the McCook Reservoir covers the largest service

area of any of the MWRD’s TARP reservoirs. Two large-diameter tunnel systems, known as the Mainstream Tunnel System (40.5 miles) and Des Plaines Tunnel System (25.9 miles), feed into the McCook Reservoir. These tunnel systems flow hundreds of feet below ground to serve communities as far north as Kenilworth, northwest to Nilcs, west to Western Springs, and as far south as Hometown and Chicago’s lakefront, all relying on combined sewer systems.

Constructing the McCook Reservoir system

The MWRD adopted TARP in 1972, and the first section of the Mainstream Tunnel was completed in 1985, large enough to store over 1 billion gallons of flow. In 1993, the MWRD completed the middle and south legs of the Des Plaines Tunnel (297 million gallons), followed by the North Branch Tunnel (249 million gallons) in 1998, and the north leg (119 million gallons) of the Des Plaines Tunnel in 1999.

The MWRD is constructing the McCook Reservoir within the lagoons at the MWRD’s Lawndale Avenue Solids Management Area. A project cooperation agreement was signed between the MWRD and U.S. Army Corps of Engineers (USACE) in 1999 outlining that the USACE was

McCook Reservoir

- Capacity: 10 billion gallons (BG)
- Service Area: 258 square miles
- Tunnel Systems: Mainstream and Des Plaines
- Capacity Breakdown: Stage 1 3.5 BG; Stage 2 6.5 BG

Mainstream Tunnel System

- Service Area: 223 square miles
- Tunnels: 1.2 BG capacity, 40.5 miles

Des Plaines Tunnel System

- Service Area: 35 square miles
- Tunnels: 0.4 BG capacity, 25.6 miles

Benefiting Communities:

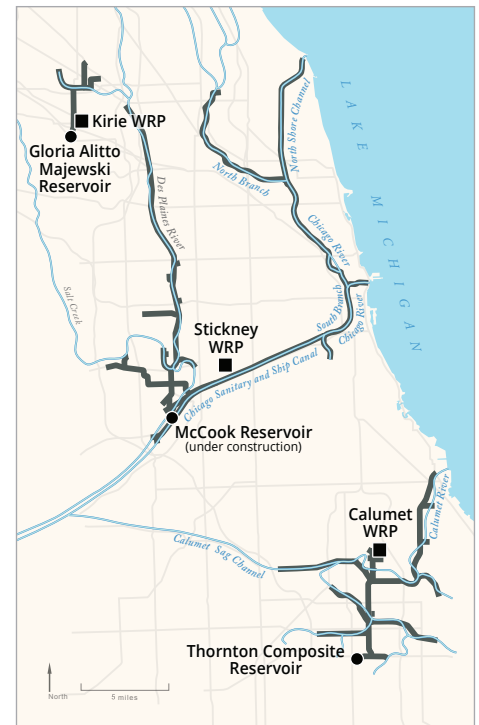
Bedford Park	Lyons
Berwyn	Maywood
Broadview	Melrose Park
Brookfield	Morton Grove
Chicago	Niles
Cicero	Norridge
Des Plaines	North Riverside
Elmwood Park	Oak Park
Evanston	Park Ridge
Forest Park	River Forest
Forest View	River Grove
Franklin Park	Riverside
Golf	Schiller Park
Harwood Heights	Skokie
Hometown	Stickney
Kenilworth	Summit
La Grange	Western Springs
La Grange Park	Wilmette
Lincolnwood	

responsible for designing and constructing reservoir features such as connecting tunnels, retaining walls and a grout curtain around the 3-mile perimeter of the reservoir, keeping water inside the reservoir and groundwater out of the reservoir. The MWRD is responsible for providing the massive hole for the reservoir. In 2003, the MWRD signed an agreement with Vulcan Materials to mine out the limestone. The MWRD procured mining equipment to crush and convey the rock south from the reservoir via an elaborate conveyor belt system that travels below I-55 and the Des Plaines River to the quarry for processing. The MWRD removed 1.8 million cubic yards of dirt in 2015 and used it to build a hilly 11-mile segment of the Centennial Trail. Bikers and hikers can find the trails in the Columbia Woods Forest Preserve, along MWRD-owned property that is leased to the Forest Preserves of Cook County near Willow Springs.

Protecting waterways, providing resilience

Since becoming operational, Stage 1 of the McCook Reservoir captured approximately 126 billion gallons of combined sewage through 2024. Because of TARP, water quality in local waterways has improved with increasingly healthy and diverse fish populations and new demand for recreation and economic development along waterways. Once completed, McCook Reservoir is estimated to provide more than \$175 million per year in flood reduction benefits. TARP was the first system of its kind to address pollution and flooding problems and is now being emulated by cities around the U.S. and the world, in places such as London, Singapore, and Vienna. These are large, costly projects, but McCook in only a few years and one completed stage is providing new evidence that the system is effective and valuable infrastructure.

TARP Tunnels and Reservoirs



How TARP Works

