

Chicago Waterways BOAT TOUR



Metropolitan Water Reclamation District of Greater Chicago



1 LAKE MICHIGAN The MWRD was founded in 1889 to protect Chicago's drinking water supply, Lake Michigan. The first action taken by the newly founded District was to design and build Chicago's canal system. This reversed the flow of the Chicago River, improved trade traffic routes from the East coast to the Mississippi River basin and provided protection for the drinking water supply. The MWRD continues to meet its mission today by operating system interceptors and seven regional wastewater treatment plants.



2 CHICAGO RIVER CONTROLLING WORKS (CRCW) A Supreme Court decree in 1933 ordered the

construction of the Chicago River lock and controlling works, which was completed in 1938. The CRCW was constructed to restrict the flow of water from Lake Michigan and to keep the Chicago River from flowing into the lake. The CRCW is one of three input sources of Lake Michigan water into the Chicago Area Waterways System (CAWS). A discretionary amount of water enters the CAWS through sluice gates to aid navigation and to improve water quality in the CAWS.



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3 CENTENNIAL FOUNTAIN The MWRD

constructed the Nicholas J. Melas Centennial Fountain in 1989 to celebrate 100 years of service to the citizens of Cook County. From May through October, the fountain sends an arc of water across the Chicago River at designated hours, wind conditions permitting, for ten minutes. Designed by Dirk Lohan of Lohan Associates, the fountain also contains a semicircular waterfall and basin. The structure is located at 300 N. McClurg Court. The fountain is named in honor of Nicholas J. Melas, who was first elected to the MWRD Board of Commissioners in November, 1962, was re-elected five times and served as Board President until January 7, 1993.



4 CHICAGO RIVER MAIN STEM The main stem of the Chicago River is not only bustling with kayakers, boaters, fish and wildlife, but the banks of the river are now home to dozens of restaurants, taverns, shops and artwork.

Chicago Sanitary and Ship Canal & South Branch of the Chicago River



8 NUTRIENT RECOVERY

FACILITY In 2016, the MWRD unveiled the world's largest nutrient recovery facility at the Stickney WRP. The facility recovers phosphorus and nitrogen to create a high value fertilizer. The process is economically and environmentally viable, providing significant benefits to the Chicago Area Waterways System and downstream to the Mississippi River and the Gulf of Mexico. With the installation of this facility, we are committed to advancing a long-term, sustainable solution.

5 PING TOM MEMORIAL PARK

Chicago Sanitary and Ship Canal

Ping Tom Memorial Park is a 17 acre public park in Chicago's Chinatown which is owned and operated by the Chicago Park District. Ping Tom Park is located on the south bank of the South Branch of the Chicago River. It features a pagodastyle pavilion, bamboo gardens and a playground. The park is named in honor of a prominent Chinatown businessman and civic leader.

MWRD Biosolids, a nutrient-rich alternative to commercial fertilizers available for communities at no cost, were used as soil amendment before placing sod in portions of Ping Tom Park. Biosolids are a product of the treatment process and are ideal for landscaping projects, recreational facilities, sports fields, parks, agricultural land and public spaces. The benefits of biosolids application include stronger root systems, decreased or eliminated need for expensive chemical fertilizers and increased soil water absorption and retention. MWRD biosolids meet the U.S. EPA's most stringent quality standards for land application.

9 STICKNEY WATER RECLAMATION

PLANT The Stickney Water Reclamation Plant is the largest used water facility in the world. It has the capacity to process 1.4 billion gallons per day. Stickney WRP serves 2.38 million people in a 260 square mile area including Chicago and 43 suburban communities. Stickney consists of two plants; the west side portion of the plant was placed into service in 1930 and the southwest portion of the plant was placed into service in 1939.

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7 SANITARY AND SHIP CANAL The MWRD reversed the flow of the Chicago and Calumet River Systems to stop the discharge of sewage to Lake Michigan and instead, discharge it to the Des Plaines River, where it could be diluted as it flowed into the Illinois River to the Mississippi River. Prior to the MWRD's construction of a 61.3 mile system of canals and waterway improvements, the Chicago and Calumet River Systems were tributary to Lake Michigan. These river systems are now tributary to the Illinois River system. The canal provides important navigational connectivity between Lake Michigan and the Illinois River system which fostered early growth of the region.

Goose Island

LAKE MICHIGAN



Wolf Point

South Branch Chicago River

6 BUBBLY CREEK Bubbly Creek is the nickname given to the South Fork of the Chicago River's South Branch. From 1865 through 1971, the Union stockyards, a meat packing industry, used Bubbly Creek as a dumping ground. As a matter of routine, workers tossed animal carcasses, grease and other remnants into the creek. It became so polluted that it bubbles methane and hydrogen sulfide gases which escape from byproducts of the decomposing materials that were present underneath the surface. Even though the stockyards closed 40 years ago, significant pollutants remain. The MWRD has conducted research to explore the impacts of the pollutants along with developing a model for further studies on area waterways so we can learn what processes are needed to make improvements. The good news is that we are making headway in reversing the effects of Bubbly Creek's troubled history.