

Water WONDERS

Ever wonder where exactly your water comes from when you turn on the tap or think about how it is made safe for you to drink? This new section will provide you with some insider knowledge that you can use to impress your friends. This quarter we will cover the Chicago facilities that will eventually provide water to the Grand Prairie Water Commission (GPWC).



**68th Street/
Dunne Intake
Crib and
Tunnel**

The GPWC is being formed to bring Lake Michigan water purchased from Chicago to its member communities. But how will Chicago collect, treat, and convey water to the Commission?



**Sawyer
Purification
Plant**

Chicago operates two water purification plants where Lake Michigan water is treated for distribution to more than 5 million people in northeastern Illinois. Water for the GPWC will be collected from Lake Michigan at the 68th Street/Dunne Intake Crib located more than 2 miles out in the lake and conveyed through a 14-foot diameter tunnel beneath the lake bottom to the Sawyer Water Purification Plant (WPP). At the Sawyer WPP, the water passes through traveling screens before beginning a complex process of purification. Chemicals are added as the water moves through mixing basins to start the process of “flocculation” and help small particles bind together so they can be effectively removed in settling basins and a large gallery of graded sand and gravel filters. Filtered water is then disinfected before it flows into the City’s South Tunnel System. The Sawyer WPP can currently treat up to 720 million gallons of water per day.

Chicago treats its water to exceed the standards for safe, high-quality drinking water required by the US Environmental Protection Agency, the Illinois Department of Environmental Protection, and the Illinois Department of Public Health. Water quality is monitored by staff in the City’s laboratory 24 hours a day, 365 days a year to confirm that the City’s targets for water quality are being met or exceeded.



**South Tunnel
Zone Water
Tunnels**

Flocculation is a process where individual particles form into small lumps as a result of a chemical reaction between the particles and another substance.

Chicago’s South Tunnel system is a network of tunnels up to 16-feet in diameter constructed in rock about 150 feet below ground. The tunnels convey treated water from the Sawyer WPP to multiple pumping stations located across the southern part of the City. To serve the GPWC, Chicago will construct a new connection to the tunnel system near 84th Street and Kedvale. The GPWC will construct additional tunnel, storage, and pumping facilities to lift the water from the tunnel and pump it toward the member communities. More information on the GPWC facilities will be covered in a future newsletter.

Allocations Secured!

In order to use water from Lake Michigan, a community in northeastern Illinois must obtain a Lake Michigan water allocation from the Illinois Department of Natural Resources (IDNR). The IDNR manages Illinois' withdrawal of water from Lake Michigan, and is responsible for ensuring that this precious resource is used efficiently and in compliance with Supreme Court decisions and the Level of Lake Michigan Act.

As part of the allocation application process, communities are required to create plans to manage water loss in their systems. These plans may include replacing old water lines and confirming all water connections are being properly metered and billed.

As of February 9, 2024, Crest Hill, Channahon, Joliet, Minooka, Romeoville, and Shorewood all had final allocation orders approved. With these allocations secured, the communities are positioned to proceed with formation of the Grand Prairie Water Commission later this Spring.

As part of
the allocation
process, communities
are required to
**MANAGE WATER
LOSS.**



CONSERVATION
CORNER

APRIL
showers
BRING MAY FLOWERS

Consider installing a rain barrel to catch all that free water! A rain barrel can provide irrigation water for your flower beds and trees as we go into the hot summer months.



Community SPOTLIGHT JOLIET

In an effort to empower its water customers, the City of Joliet introduced an on-line Customer Water Portal in 2023. Using the Portal, residents can monitor their water usage in near-real time and set alerts for high or unusual usage.

Roll out of the portal coincides with City efforts to standardize and upgrade its water meters. The new water meters register in smaller increments and provide for more accurate tracking of water use in addition to providing near-real time data.

The Portal is easy to use, and a video is available [here](#) to help individuals get their account set up. Customers using the system have provided positive feedback and are happy to have a tool to help them conserve water.

Joliet offers other opportunities to help residents conserve including a rain barrel program, low flow toilet rebate, and a quarterly conservation challenge. To learn more visit www.RethinkWaterJoliet.org.