In the early days, the Chicago River was very pure. It naturally cleaned itself as it flowed toward Lake Michigan. The river was used for traveling and sometimes for drinking. By 1796, the first permanent settler of the area, Jean Baptiste Pointe DuSable, used the river to trade fur pelt.
Throughout the 1800s, many people came to Chicago. They were not careful about what they put into the water. The city's sewers emptied dirty water directly into the Chicago River. There was no dirty water treatment yet in the United States.
The city’s waterways were getting very dirty. Water from the river that flowed into Lake Michigan became very foul. Drinking water from the lake made some people sick. In 1889, the state government created the Sanitary District of Chicago. Its single job was to make sure that the lake stayed clean.
In 1900, the District reversed the flow of the Chicago River away from the lake by digging a canal deeper and wider than the Chicago River. This made the lake water safer to drink. The District built two more canals, one to keep the North Branch clean and the other to reverse the flow of the Calumet River.
The city kept growing, creating more and more wastewater. To clean the river water, the District built large sewers to carry dirty water to a treatment plant. There, the dirty water was made clean.
Every time you turn on the faucet or flush your toilet, the water goes down the drain into a local sewer. The water then goes to an intercepting sewer, where it travels to the District’s treatment plants. The first plant was built in the 1920s.
Today, the Metropolitan Water Reclamation District has seven treatment plants called water reclamation plants. The polluted water from homes, factories and businesses is sent to the plants, treated and released clean into the waterways.
The water reclamation plants imitate the way a river cleans itself, but work much faster. Eventually, the District started treating the dirty water for most of Cook County.
Cities and towns grew around the Chicago area. More streets, homes and factories took space away from natural wetlands. Rainwater also had fewer places to flow. Flooding often happened. Sometimes to prevent flooding, polluted water was sent into the lake. By 1976, the District started the Tunnel and Reservoir Plan (TARP) to solve this problem. TARP has more than 109 miles of huge tunnels that are as deep as 350 feet below ground. It also has reservoirs, or manmade lakes. TARP keeps dirty water from entering waterways, the lake and basements.
When water is treated, the solid materials are separated out and dried. This substance is called biosolids. It is safe and often rich in minerals. It can be used to fertilize farm fields, to cover landfills, and even as soil to build entire golf courses! District scientists always are working to find new ways to use the biosolids.
To improve water quality along one of its canals, the Calumet-Sag Channel, the District built five waterfalls. These are called Sidestream Elevated Pool Aeration (SEPA) Stations. As water flows over the falls, it mixes with air, making dissolved oxygen. This natural mixture helps water to clean itself. The waterfalls also provide nice places for people to visit.
People enjoy the waterways for boating and fishing because of the District's work. Rivers and channels, that used to have very few fish, now have at least 70 different types! Water reclamation, TARP and the waterfalls all have produced cleaner waterways.
The District has grown with the Chicago area. Today, the District covers 883 square miles across the city and suburbs. The District includes many places we all know, and handles the stormwater for all of the areas on the map.
The District does all these things and more to protect our environment.

- Uses prairie flowers and vegetation at its facilities to help water drain naturally
- Uses porous pavement at some facilities to keep rainwater where it falls
- Restores natural plantings along rivers to help control erosion and runoff
- Removes debris from rivers, channels and streams
- Monitors all of the waterways for unsafe dumping or chemical imbalances
- Works with other environmental organizations to keep the waterways and surrounding areas in good condition

Fill in the blanks to show how you can help our environment.

<table>
<thead>
<tr>
<th>rain barrel</th>
<th>full</th>
<th>trash</th>
</tr>
</thead>
<tbody>
<tr>
<td>turn off the water</td>
<td>native flowers and plants</td>
<td>large bin or bowl</td>
</tr>
<tr>
<td>dripping water</td>
<td>call 1-800-332-DUMP</td>
<td>ten minutes</td>
</tr>
</tbody>
</table>

While brushing your teeth or washing your face, you should _____________________.

Prevent erosion in your yard by planting _____________________________.

When not in use, make sure your faucets aren't _________________________.

The longest time you should spend taking a shower is _________________________.

Wash vegetables and dishes in a ___________________________ to save water.

Make sure the washing machine and dishwasher are ___________________ before someone runs them.

When you go to a beach or a lake, do not leave _________________________ behind.

You can water plants without turning on your faucet by using a ________________.

If you see someone putting something into the water that doesn't belong there, you should _________________________.

This book was printed on recycled paper using soy-based ink.
Board of Commissioners

Kari K. Steele, President
Barbara J. McGowan, Vice President
Marcelino Garcia, Chairman of Finance

Cameron Davis
Kimberly Du Buclet
Josina Morita
Eira L. Corral Sepúlveda
Debra Shore
Mariyana T. Spyropoulos

Brian A. Perkovich, Executive Director

For additional instructional materials, speakers or tours, please call: 312-751-6633, or visit our website: www.mwrd.org.

Metropolitan Water Reclamation District of Greater Chicago