

Central Brown County Water Authority

Fun Facts

- The complete system is 65-miles long which includes the 48-inch mainline and the distribution system which carries the water to each of the six member communities.
- On average, 3 billion gallons of water flow through the system annually.
- Total capacity of the system is 54 million gallons per day through the main 48-inch distribution line.
- Water is drawn from Lake Michigan and then treated by Manitowoc Public Utilities (MPU).
- Manitowoc Public Utilities uses a process called microfiltration to purify the water. This is a similar system to what is used on NASA's space shuttles.
- MPU can treat 20 million gallons of water each day for the Authority. Additional capacity can be added as the need grows among the communities and/or if additional communities join the Authority.
- During construction, the Fox River and the Manitowoc River were tunneled under.
- To cross the Fox and Manitowoc Rivers, a 96-inch diameter tunnel was drilled under each river.
- The Fox River crossing is 800 feet long.
- The Manitowoc River crossing is 400 feet long and required a similar tunnel boring technique as the Fox River.
- The system provides drinking water to six communities including Allouez, De Pere, Bellevue, Howard, Lawrence and Ledgeview.
- Average water consumption among the communities for 2009 is estimated at:
 - Allouez: 465,000 gallons per day
 - Bellevue: 470,000 gallons per day
 - De Pere: 890,000 gallons per day
 - Howard: 675,000 gallons per day
 - Lawrence: 70,000 gallons per day
 - Ledgeview: 170,000 gallons per day

- Construction of the 48-inch pipeline used more than 13,000 tons of steel.
- Since the six communities stopped using the St. Peters Aquifer, other communities are reporting that the aquifer water level has risen by as much as 100 feet or more.
- The cost for 1,000 gallons of Authority water is \$3.30. One bottled water cost approximately \$1.50 for 20 ounces. The cost of buying 1,000 gallons of bottled water would be \$9,600.
- The 48-inch mainline is pressurized to 160 pounds per square inch to transport the water from Manitowoc to the start of the spoke system in Ledgeview. The spoke system is comprised of smaller diameter pipe that carries the water from the mainline valve to each of the member communities. Pressure reducing valves are utilized to reduce the pressure as the water enters the spoke system.