

Maintaining and Responding

City of Dayton Water's preparedness helped the city bounce back after 2019's tornadoes

BY KEVIN MICHELL

When tornadoes shredded the Dayton area on May 27, 2019, power to the city's water plants and pump stations was knocked out, severing access to drinkable water to a vast number of the area's residents. As city officials put it, it presented City of Dayton Water with one of its greatest challenges ever.

But the 150-year-old municipal utility management organization had the right plans and tools in place for this worst-case scenario. The Ohio Water/Wastewater Response Network was activated providing emergency equipment and staffing for response. Dayton Water located and placed eight water tankers throughout Montgomery County to fight fires caused by the tornadoes' destruction. Through the response and recovery efforts the department drew upon its disaster planning and simulation practice to act swiftly.

"The Department of Water has annual emergency exercises," says Keshia Kinney, division manager at Dayton Water. "For the Memorial Day disaster water staff assumed the National Incident Management System/ Incident Command structure practiced during emergency exercise... [which] allows for sound communications and enabled staff to develop a clear operational plan."

Despite both the Ottawa and Miami Treatment Plants—the two redundant plants that provide drinking water to the city—losing power within 37 minutes of each other and extensive damage to infrastructure power was restored to the former in just over a day, a turnaround that was



hailed by the Ohio EPA and USI Insurance.

"We plan for the unthinkable, practice how to respond and exceed best practices across the water industry for backup power to our water plants," the department says in a statement.

Entering its 150th year of operations, City of Dayton Water has plenty of experience with handling the demands of ensuring a reliable water supply. The Ottawa and Miami plants can each support the entire water system on their own and have similarly redundant electrical supplies to allow for continued operation or quick recovery in case of sudden problems. The department's communications staff works to quickly inform residents of outages, boil advisories and restored service.

Looking ahead, Dayton Water is continuing to improve its infrastructure and replace pipes before problems can arise. Kinney says annual evaluations—such as

TOP: Lorrie Brown, a water supply and treatment operations administrator for the City of Dayton, speaks at an annual emergency preparedness exercise discussion. **ABOVE:** The City of Dayton Water's Miami Plant.

purchasing portable generators and testing the voltage of main electrical feeds—as well as cross training of staff for extended emergency response will be conducted.

"People are the greatest resource during an emergency," she says. "By cross-training staff Dayton can continue to respond at a high level without overtasking a limited resource."

Even with its investment in maintenance and improvements the cost to residents of water and sewer service for an average consumption of 22,500 gallons over a three-month period—according to an annual study from the City of Oakwood—was \$172.06, the third lowest of 66 jurisdictions surveyed in southwest Ohio. ■