Info About PFAS and Drinking Water

Is my water safe?

Yes! As a preventative measure and to ensure the quality of its water, the City maintains an early warning, state-of-the-art monitor system designed to alert its team of highly qualified scientists and water professionals to potential risks before drinking water is impacted. The City routinely tests its drinking water and the latest tests show PFAS present in its water at levels of 7-18 parts per trillion, significantly lower than the U.S. Environmental Protection Agency's health advisory limit of 70 parts per trillion. To put this in context, 1 part per trillion represents a grain of sand in an Olympic-sized swimming pool. The City will continue to use the latest available technology to proactively monitor and safeguard our drinking water in coordination with the Ohio Environmental Protection Agency.

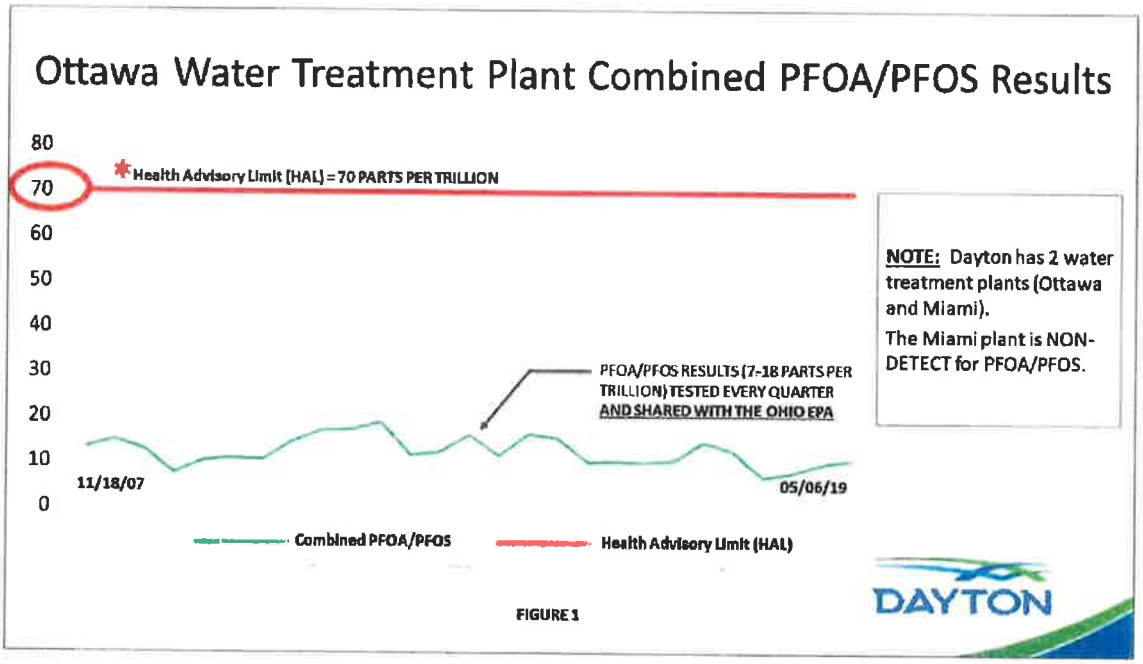


FIGURE 1

Is there a way to fix this? What are you doing about PFAS? What are next steps?

Yes, the migration of the PFAS-tainted groundwater can be reduced, and even stopped. This can be accomplished by installing gradient control wells near potential sources to draw any contaminated water back toward the source.

The City also is investigating other technology to treat its water supply for these contaminants prior to being distributed to customers. This includes researching processes to remove PFAS from the aquifer as well as at the water treatment plants.

How does the testing work and how long does it take?

U.S. EPA has developed testing protocols and we have worked closely with Ohio EPA to ensure we are following those procedures, so that samples are collected without introducing external contaminants (such as sunscreen, cleaning products, bug spray, food packaging, etc.). These samples are sent to an independent certified laboratory for analysis. Results are generally available in 6-8 weeks. These results are then shared with the EPA and key stakeholders.

Why aren't you telling Montgomery County about your test results?

We have and will continue working and communicating with our wholesale and retail customers across the region, including the County. We have had numerous contacts with County environmental services personnel about our PFAS testing and remediation efforts, including correspondence from October, November and December of 2018. We also met with County personnel about PFAS in December and sent updated data to them in February 2019. And, as recent as this month, we provided the County with all PFAS data submitted to the Ohio EPA. In fact, the City, Ohio EPA and key stakeholders meet on a monthly and quarterly basis to work on sampling, testing and monitoring PFAS and figuring out how to contain PFAS migration, and we share this information with our customers, which includes the County.

Why shouldn't Montgomery County also test for PFAS – doesn't that just make the water safer?

Testing can and should be used to identify and quantify PFAS levels. The test results provided from the City are representative of the water quality in the system. It is our hope that any testing for PFAS is done in accordance with U.S. EPA approved methods. These methods have been developed for site specific sampling locations using approved regulatory sampling procedures.

Will it cost City of Dayton residents more if the County also tests?

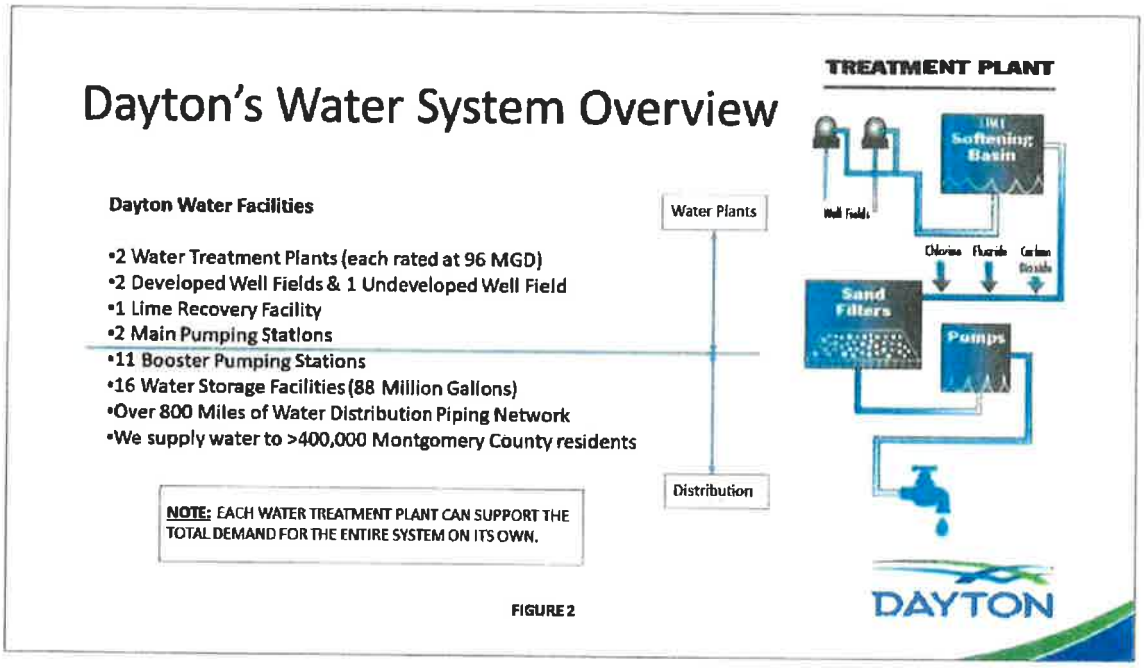
The cost of testing performed by Montgomery County in its system will likely be borne by its customers, not City of Dayton residents.

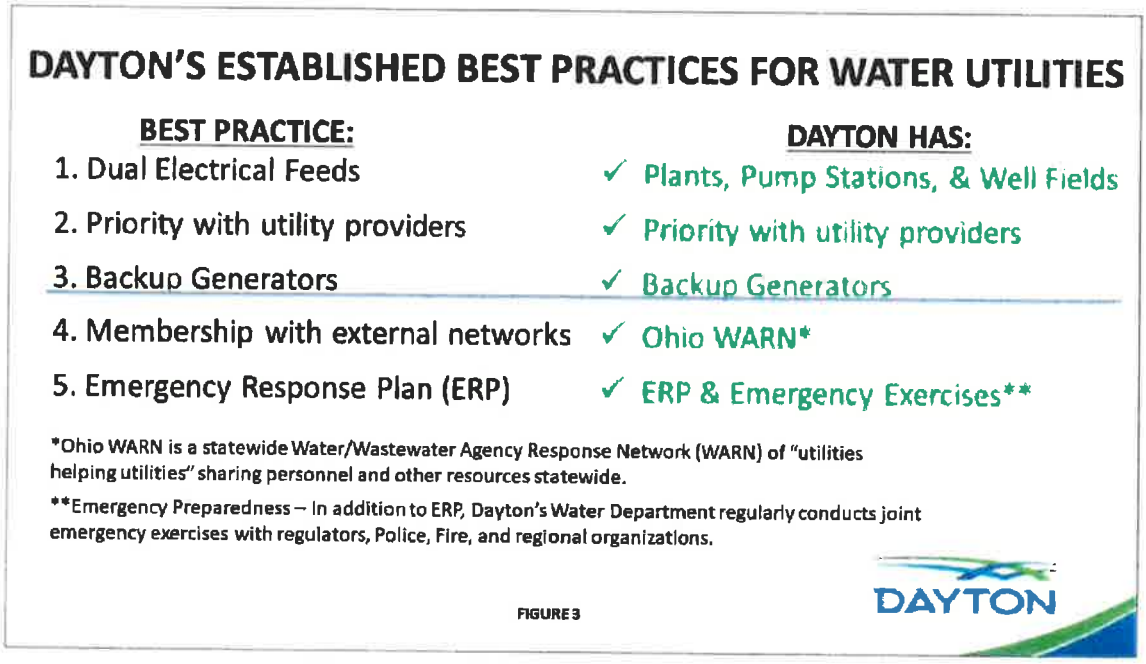
The County says the City has denied requests for more information about PFAS. Why would you do that?

This simply is not true. The City continues to work with our wholesale and retail customers across the region, including the County. We have had numerous contacts with County Environmental Services personnel about our PFAS testing, including correspondence from October, November and December of 2018. We also met with county personnel about PFAS in December and sent updated data to them in February 2019. And, as recent as June 2019, we provided the county with all PFAS data submitted to the Ohio EPA. In fact, the City, Ohio EPA and key stakeholders meet on a monthly and quarterly basis to work on sampling, testing and monitoring PFAS and figuring out how to contain PFAS migration, and we share this information with our customers, which includes the County.

Is Dayton water really prepared for an emergency, like the tornadoes we recently experienced?

Absolutely. Each treatment facility has Emergency Response Plans (ERP) to address these and other types of emergencies. The EPA requires that each facility have a documented ERP that's updated annually. In addition, the City of Dayton Department of Water conducts annual Emergency Exercises for these and other types of emergencies. These exercises have included community partners such as Public Health Dayton-Montgomery County, Ohio EPA, businesses, universities, and other City departments including Public Works, Police and Fire. Case studies of actual events from other water utilities are used to test the capabilities of our water system and evaluate our response under similar conditions. In addition to actual events, we to test the system's resilience with simulations including, for example: manmade disasters, natural disasters, cyber-terrorism, etc. The lessons learned from these exercises are used to improve operations.





What is redundancy and how does redundancy work?

Redundancy refers to duplicate systems that minimize potential service interruptions to our customers. For example, a solely independent back-up source of electricity would be a redundancy if the loss of electricity from the main source shut down a water plant.

The City of Dayton has built in redundancy in its water system including:

- Two (2) separate water treatment plants. Each treatment plant has an independent pump station that can support the entire system's demand. It should be noted that each plant independently has the capacity to meet the region's current need.
- Two (2) independently operated well fields that have sufficient capacity to operate fully. For instance, the City has over 100 drinking water wells with less than half being utilized at any one time. And the City has an undeveloped well field for redundancy, if needed.
- Primary and secondary electrical feeds to each plant, pump station and well field. We also have backup generators that can be deployed to strategic locations during an emergency, if needed.

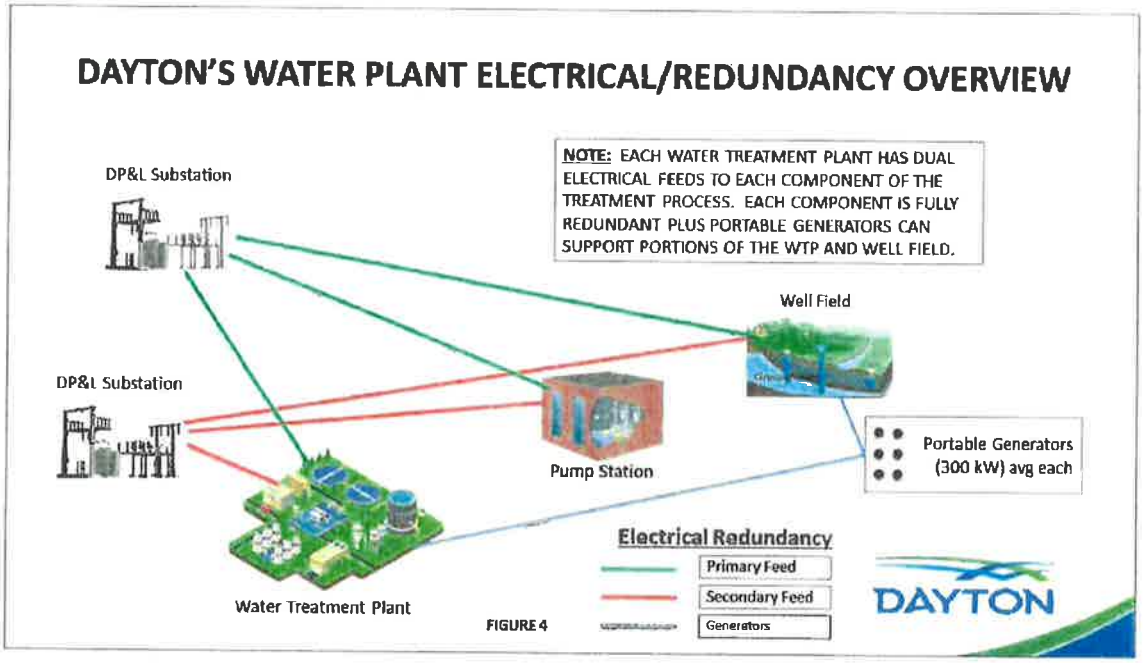


FIGURE 4

What's the cost to me to increase redundancy? And why don't we buy more generators that could run the whole system if needed, not just ones to be placed at strategic locations?

Our current rate structure supports the current level of redundancy in Dayton's water system. The City of Dayton has continuously invested in redundancy by maintaining two water treatment plants with dual electric feeds. Based on the level of redundancy currently built into the Dayton system, it does not make sense-to add more backup systems, such as backup generators to power the entire system. For example, we would need six or seven generators the size of train engines at each of the two plants to fully backup our system. While that is physically doable, it would cost you, our customers, around $45.2 million. That would equate to about another 2%, in addition to the required annual rate increases being added to your City of Dayton water bill, for something, quite frankly, we do not need. **[See Figure # 4 above]**

You say we don't need even more generators for the water plants because these emergencies are so rare. But we've had two in the last few months. So, are they really rare?

Yes. Since 1954 – 65 years – the City has had only two service disruptions, including a system-wide boil advisory. Both happened this year.

Why can't the City and County work together on these problems?

We do work with Montgomery County. In fact, the City of Dayton has five work groups in coordination with Montgomery County. These work groups meet regularly in accordance with the terms of our contract to discuss a wide range of water system topics, and they annually report progress to the County Administrator and City Manager.

What is SCADA?

Supervisory Control And Data Acquisition (SCADA) is a system of software and hardware that allows us to:

- Control water treatment and well field processes locally or at remote locations
- Monitor, gather, and process real-time data from devices such as sensors, valves, pumps, motors, etc.
- Maintain a record of events

SCADA systems are crucial for our water treatment plants since they help to maintain efficiency, process data for smarter decisions, and communicate system status to help minimize process disruptions.

Was the City really prepared to fight a fire when the water supply was down from the tornado?

Yes. Four water tankers were brought in and strategically located throughout the region to provide a water supply for crews as needed during fire suppression activities. Each of these water tankers carried 3,500 gallons of water that complemented the 500-750 gallons of water carried on each fire engine. Additionally, we added staff and equipped two fire engines with the tools and appliances necessary to draw from water sources, such as ponds, rivers and lakes. When dispatching for emergency calls, the Regional Dispatch Center would include requests for any of these additional resources needed for each response.