Tuppers Plains-Chester Water District

2020 Water Quality

www.tpcwd.org | Consumer Confidence Report | July, 2021

Facts and Figures

- The Water District was first created by the Orange Township Trustees on December 31, 1966. Our first water service was installed in 1969.
- Robert Marcinko, Oscar Pennington, & Cecil Caldwell were the Township Trustees. The original water board Trustees for the Water District were Lindsey L. Lyons, Jr., Carl J. Barnhill, Eldon Gaul, Delmar Baum, and Harold Blackston.
- We serve a population of about 14,000 people with just below 600 miles of water line installed to 5503 homes.
- 21 water tanks with a total capacity of over three million gallons.
- 6 water wells with an average production of 1,230,000 gallons per day. We are currently completing the installation of a 7th well to insure we keep up with demand.
- Our Treatment Facility has a maximum capacity 0f 2.4 million gallons per day.
- Our treatment process removes C-8 as well as the other "forever chemicals", Iron, Manganese, and some hardness from the water and adds fluoride. Chlorine is used to disinfect the water so it is free of bacteria when it reaches the customer.
- Our type of treatment requires a Class I Treatment Operator. Our District has five Class I Ohio EPA Licensed operators. One employee has a Class I Distribution License. We also have ten employees certified to protect against backflow.
- Our water mains are made from: Ductile Iron, Cement Asbestos, PVC and High Density Poly Ethylene (HDPE).
- The Source of your drinking water is from six wells in Long Bottom. The Treatment Plant is located on Sand Hill Cemetery Road. Across SR 124 from the well field. Our water is drawn from the Ohio Valley Aquifer.

Billing Changeover

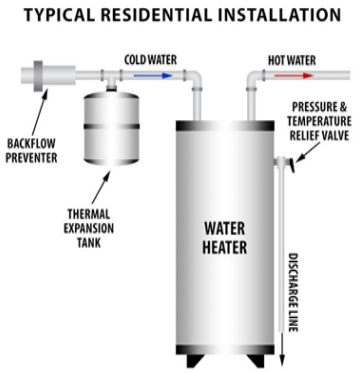
The District is currently switching billing computer systems. This will result in a switch for the online bill pay system as well from Invoice Cloud to Nexbillpay. In June we will be completing the changeover. The website will be updated with new links for the new system. We are sure there will be some snags along the way so please work with us to get through the issues. The new system should result in less confusion and a smoother bill paying experience for our customers. The District thanks you for your patience and understanding in working through this process.

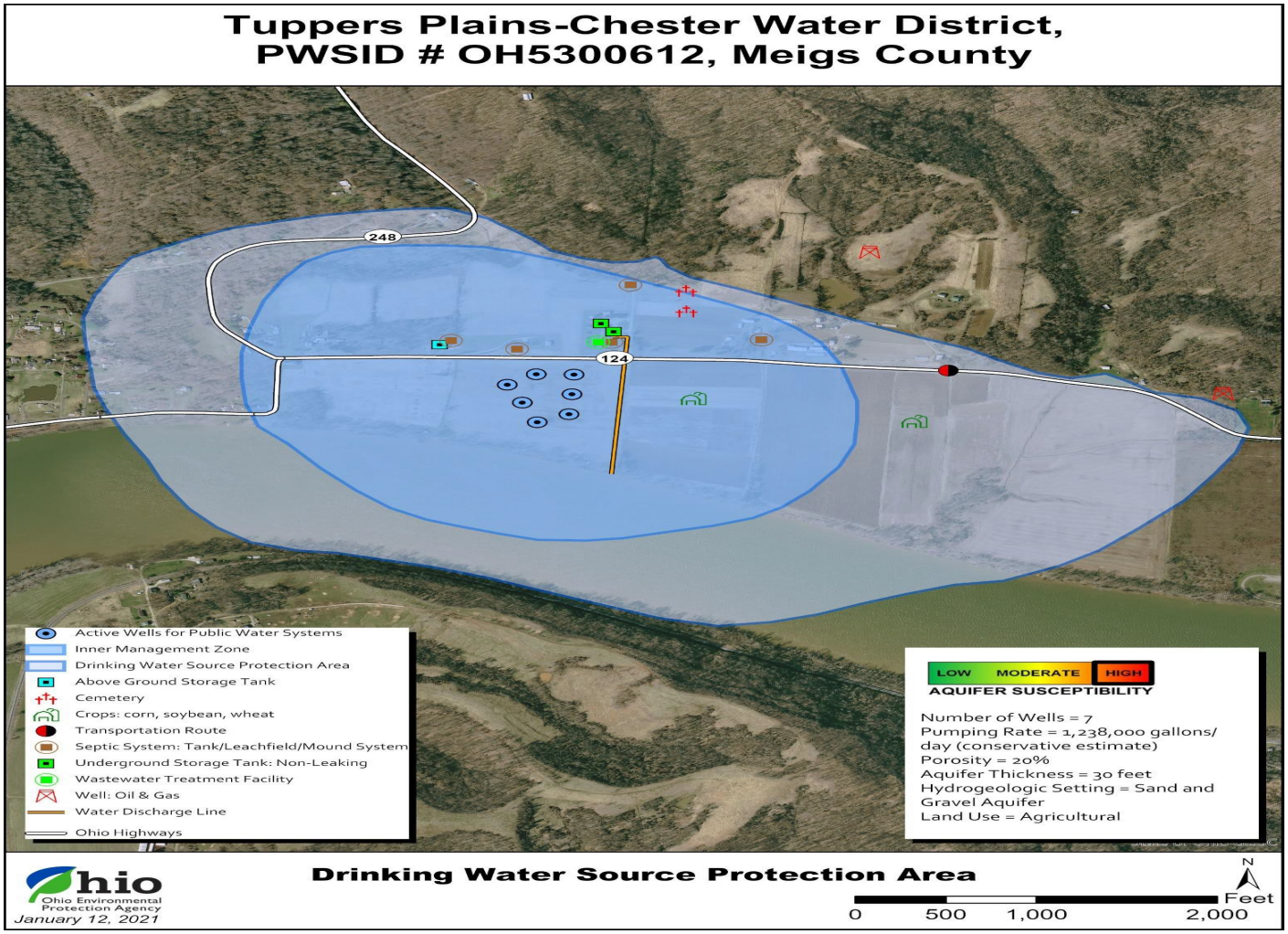
Hot Water Heater Calcium Buildup

The water that leaves our treatment plant after the softening process has between 110 and 150 mg/L hardness from calcium. This places our water in the moderate range for hardness. Although we remove some hardness from the water there is still calcium left in the water that can buildup in your plumbing. This occurs mainly in the hot water tank, but if let go long enough it can become an issue at fixtures and inside of your plumbing. Calcium will either be found as a sticky gel type material or as hard white to yellow chunks. It can even end up on the cold side of plumbing if the pressure on the cold inlet to the hot water heater becomes lower than the pressure on the hot water side. We recommend flushing your hot water heater every six to twelve months to remove the calcium and eliminate issues with its buildup. This calcium is not harmful it just can become a nuisance if let go for too long.

Thermal Expansion is doing Harm to our Customers Homes

Thermal expansion tanks help to control pressure build-up in closed, hot water systems. The problem has become such an issue that the District has changed its policy on new services that during the inspection the water will not be turned on until this device is installed. This prevents the water heater pressure relief valve from opening, saving energy and eliminating a potential safety hazard. The tank helps prevent dripping faucets and wasted energy; puddles of water at the base of the water heater from pressure relief valve discharge; water heater damage from frequent water pressure build-up; dishwasher and washing machine solenoid damage; toilet valve running intermittently and noisy water hammer. Every home in America is required to have this, but even many new homes in our area are not getting them installed, talk to your builder and plumber.





What is Drinking Water Source Protection?

Drinking Water Source Protection is a plan of action for protecting the water you drink from contamination, at the source. To assist the Tuppers Plains-Chester Water District with our drinking water source protection efforts, Ohio EPA provided the district with a Drinking Water Source Assessment report. The Source Water Assessment Report determined that the TPCWD aquifer has a high susceptibility to contamination. This report included a map of the protection area (see above), based on calculations of how far water travels through the aquifer in five years. The report also includes information on land uses and facilities that may pose a contamination risk to the drinking water source. Potential risks are based on proximity to the drinking water source and the kinds/quantities of chemicals that are typically handled by these types of facilities.

The Tuppers Plains-Chester Water District has used the provided assessment to develop a drinking water source protection plan. If you would like to be more involved with the district's drinking water protection efforts or if you would like to see a copy of the district's drinking water source protection plan, please contact the Tuppers Plains-Chester Water's office at (740) 985-3315.

Sources of Water Contamination

Drinking water, including bottled water, may be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both tap water and bottled water) include rivers, streams, lakes, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and in some cases radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Microbial contaminants, such as viruses and bacteria, may come from sewage treatment, plants, septic systems, agricultural livestock operations, and wildlife. Inorganic contaminants, such as salts and metals, can be naturally occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming. Pesticides and herbicides, may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses. Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic tanks. Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, the EPA introduces regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection from public health.

We have a current, unconditional license to operate our water system.

About your drinking water

The EPA requires routine sampling to ensure drinking water safety. The Tuppers Plains-Chester Water District conducted sampling for Bacteria, Chlorine, Hardness, Fluoride, Nitrates, synthetic organic chemicals (SOCs), Iron, Manganese, lead, copper, Sodium, Total Haloacetic Acids (HAA5's), and Total Trihalomethanes (TTHM's) in 2019. The Ohio E.P.A. requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants remain below the MCL for an EPA determined amount of time. Some of our data, though accurate, is more than one year old.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Radiological							
Bacteriological							
Total Coliform Bacteria	0	2 or more in a month	0	0	NO	2020	May come from sewage treatment plants, septic systems, agricultural livestock, and wildlife
Inorganic Contaminants							
Nitrate (ppm)	10 mg/l (ppm)	10 mg/l (ppm)	2.18 mg/l (ppm)	N/A	NO	2020	Runoff from fertilizer use; erosion of natural deposits
Fluoride (ppm)	4.0 mg/l (ppm)	4.0 mg/l (ppm)	.90 mg/l (ppm)	.20-1.31 mg/l (ppm)	NO	2020	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Barium (ppm)	2.0 mg/l (ppm)	2.0 mg/l (ppm)	.0553 mg/l (ppm)	N/A	NO	2018	Mineral deposits, drilling waste
Volatile Organic Contaminants							
Residual Disinfectants							
Total Chlorine	0	4	1.25	0.83-1.65	NO	2020	Disinfection
TTHM'S Total Trihalomethanes (ppb)	None	.080 mg/l (ppm)	.0130 mg/l (ppm)	N/A	NO	2020	By-products of drinking water chlorination
Lead and Copper							
Contaminants (units)	Action Level	Individual Results over the AL	90% of test levels were less than		Violation	Year Sampled	Typical Source of Contaminants
Lead (ppb)	.015 ppm	0	.005 ppm		NO	2020	Corrosion of household plumbing systems; Erosion of natural deposits
0 out of 30 samples were found to have lead levels in excess of the lead action level of 15 ppb.							
Copper (ppm)	1.3 ppm	0	.100 ppm		NO	2020	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
0 out of 30 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.							

Violation: The district received a violation for failing to monitor for disinfection byproducts during the 2020 monitoring period. This was due to confusion around the UCMR 4 samples that were collected and had a portion of the disinfection byproduct data included, but could not be excepted by the Ohio EPA. The correct samples were taken on 12/18/20 and the results are above for TTHMs. All samples were well below the maximum contaminant levels.

Definitions of Terms

1. **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
2. **Maximum Contaminant level (MCL):** The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
3. **Parts per Million (ppm) or Milligrams per Liter (mg/L)** are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.
4. **Parts per Billion (ppb) or Micrograms per Liter (µg/L)** are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
5. **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
6. **The '<' symbol:** This symbol means less than. A result of <5 means that is the lowest level that could be detected. was 5 and the contaminant in that sample was not detected.

UCMR 4

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. In 2020 Tuppers Plains-Chester Water District participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR 4). For a copy of the results please call Derek Baum at 740-985-3315.

Table of Unregulated Contaminants				
Contaminants (Units)	Sample Year	Average Level Found	Range of Detections	Sample Location
Haloacetic Acids (HAA5) (ppb)	2020	3.75	3.66-3.90	Distribution
Haloacetic Acids (HAA9) (ppb)	2020	7.385	7.21-7.56	Distribution
Haloacetic Acids (HAA6BR) (ppb)	2020	5.865	5.59-6.14	Distribution
Total Organic Carbon (ppb)	2020	644	644	Raw
Bromide(ppb)	2020	22.3	22.3	Raw

Who needs to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infection. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the **Safe Drinking Water Hotline (1-800-426-4791)**

Public Participation

Public participation and comments are encouraged at regular meetings of the Board of Directors, which meets the second Monday of each month at 7:30 p.m. at the District's main office. We are located on SR 7 three miles south of the caution light in Tuppers Plains.

For more information

If you have any questions regarding this report, or any other matter regarding our drinking water, you may contact Derek Baum, General Manager at 1-740-985-3315

PWS #5300612

CALL BEFORE YOU DIG. Remember to call your local underground locating service at least 48 hours in advance.

The call is free! Ohio (800)-362-2764

Electronic Bill Pay (aka ACH)

For several years we have offered ACH to our customers, to sign-up for this process, an application must be completed and returned to our office. This service is free if completed in office. If you sign up online through invoice cloud there is a fee of $1.95 per transaction.

Leak Insurance

Another service the District offers is Leak Insurance. This covers excess water usage due to leaks from the meter to and including in your home. The cost is $25.00 for the year and it covers up to $500.00 in one or several leaks. This coverage begins each year on July 1st and covers you to the end of June the following year.

Online Bill Pay

is also available on our website at **www.tpcwd.org ($1.95 Fee per transaction)**

Or pay by phone: 855-579-7890 ($2.90 Fee per transaction)

Lead Educational Information

"If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children lead in drinking water is primarily from materials and components associated with service lines and home plumbing. TPCWD is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. If desired the testing costs about $50. The District is required to sample 30 homes each year. The 2020 sampling did not indicate any copper or lead issues. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at **"http://www.epa.gov/safewater/lead."**

Backflow Prevention

Our efforts to prevent backflow of water from each metered water service is still on going. Each new customer is required to have an inspection of their plumbing from our personnel before the water will be turned on. We have to see a backflow prevention device (aka double check valve) installed at each home and a clear separation of another water supply (well or spring) if it exists on the property.

The process of checking existing commercial customers, notifying them of what will be required, and performing inspections is ongoing. All commercial operations are required to install a backflow prevention device and are required to have yearly inspections of their equipment by a qualified person. The Water District will perform the first on site inspection to advise the customer what type of device is needed, but the landowner will be required to purchase, install, and maintain the device as per Ohio Law. The backflow prevention program is important to help protect the water system users from hazards and is mandated by the EPA. The district appreciates the understanding and assistance in completing the implementation of the program.