2019 Annual Drinking Water Quality Report
Bedford Township Municipal Authority

As your public drinking water supplier (Public Water Supply ID Number 4050037), the Bedford Township Municipal Authority (BTMA) is pleased to present to you our Consumer Confidence Report for the 2019 operating year. This report provides you with information about the quality of water and the services we deliver to you every day. We constantly strive to provide you with a safe and dependable supply of drinking water. We want you to understand the constant effort we make to continually protect our water sources and improve the quality of water supplied to you. We are committed to ensuring the quality and consistency of your water.

SOURCES: Three separate groundwater sources, consisting of a total of five production wells, make up the public water supply that is owned and operated by the BTMA. The first source is located in the Chalybeate area of Bedford Township and consists of two wells known as the Bowman Tract Wells. Construction of these wells was completed in May 2000. The second source is situated in the Bedford Springs area and consists of one well referred to as the Bedford Springs or "Hotel" Well. This well was placed into operation in mid-2007. Development of a third new source was completed in and placed into operation in late 2009. The third source consists of two wells known as the Shaffer Tract wells. These wells are located in the Belden (Camp Shaffer) area of the Township. The BTMA developed this additional source to ensure an adequate supply for its current customers, to provide for continuing growth that is being experienced within the Township and to provide an alternative source of supply in the event of an emergency, a supply problem, or down time during system maintenance within one of its other sources. The BTMA is also in the process of developing an additional supply well in the Bedford Springs area to provide a supplemental backup source for the area supplied by the existing Bedford Springs Well. During 2019, a combined total of nearly 70 million gallons of water was provided from these sources for use by BTMA customers. The availability of multiple, independent sources of supply affords the BTMA considerable flexibility in its operation of the water system which minimizes the chance of a long term service interruption to its customers during periods of necessary source maintenance and repair, or potential emergency events.

In addition to these ground water sources, the Authority maintains four active, bidirectional interconnections with Bedford Borough's water system which may be utilized during emergency situations as supplemental sources of supply for both the BTMA and Bedford Borough when needed. These interconnects were not needed to supplement the BTMA supply in 2019.

SOURCE WATER ASSESSMENT: A Geographic Information System (GIS) analysis-based, Source Water Assessment was completed in 2005 by the PA Department of Environmental Protection (PA DEP) and the Penn State Environmental Resources Research Institute for the Bedford Township Municipal Authority water supply. The Assessment has found that the BTMA ground water sources are potentially susceptible to contamination from agricultural activities situated within the well systems' recharge zones. Source Water Assessments were also completed for the Bedford Borough Water System in 2003. The Bedford Borough Source Water Assessments determined that the Bedford surface water sources have a high risk susceptibility rating for contamination from runoff of deicing materials and spills along roadways, bridges and railroads storm water runoff from salt storage facilities, agricultural fields, golf courses, malfunctioning septic systems and timbering operations. Copies of the respective reports were provided to the BTMA, Bedford Township, Bedford Borough Water Authority and the Altoona District Office of the PA DEP. Copies of the respective summary reports are available by writing to the BTMA, 1007 Shed Road, Suite 102, Bedford PA 15522 or to the Bedford Borough Water Authority, 244 West Penn Street, Bedford PA 15522. A summary of the PA DEP Source Water Assessment report is available in the eLibrary page on the DEP website at www.depgreenport.state.pa.us/elibrary/GetFolder.aspx?FolderID=4490. Copies of the complete reports are also available for review at the PA DEP Southcentral Regional Office, Records Management Unit at (717) 705-4700.

THE SOURCES OF DRINKING WATER (both tap water and bottled water) include rivers, lakes, streams, 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. Contaminants that may be present in source water include:

- **Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic Contaminants**, such as salts and metals, which 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**, which 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- **Radioactive Contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

SOME PEOPLE MAY BE MORE VULNERABLE to contaminants in drinking water than the general population. Immuno-compromised 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 infections. 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 at (1-800-426-4791).

DRINKING WATER, INCLUDING BOTTLED WATER, may reasonably be expected to contain at least small amounts of some contaminants. The presence of some 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 EPA's Safe Drinking Water Hotline (1-800-426-4791). **IN ORDER TO ENSURE THAT TAP WATER IS SAFE TO DRINK**, EPA and DEP prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration and DEP regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

WATER QUALITY was monitored during the operating period between January 1, and December 31, 2019. The Authority routinely monitors for contaminants in your drinking water according to Federal and State laws.

THE FOLLOWING TABLE SHOWS THE RESULTS OF OUR WATER QUALITY MONITORING for the period of January 1, through December 31, 2019. In reviewing this table, it should be noted that the State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of the data is from previous years in accordance with the Safe Drinking Water Act. The date of sampling has been noted on the following sampling results table. Only those contaminants found in the Authority's treated water are listed in the table.

2019 Detected Regulated Contaminant Table Bedford Township Municipal Authority							
Contaminant (Unit of Measure)	MCL	MCLG	Highest Level Detected	Range	Sample Period	Violation	Likely Source of Contamination
Inorganic Contaminants							
Barium (ppm) *[BTMA Entry Points]*	2	2	0.0254	0.0118 to 0.0254	2018	No	Discharge of drilling waste, discharge from metal refineries, erosion of natural deposits
Selenium (ppb) *[BTMA Entry Points]*	50	50	3.65	ND to 3.65	2018	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Radiological Contaminants							
Combined Radium (pCi/L) *[Entry Point 102]*	5	0	1.05	NA-One sample only	2018	No	Erosion of natural deposits
Disinfectant Residuals							
Chlorine – Distribution System							
Chlorine (ppm) *[BTMA distribution system]*	MRDL = 4	MRDLG = 4	Max Level Detected= 2.2 *(March)*	1.08 – 1.27	2019	No	Water additive used to control microbes
Chlorine (ppm) – Entry Points							
BTMA Bowman Wells (ppm)	MinRDL=0.4	NA	Min Level Detected =0.67 12/22/2019	.67 – 1.98	2019	No	Water additive used to control microbes
BTMA Bedford Springs Well (ppm)		NA	Min Level Detected = .82 4/11/2019	.82 – 2.2	2019	No	
BTMA Shaffer Wells (ppm)		NA	Min Level Detected= .45 8/8/2019	.45 – 2.16	2019	No	
Disinfection By-Products							
Trihalomethanes, Total (ppb) [*BTMA distribution system]*	80	NA	2.57	.57 to 2.57	3rd Qtr 2019	No	Byproduct of drinking water chlorination.
Haloacetic Acids (ppb) [*BTMA distribution system]*	60	N/A	1.0	ND to 1.0	3rd Qtr 2019	No	Byproduct of drinking water disinfection.

Lead and Copper							
Contaminant (Unit of Measure)	Action Level (AL)	MCLG	90th Percentile Value	# Sites Above AL of Total Sites	Sample Period	Violation	Likely Source of Contamination
Lead (ppb) *[BTMA Distribution System]*	15	0	2.73	Zero out of 13 samples	2019	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm) *[BTMA Distribution System]*	1.3	1.3	0.54	Zero out of 13 samples	2019	No	Corrosion of household plumbing systems; Erosion of natural deposits. Leaching from wood preservatives.

Violations – Bedford Township Municipal Authority Water System – No violations were issued to BTMA in 2019.

Supplemental Information Regarding Lead in Drinking Water – Although **no** samples from the BTMA distribution system that were tested for lead exceeded the established Action Limit (AL), lead was present at detectable levels in five samples analyzed in 2019. Elevated levels of lead, if present, 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. The BTMA 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 for 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. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Additional contaminants are regulated and are also routinely tested for, but are **not** present at detectable levels. Contaminants that have been tested for by the Bedford Township Municipal Authority, but **not detected** in the Authority's system during 2019 or recent years, include:

- **Radioactive Contaminants: (2019)** Gross Alpha Emitters, Radium 226 & Combined Uranium
- **Volatile Organic Compounds (VOCs) including: (2018 all sources & 2019 – Shaffer Wells)** cis-1,2-Dichloroethylene; Benzene; trans-2-Dichloroethylene; Dichloromethane; 1,2-Dichloropropane; Ethylbenzene; Styrene; Tetrachloroethylene; 1,1,1-Trichloroethane; 1,1,2-Trichloroethane; Trichloroethylene; Toluene; Xylenes (total); Carbon tetrachloride; Chlorobenzene; o-Dichlorobenzene; p-Dichlorobenzene; 1-2-Dichloroethane; 1,1-Dichloroethylene; 1,2,4-Trichlorobenzene; Vinyl chloride - Bowman, Shaffer and Bedford Springs Well Sources
- **Inorganic contaminants including: (2019)** Nitrates; Nitrites, **(2019)** Antimony; Arsenic; Beryllium; Cadmium; Chromium; Cyanide; Mercury; Nickel; Fluoride; Thallium – Bowman, Shaffer and Bedford Springs sources; **(2014)** Asbestos
- **Synthetic Organic Chemicals (SOCs) including: (2018 all sources)** Lindane; Methoxychlor; Endothall; Di(2-Ethylhexyl)Adipate; Oxymal (Vydate); Simazine; Di(2-Ethylhexyl) Phthalate; Piclorem; Carbofuran; Hexachlorocyclopentadiene; Atrazine; Alachlor; 2,4-D; Benzo(a)pyrene; Pentachlorophenol; 1,2-Dibromo, 3 Chloroprop; Ethylene Dibromide (EDP); Chlorodane; Toxaphene; Dalpon; Diquat; Glyphosate; Dinoseb; Dioxin; Heptachlor; Heptachlor epoxide; 2,4,-D; 2,4,5-Silvex; Hexachlorobenzene; Endrin; PCBs
- **Microbial Contaminants (2019):** Total Coliform Bacteria

Glossary of Terms Used in This Report

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

BTMA - Bedford Township Municipal Authority

DEP – Pennsylvania Department of Environmental Protection; **EPA** – US Environmental Protection Agency

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

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.

Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Minimum Residual Disinfectant Level (MinRDL) – The minimum level of residual disinfectant required at the entry point to the distribution system.

NA – Not Applicable **ND** – Not Detected (**pCi/L) -** PicoCuries per liter **-** A measure of radioactivity

(ppb) - Parts per billion or micrograms per liter **(ppm) -** Parts per million or milligrams per liter

Treatment Technique (TT) – A required process intended to reduce the level of contaminant in drinking water.

- PLEASE CONSERVE OUR WATER RESOURCES -

The Bedford Township Municipal Authority requests that customers conserve our water resources by conserving water in the home and at places of work. Efficient water use can have major environmental, public health, and economic benefits by helping to improve water quality, maintain aquatic ecosystems, and protect drinking water resources. Efficient use of water, through behavioral, operational, or equipment changes, if practiced broadly can help mitigate the effects of drought. Efficiency measures can also save the homeowner money on their water and energy bills. The following tips and suggestions were obtained from *"Water use it wisely"* website and can help you conserve water, save money and protect and preserve our water resources. For many more water saving tips and water conservation resources, please visit their website at www.wateruseitwisely.com.

Kitchen

1. There are a number of ways to save water, and they all start with you.
2. When washing dishes by hand, don't let the water run. Fill one basin with wash water and the other with rinse water.
3. Dishwashers typically use less water than washing dishes by hand. Now, Energy Star dishwashers save even more water and energy.
4. If your dishwasher is new, cut back on rinsing. Newer models clean more thoroughly than older ones.
5. Designate one glass for your drinking water each day, or refill a water bottle. This will cut down on the number of glasses to wash.
6. Soak pots and pans instead of letting the water run while you scrape them clean.
7. Use the garbage disposal sparingly. Instead, compost vegetable food waste and save gallons every time.
8. Wash your fruits and vegetables in a pan of water instead of running water from the tap.
9. Don't use running water to thaw food. For water efficiency and food safety, defrost food in the refrigerator.
10. Install an instant water heater near your kitchen sink so you don't have to run the water while it heats up. This also reduces energy costs.
11. Keep a pitcher of drinking water in the refrigerator instead of running the tap. This way, every drop goes down you and not the drain.
12. Reuse leftover water from cooked or steamed foods to start a nutritious soup, it's one more way to get eight glasses of water a day.
13. Cook food in as little water as possible. This also helps it retain more nutrients.
14. Select the proper pan size for cooking. Large pans may require more cooking water than necessary.
15. If you accidentally drop ice cubes, don't throw them in the sink. Drop them in a house plant instead.
16. Collect the water you use while rinsing fruit and vegetables. Use it to water house plants.
17. When shopping for a new dishwasher, use the Consortium for Energy Efficiency website to compare water use between models.

Laundry Room

18. When doing laundry, match the water level to the size of the load.
19. Washing dark clothes in cold water saves water and energy, and helps your clothes retain their color.
20. When shopping for a new washing machine, compare resource savings among Energy Star models. Some can save up to 20 gallons of water per load.
21. Have a plumber re-route your greywater to trees and plants rather than the sewer line. Check with your city and county for codes.
22. When buying a washer, check the Consortium for Energy Efficiency website to compare water use between models.

Bathroom

23. If your shower fills a one-gallon bucket in less than 20 seconds, replace the showerhead with a WaterSense® labeled model.
24. Shorten your shower by a minute or two and you'll save up to 150 gallons per month.
25. Time your shower to keep it under 5 minutes. You'll save up to 1,000 gallons per month.
26. Toilet leaks can be silent! Be sure to test your toilet for leaks at least once a year.
27. Put food coloring in your toilet tank. If it seeps into the bowl without flushing, there's a leak. Fix it and start saving gallons.

28. When running a bath, plug the bathtub before turning on the water. Adjust the temperature as the tub fills.
29. Upgrade older toilets with water-saving WaterSense® labeled models.
30. If your toilet flapper doesn't close properly after flushing, replace it.
31. Use a WaterSense® labeled showerhead. They're inexpensive, easy to install, and can save you up to 500 gallons a month.
32. Turn off the water while you brush your teeth and save up to 4 gallons a minute. That's up to 200 gallons a week for a family of four.
33. If your toilet was installed before 1992, purchasing a WaterSense® labeled toilet can reduce the amount of water used for each flush.
34. Consider buying a dual-flush toilet. It has two flush options: a half-flush for liquid waste and a full-flush for solid waste.
35. Plug the sink instead of running the water to rinse your razor and save up to 300 gallons a month.
36. Turn off the water while washing your hair and save up to 150 gallons a month.
37. When washing your hands, turn the water off while you lather.
38. Take 5-minute showers instead of baths. A full bathtub requires up to 70 gallons of water.
39. Install water-saving aerators on all of your faucets.
40. Drop tissues in the trash instead of flushing them and save water every time.
41. Look for WaterSense® labeled toilets, sink faucets, urinals and showerheads.
42. One drip every second adds up to five gallons per day! Check your faucets and showerheads for leaks.
43. While you wait for hot water, collect the running water and use it to water plants.

General Indoor

44. Teach children to turn off faucets tightly after each use.
45. Watch the Home Water Challenge video or use the Home Water Audit Calculator to see where you can save water.
46. When the kids want to cool off, use the sprinkler in an area where your lawn needs it most.
47. Encourage your school system and local government to develop and promote water conservation among children and adults.
48. Play fun games while learning how to save water!
49. Monitor your water bill for unusually high use. Your bill and water meter are tools that can help you discover leaks.
50. Learn how to use your water meter to check for leaks.
51. Reward kids for the water-saving tips they follow.
52. Avoid recreational water toys that require a constant flow of water.
53. Grab a wrench and fix that leaky faucet. It's simple, inexpensive, and you can save 140 gallons a week.
54. Hire a GreenPlumber® to help reduce your water, energy, and chemical use.
55. Be a leak detective! Check all hoses, connectors, and faucets regularly for leaks.
56. We're more likely to notice leaky faucets indoors, but don't forget to check outdoor faucets, pipes, and hoses.
57. See a leak you can't fix? Tell a parent, teacher, employer, or property manager, or call a handyman.
58. At home or while staying in a hotel, reuse your towels.
59. Make suggestions to your employer or school about ways to save water and money.
60. Run your washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
61. See how your water use stacks up to others by calculating your daily water use.

Xeriscape Landscaping

62. Use porous material for walkways and patios to prevent wasteful runoff and keep water in your yard.
63. Group plants with the same watering needs together to avoid overwatering some while underwatering others.
64. Choose the right Arizona-friendly plants and watch them thrive in our desert environment.
65. Reduce the amount of lawn in your yard by planting shrubs and ground covers appropriate to your site and region.
66. Plant species native to your region.
67. Plant in the spring and fall, when the watering requirements are lower.
68. When sprucing up your front or backyard, consider xeriscaping. This landscape method uses low-water-use plants to limit your water use.

69. Consider attending a landscape class hosted by a water provider. Most workshops occur in the spring and fall.
70. Avoid planting grass in areas that are hard to water, such as steep inclines and isolated strips along sidewalks and driveways.
71. Leave lower branches on trees and shrubs and allow leaf litter to accumulate on the soil. This keeps the soil cooler and reduces evaporation.
72. Start a compost pile. Using compost in your garden or flower beds adds water-holding organic matter to the soil.
73. Use a layer of organic mulch on the surface of your planting beds to minimize weed growth that competes for water.
74. Spreading a layer of organic mulch around plants helps them retain moisture, saving water, time and money.
75. Use 2 to 4 inches of organic mulch around plants to reduce evaporation and save hundreds of gallons of water a year.
76. Visit your local xeriscape garden to view plants that thrive in our hot desert environment.
77. Next time you add or replace a flower or shrub, choose a low-water-use plant and save up to 550 gallons each year.
78. Call your local conservation office for more information about xeriscaping with water-thrifty trees, plants, and ground covers.
79. Collect water from your roof by installing gutters and downspouts. Direct the runoff to plants and trees.
80. For automatic water savings, direct water from rain gutters and HVAC systems to water-loving plants in your landscape.

Lawn Care

81. Hire a qualified pro to install your irrigation system and keep it working properly and efficiently.
82. Hire a Smartscape Certified professional landscaper who has received landscape training specific to the Sonoran Desert.
83. Adjust your lawn mower to the height of 1.5 to 2 inches. Taller grass shades roots and holds soil moisture better than short grass.
84. Leave lawn clippings on your grass, this cools the ground and holds in moisture.
85. If installing a lawn, select a lawn mix or blend that matches your climate and site conditions.
86. Aerate your lawn periodically. Holes every six inches will allow water to reach the roots, rather than run off the surface.
87. If walking across the lawn leaves footprints (blades don't spring back up), then it is time to water.
88. Let your lawn go dormant (brown) during the winter. Dormant grass only needs to be watered every three to four weeks, less if it rains.
89. Avoid overseeding your lawn with winter grass. Ryegrass needs water every few days, whereas Dormant Bermuda grass needs water monthly.
90. Remember to weed your lawn and garden regularly. Weeds compete with other plants for nutrients, light and water.
91. While fertilizers promote plant growth, they also increase water consumption. Apply the minimum amount of fertilizer needed.
92. Water your summer lawns once every three days and your winter lawn once every five days.
93. Catch water in an empty tuna can to measure sprinkler output. 3/4 to 1 inch of water is enough to apply each time you irrigate.

Landscape

94. Read the Landscape Watering by the Numbers guidebook to help you determine how long and how much to water.
95. Use a trowel, shovel, or soil probe to examine soil moisture depth. If the top two to three inches of soil are dry, it's time to water.
96. Set a kitchen timer when using the hose as a reminder to turn it off. A running hose can discharge up to 10 gallons per minute.
97. Check your sprinkler system frequently and adjust sprinklers so only your lawn is watered and not the house, sidewalk or street.

98. Minimize evaporation by watering during the early morning hours when temperatures are cooler and winds are lighter.
99. Timing is everything when it comes to irrigation. Learn how to set your controller properly.
100. Look for WaterSense® labeled irrigation controllers.
101. Learn how to shut off your automatic watering system in case of malfunctions or rain.
102. Apply water only as fast as the soil can absorb it.
103. If water runs off your lawn easily, split your watering time into shorter periods to allow for better absorption.
104. Water only when necessary. More plants die from over-watering than from under-watering.
105. Signs of overwatering: Leaves turn lighter shades of green or yellow, young shoots wilt, and sometimes algae or fungi grow.
106. Adjust your watering schedule each month to match seasonal weather conditions and landscape requirements.
107. Install a rain sensor on your irrigation controller so your system won't run when it's raining.
108. Water dry spot by hand instead of running the whole irrigation system longer.
109. Don't water your lawn on windy days when most of the water blows away or evaporates.
110. Use drip irrigation for shrubs and trees to apply water directly to the roots, where it's needed.
111. Water your plants deeply but less frequently to encourage deep root growth and drought tolerance.
112. Use sprinklers that deliver big drops of water close to the ground. Smaller drops and mist often evaporate before hitting the ground.
113. Use a rain barrel to harvest rainwater from gutters for watering gardens and landscapes.
114. For hanging baskets, planters and pots, put ice cubes on top of the soil to give your plants a cool drink of water without overflow.
115. Remember to periodically check your sprinkler system valves for leaks, and to keep sprinkler heads in good shape.
116. Spring is a great time to give your irrigation system a checkup to ensure it's working efficiently.
117. Pruning properly can help your plants use water more efficiently.

Pool

118. Use a pool cover to help keep your pool clean, reduce chemical use and prevent water loss through evaporation.
119. Make sure your swimming pools, fountains and ponds are equipped with recirculating pumps.
120. If you have an automatic refilling device, check your pool periodically for leaks.
121. When back-washing your pool, consider using the water on salt-tolerant plants in the landscape.
122. Minimize or eliminate the use of waterfalls and sprays in your pool. Aeration increases evaporation.
123. Don't overfill the pool. Lower water levels will reduce water loss due to splashing.
124. Keep water in the pool when playing, it will save water.
125. Instead of building a private pool, join a community pool.
126. Trickling or cascading fountains lose less water to evaporation than those that spray water into the air.
127. Use a grease pencil to conduct a bucket test to check for pool leaks. An unnatural water level drop may indicate a leak.

General Outdoor

128. Winterize outdoor spigots when temperatures dip below freezing to prevent pipes from leaking or bursting.
129. For more immediate hot water and energy savings, insulate hot water pipes.
130. Use a commercial car wash that recycles water. Or, wash your car on the lawn, and you'll water your grass at the same time.
131. Use a hose nozzle or turn off the water while you wash your car. You'll save up to 100 gallons every time.
132. Wash your pets outdoors, in an area of your lawn that needs water.
133. When cleaning out fish tanks, give the nutrient-rich water to your non-edible plants.
134. When you give your pet fresh water, don't throw the old water down the drain. Use it to water your trees or shrubs.
135. Use a broom instead of a hose to clean patios, sidewalks and driveways, and save water every time.
136. Evaporative coolers require a seasonal maintenance check. For more efficient cooling, check your evaporative cooler annually.
137. If you have an evaporative cooler, direct the water drain to plants in your landscape.
138. Set water softeners for a minimum number of refills to save both water and chemicals, plus energy, too.

139. If you have an evaporative cooler, install a recirculating pump to keep water from bleeding off with one pass.
140. Report broken pipes, leaky hydrants and errant sprinklers to property owners or your local water provider.
141. Know where your master water shut-off valve is located. Were a pipe to burst, this could save gallons of water and prevent damage.
142. Install a thermostat and timer on your evaporative cooler so it only operates when necessary.

Office

143. Install an instant water heater near your kitchen sink so you don't have to run the water while it heats up. This also reduces energy costs.
144. Upgrade older toilets with water-saving WaterSense® labeled models.
145. Install water-saving aerators on all of your faucets.
146. Look for WaterSense® labeled toilets, sink faucets, urinals and showerheads.
147. Hire a GreenPlumber® to help reduce your water, energy, and chemical use.
148. Some commercial refrigerators and ice-makers are cooled with water. Upgrade to air-cooled appliances for significant water savings.
149. Post a hotline in bathrooms and kitchens to report leaks or water waste to facility managers or maintenance personnel.
150. Create a suggestion and incentives system at your organization to recognize water-saving ideas.
151. Include a water-saving tip in your employee newsletter. Find 100+ tips at wateruseitwisely.com.
152. Implement a water management plan for your facility, then educate employees on good water habits through newsletters and posters.
153. Publish your organization's monthly water use to show progress toward water-saving goals.
154. Invite your water utility conservation staff to your organization for Earth Day and other environmental events to help promote water savings.
155. Water audit your facility to find out your recommended water use, then monitor your utility bills to gauge your monthly consumption.
156. Have maintenance personnel regularly check your facilities for leaks, drips and other water waste.
157. If you use processed water in your business or facility, look into water recycling.
158. Contact your water utility to see if rebates are available for purchasing water-efficient fixtures, equipment or for facility audits.
159. Consider and compare water use when purchasing ice makers, dishwashers, reverse osmosis units, coolers and cleaning equipment.
160. Become or appoint a water ambassador within your organization who creates, implements and maintains your water conservation program.
161. Become a proud WaterSense® partner and let all your customers know.
162. As part of the WaterSense® Fix-A-Leak Week in March, plan an employee campaign to look for leaks.
163. Determine how your on-site water is being used by installing sub-meters where feasible, then monitoring for savings.
164. Conduct a facility water use inventory and identify water management goals.
165. Don't forget hidden water use costs, like energy for pumping, heating and cooling, chemical treatment, and damage and sewer expenses.
166. Show your company's dedication to water conservation through a policy statement. Commit management, staff and resources to the effort.
167. Shut off water to unused areas of your facility to eliminate waste from leaks or unmonitored use.
168. Create a goal of how much water your company can save and plan a celebration once that goal is met.
169. Ask employees for suggestions on saving water and give prizes for the best ideas. Incentivize it!
170. Write feature articles on your employee website that highlight water-saving ideas and successes.
171. Test your co-workers or employees on topics like xeriscape, WaterSense®, and high-efficiency toilets. See how water-wise they are.
172. Hire a WaterSense® irrigation partner to help with your landscape.
173. Saving water on your landscape adds up quickly. Send the person in charge of your landscape to an irrigation workshop.
174. Marry the weather with your landscape water use. Water use should decrease during rainy periods and increase during hot, dry periods.
175. Visit your local Water Conservation office's website to get information on programs available to businesses.
176. Make sure your contract plumber and/or maintenance personnel knows about GreenPlumbers®.

177. Ask your company to support water conservation events and education. ProjectWet hosts local events throughout the country.
178. Support Tap Into Quality and forgo those plastic water bottles to lower your carbon footprint.
179. Scrape dishes rather than rinsing them before washing.
180. Use water-conserving icemakers.
181. A recent study showed that 99% of business managers surveyed ranked water conservation as a “top five” priority over the next decade.
182. If your facility relies on cooling towers, have maintenance maximize cycles of concentration by providing efficient water treatment.
183. Be sure your irrigation system is watering only the areas intended, with no water running onto walks, streets or down the gutter.
184. While cleaning sidewalks, a hose and nozzle use 8-12 gallons of water per minute. A pressurized Waterbroom® uses closer to 3 gallons.
185. Inspect your landscape irrigation system regularly for leaks or broken sprinkler heads and adjust pressures to specification.
186. Give your landscape proper amounts of irrigation water. Determine water needs, water deeply but infrequently, and adjust to the season.
187. Establish a monthly water budget for your landscape based on the water needs of your plants.
188. Limit turf areas at your facility. Instead, landscape using xeriscape principles to cut water use in half.
189. Put decorative fountains on timers and use only during work or daylight hours. Check for leaks if you have automatic refilling devices.
190. Wash company vehicles at commercial car washers that recycle water.
191. Wash company vehicles as needed rather than on a schedule. Stretch out the time in between washes.
192. Consider turning your high-maintenance water feature/fountain into a low-maintenance art feature or planter.
193. When buying new appliances, consider those that offer cycle and load size adjustments. They are more water and energy efficient.
194. Support projects that use reclaimed wastewater for irrigation and industrial uses.
195. When ice cubes are left over from your drink, don’t throw them out. Pour them on a plant.

Check out these additional websites for more water conservation information:

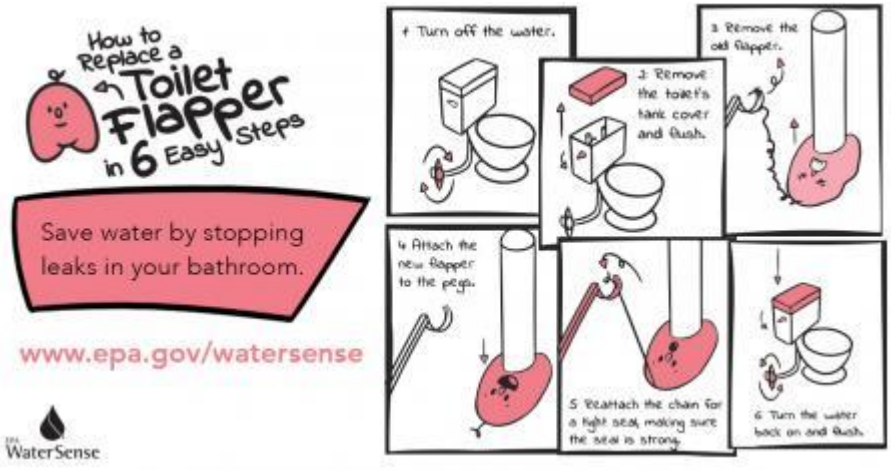
www.epa.gov/WaterSense; wateruseitwisely.com/100-ways-to-conserve/index.php; www.americanwater.com/49ways.php;www.epa.gov/greenhomes/ConserveWater.htm;www.h2ouse.org/

Please help us find leaks, save water and reduce water service costs… Because water lines are located underground, leaks may go unnoticed for days and even years resulting in a considerable waste of our valuable water resource and additional costs for all customers. Please help us locate these leaks by reporting to the Water Department any occurrences of: water running in locations that are normally dry; wet spots in yards and streets; the sound of water running in your home when water is not in use; the sound of water trickling or running in a storm inlet when it is not raining; sudden or unusually low water pressure; and slugs of discolored or cloudy water. When an occurrence such as this is reported, a representative of the water department will make contact and investigate the situation.

WATER FOOTPRINT CALCULATOR

https://www.watercalculator.org/wfc2/q/household/

DIY YOUR WAY TO BATHROOM SAVINGS



Looking for a little do-it-yourself project this winter to put money back into your pocketbook? By finding and fixing easily corrected leaks in your home, you could save 10 percent on your water bill.

One of the biggest culprits for bathroom leaks is a worn out flapper in your toilet tank. To see if your flapper needs replacing, place a few drops of food coloring in the tank of the toilet and if any color has seeped into the bowl after 10 minutes, you have a leak. Don't forget to flush the dye down the drain after the test is done.

Replacing the flapper can be done in a few simple steps and in just a few minutes to generate big water savings without breaking the bank. Need a walk-through? No problem! Check out this toilet flapper bath hack video to learn just what to do.

While you're at it, tackle your bathroom faucets, too. Replacing old, inefficient faucets and aerators with WaterSense labeled models can save the average family 700 gallons of water per year, equal to the amount of water needed to take 45 showers. To install your new WaterSense labeled faucet aerator, first cover your drain to ensure nothing falls through. Then, twist off your current faucet aerator and remove the rubber washer if it happens to be stuck. Finally, twist on the WaterSense labeled aerator and you're done!

Learn more ways to find and fix leaks as you celebrate during Fix a Leak Week or work to save water year-round.

SOURCE: https://www.epa.gov/watersense/watersense-current-winter-2020

Bedford Township Municipal Authority
1007 Shed Road, Suite 102
Bedford PA 15522

2019 Annual Drinking Water Quality Report
Bedford Township Municipal Authority

This report shows our water quality and what it means. **IF YOU HAVE ANY QUESTIONS ABOUT THIS REPORT** or questions concerning your water utility, please contact Amy Melius, Authority Manager at (814) 623-7879, Monday through Friday, 7:30 a.m. to 3:30 p.m. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Authority meetings. They are held at 4:00 p.m. on the first Wednesday of each month at the Bedford Township Municipal Building located at 1007 Shed Road, Suite 102, in Bedford Township. For more information regarding the Bedford Township Municipal Authority and the BTMA water system, you may visit the Authority's webpage on the PA Rural Water Association website at: http://www.goh2o.net/btma.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.