

# 2016 DRINKING WATER QUALITY REPORT

## 💧 HASTINGS MUNICIPAL AUTHORITY 💧

We are pleased to present to you our Annual Drinking Water Quality Report for the 2016 operating year. This report provides you with information about the quality of water and the services we deliver to you every day. Our constant goal is to provide you with a dependable supply of drinking water that meets or exceeds state and federal water quality drinking water health standards.

**The Sources:** The Hastings Municipal Authority's water system (Public Water Supply ID Number 4110013) receives its water from two mine spring discharges known as the Pardee No. 29, Mine Springs No. 1 and No.2. These springs are located approximately 1.3 miles east of the Borough. The Authority also relies on a groundwater source known as the Park Well. This well, which is located in the Hastings Park area, is 441 feet deep and draws water from the Mauch Chunk geologic formation. The Authority blends raw water from the Mine Spring(s) and the Park Well. The amount used from each source is dependent upon the season and amount of water available from each source. The blended raw water is then treated using the Authority's water treatment facility that uses pre-ozonation, direct filtration using tri-media rapid sand filters, and a computer operated instrumentation and control system. The water treatment process produces a high quality drinking water that meets all State and Federal potable water quality standards. Also, for a portion of 2016, the HMA received water from the Elder Township Water Authority (ETWA) which during that period received its water from Patton Borough's newly developed groundwater sources. This alternate source was utilized while improvements were being performed on the HMA Mine Springs source, the raw water transmission line and the water treatment plant.

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or manmade. The constituents can be microbial, organic or inorganic chemicals, or radioactive materials. 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 stormwater 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 agricultural and residential uses.
- Radioactive contaminants which are naturally occurring.
- 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 stormwater runoff and septic systems.

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/ Centers for Disease Control (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.

Source Water Assessment: A Source Water Assessment has not yet been completed by the PA Department of Environmental Protection (PA DEP) for the Hastings Municipal Authority water supply. However, a source water assessment was completed in 2002 for the Patton source, but since the assessment was prepared for the Chest Creek surface water source that is no longer in use, that assessment is not representative of the current Patton groundwater source that supplied the HMA system during a portion of 2016. Information on the PA DEP source water assessment program and the current status of assessments being conducted is available from the PA DEP website at [www.dep.state.pa.us](http://www.dep.state.pa.us) (Keyword: DEP Source Water).

Water Quality: In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

WE ARE PLEASED TO REPORT THAT OUR WATER MEETS ALL FEDERAL AND STATE REQUIREMENTS.

The Hastings Municipal Authority routinely monitors for constituents 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<sup>st</sup> through December 31, 2016. The table also provides information regarding the quality of water provided from the Patton Borough water system, since water was provided to the HMA system via the Elder Township Water Authority water system in 2016 while improvements to the HMA Mine Spring source, transmission main and water treatment plant were being completed. A complete copy of Patton Borough's 2016 Water Quality Report may be obtained from the Patton Borough Office located at 800 Fourth Ave, Patton. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data is from previous years in accordance with the Safe Drinking Water Act. The date has been noted on the enclosed sampling results table. Only those contaminants found in the Authority's treated water are listed on the table, and all those detected are below the allowable limits. Many other contaminants are regulated and have been routinely tested for, but have not been found to be present at levels that are detectable. These have been listed below the following table.

# 2016 Water Quality Report – Hastings Municipal Authority

Detected Regulated Contaminant Table							
Contaminant (Unit of Measure)	MCL	MCLG	Level Detected	Range	Sample Period	Violation (Yes/No)	Likely Source of Contamination
Turbidity							
Turbidity (NTU) [HMA Entry Point]	TT=1NTU single measurement	0	0.08	0.03 to 0.08	08/12/2016 (highest)	No	Soil Runoff -Turbidity is a measure of cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
	TT= at least 95% of monthly samples ≤ 0.3		100% less than 0.3 NTU limit	N/A	2016	No	
Inorganic Contaminants							
Copper (ppm) [HMA Distribution system]	AL = 1.3	1.3	0.125 [90 <sup>th</sup> percentile]	Zero sites above AL out of 11 sites sampled 2016		No	Corrosion of household plumbing systems
Lead (ppb) [HMA Distribution system]	AL = 15	0	0.00 [90 <sup>th</sup> percentile]	Zero sites above AL out of 11 sites sampled 2016		No	Corrosion of household plumbing systems
Barium (ppm) [HMA Entry Point]	2	2	0.026	NA – one sample only	3/8/2016	No	Discharge from drilling wastes, Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm) [HMA Entry Point]	2	4	0.139	NA – one sample only	3/8/2016	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Fluoride (ppm) [Patton Borough Entry Point]	2	4	0.85	NA – one sample only	1/8/2016	No	
Disinfection Residuals and Disinfection Byproducts							
Chlorine (ppm) [HMA Distribution system]	MRDL = 4	MRDLG =4	1.74 (highest)	1.35 to 1.74	2016	No	Water additive used to control microbes
Chlorine (ppm) [HMA Entry Point]	MinRDL = 0.2	N/A	Lowest level detected = 0.78	0.78 to 2.86	11/27/16	No	Water additive used to control microbes
Chlorine (ppm) [Patton Borough Entry Point]	MinRDL = 0.2	N/A	Lowest level detected = 0.34	0.34 to 1.0	4/20/16	No	Water additive used to control microbes
Total Trihalomethanes (ppb) [HMA Distribution system]	80	N/A	14.0*	8.53 to 22.1	2016	No	Byproduct of drinking water chlorination
Total Haloacetic Acids (ppb) [HMA Distribution system]	60	N/A	2.46*	ND to 3.18	2016	No	Byproduct of drinking water disinfection
Microbial Contaminants							
Contaminant	MCL	MCLG	Highest Number of Positive Samples	Sample Period	Violation? (Yes-No)	Likely Source of Contamination	
Total Coliform Bacteria	No more than 1 positive sample per month	0	0	2016	No	Naturally present in the environment	

\*For Haloacetic Acids and Total Trihalomethanes – Highest Level Detected column = Highest Running Annual Average Result

**Supplemental Information Regarding Lead in Drinking Water** – Although lead was **not** detected in samples collected from the Hastings distribution system, 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. Hastings Municipal Authority 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>.

## VIOLATIONS

**One missed sample event.** We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets established health standards and regulations. At least once per year, a sample of water from the entry point to the distribution system is required to be collected and analyzed for the presence of nitrate and nitrite. During 2016, sampling was to be conducted during the calendar quarter with the highest historical results. Unfortunately, the nitrate and nitrite sampling and testing event was inadvertently missed by the HMA. Therefore we cannot be sure of the quality of water, with respect to nitrate and nitrite, during that time. However, immediately upon receipt of notification by the PA DEP of the missed sample event, the HMA collected a water sample on January 31, 2017 and had it analyzed for nitrate and nitrite. The result of the follow-up sample event has indicated that neither nitrate nor nitrite was present in the HMA water at detectible levels. However, had nitrate or nitrite been detected, it should be noted that infants below the age of six months who drink water containing nitrate or nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Because nitrates and nitrites were not detected in the follow-up test performed by the HMA and because nitrate and nitrite have not been detected in the entry point water during previous routine annual testing conducted by the HMA, it is believed that the nitrate and nitrite test missed during the 2016 annual monitoring period has not resulted in any risk to the health of those persons consuming water from the HMA water system. Consumers do not need to utilize an alternate source of water supply nor do they need to take any further actions as a result of this missed sample event. Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail. For more information, you may contact Mr. Richard Banik, HMA Water System operator, at the HMA office located at 207-1 Fifth Avenue, Hastings, 814-247-8240.

**Late Annual Water Quality Report Submission** - We delivered our 2015 Annual Water Quality Report to our customers by the July 1, 2016 deadline; however, we failed to deliver a copy of the 2015 report to DEP by July 1, 2015. We have subsequently submitted the 2015 report to DEP and are currently in compliance

*Other contaminates that have been tested for, but were **not detected** included:*

**Disinfection By-Products (2016):** Bromate; **Other (2012):** Total Organic Carbon

**Inorganic Contaminants: (2016)** Arsenic, Cadmium, Chromium, Cyanide, Mercury, Nickel, Antimony, Beryllium, Selenium, Thallium, (2017–Late sample) Nitrates and Nitrites; (2012) Asbestos

**Volatile Organic Compounds [VOCs] (2016):** Benzene, Carbon tetrachloride, Chlorobenzene, para-Dichlorobenzene, o-Dichlorobenzene, 1,2-Dichloroethane, 1,1-Dichloroethylene, Cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene, Dichloromethane 1,2-Dichloropropane, Ethylbenzene, Styrene, Tetrachloroethylene, Toluene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Vinyl chloride; Xylenes, and 1,2,4-trichlorobenzene

**Radiological Contaminants: (2012)** Combined Uranium, Radium-226 and Radium-228; (2015) Gross Alpha

**Synthetic Organic Compounds [SOCs] (2016):** Endrin, Lindane, Methoxychlor, Toxaphene, Dalapon, Diquat, Endothall, Glyphosate, Di(2-Ethylhexyl)Adipate, Oxymal, Simazine, Di(2-Ethylhexyl)Phthalate, Piclorem, Dinoseb, Hexachlorocyclopentadiene, Carbofuran, Atrazine, Alachlor, Heptachlor, Heptachlor Epoxide, 2,4-D, 2,4,5-TP Silvex, Hexachlorobenzene, Benzo(A)pyrene, Pentachlorophenol, PCBs, 1,2-Dibromo,3-Chloroprop, Ethylene Dibromide, Chlorodane; (2014) Dioxin

**Cryptosporidium** - During the period of April 2010 through March 2011, the Hastings Municipal Authority (HMA) collected 24 samples from its raw water sources prior to filtration and treatment. The samples were tested for the presence of *Cryptosporidium*. **No *Cryptosporidium* sized cysts were identified in any of the 24 raw water samples analyzed.**

*Cryptosporidium* is a microbial pathogen found in surface waters and groundwater systems impacted by surface water throughout the U.S. Although filtration removes *Cryptosporidium*, 100 percent removal cannot be guaranteed. The treatment facilities that serve our water system are designed to remove *Cryptosporidium* and other harmful constituents. The HMA treatment facilities use pre-ozonation, filtration and chlorine disinfection to help ensure that these constituents are inactivated and removed. The PA DEP also conducts Filter Plant Performance Evaluations at the HMA water treatment facility on a regular basis and has never found *Cryptosporidium* in the finished water provided to our system. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

## Definitions and Abbreviations:

(The following are definitions of terms and abbreviations used throughout this report and in the Water Quality Tables)

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

**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 Disinfection Level (MinRDL)** - The minimum level of residual disinfectant required at the entry point to the distribution system.

**N/A** - Not applicable; **ND** - Not Detected; **NTU**=Nephelometric Turbidity Units (a measure of water clarity)

**ppb** - Parts per billion or micrograms per liter ( $\mu\text{g/L}$ ); **ppm** - Parts per million or milligrams per liter ( $\text{mg/L}$ )

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

## - PLEASE CONSERVE OUR WATER RESOURCES -

The following tips and suggestions were obtained from the *Eartheasy* 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.eartheasy.com](http://www.eartheasy.com). In addition to saving money on your utility bill, water conservation helps prevent water pollution in nearby lakes, rivers and local watersheds. Conserving water can also extend the life of your septic system by reducing soil saturation, and reducing any pollution due to leaks. Overloading municipal sewer systems can also cause untreated sewage to flow to lakes and rivers. The smaller the amount of water flowing through these systems, the lower the likelihood of pollution. In some communities, costly sewage system expansion has been avoided by communitywide household water conservation.

### Water conservation in the home...

1. Check faucets and pipes for leaks. A small drip from a worn faucet washer can waste 20 gallons of water per day. Larger leaks can waste hundreds of gallons.
2. Don't use the toilet as an ashtray or wastebasket. Every time you flush a cigarette butt, facial tissue or other small bit of trash, five to seven gallons of water is wasted.
3. Check your toilets for leaks. Put a little food coloring in your toilet tank. If, without flushing, the color begins to appear in the bowl within 30 minutes, you have a leak that should be repaired immediately. Most replacement parts are inexpensive and easy to install.
4. Use your water meter to check for hidden water leaks. Read the house water meter before and after a two-hour period when no water is being used. If the meter does not read exactly the same, there is a leak.
5. Install water-saving shower heads and low-flow faucet aerators. Inexpensive water-saving low-flow shower heads or restrictors are easy for the homeowner to install. Also, long, hot showers can use five to ten gallons every unneeded minute. Limit your showers to the time it takes to soap up, wash down and rinse off. "Low-flow" means it uses less than 2.5 gallons per minute. You can easily install a ShowerStart showerhead, or add a ShowerStart converter to existing showerheads, which automatically pauses a running shower once it gets warm. Also, all household faucets should be fit with aerators. This single best home water conservation method is also the cheapest!
6. Save water with each flush. Put plastic bottles or float booster in your toilet tank. To cut down on water waste, put an inch or two of sand or pebbles inside each of two plastic bottles to weigh them down. Fill the bottles with water, screw the lids on, and put them in your toilet tank, safely away from the operating mechanisms. Or, buy an inexpensive tank bank or float booster. This may save ten or more gallons of water per day. Be sure at least 3 gallons of water remain in the tank so it will flush properly. If there is not enough water to get a proper flush, users will hold the lever down too long or do multiple flushes to get rid of waste. Two flushings at 1.4 gallons is worse than a single 2.0 gallon flush. A better suggestion would be to buy an adjustable toilet flapper that allow for adjustment of their per flush use. Then the user can adjust the flush rate to the minimum per flush setting that achieves a single good flush each time. For new installations, consider buying "low flush" toilets, which use 1 to 2 gallons per flush instead of the usual 3 to 5 gallons. Replacing an 18 liter per flush toilet with an ultra-low volume (ULV) 6 liter flush model represents a 70% savings in water flushed and will cut indoor water use by about 30%.

7. Insulate your water pipes. It's easy and inexpensive to insulate your water pipes with pre-slit foam pipe insulation. You'll get hot water faster plus avoid wasting water while it heats up.
8. Take shorter showers. One way to cut down on water use is to turn off the shower after soaping up. Then turn it back on to rinse. A four-minute shower uses approximately 20 to 40 gallons of water.
9. Turn off the water after you wet your toothbrush. There is no need to keep the water running while brushing your teeth. Just wet your brush and fill a glass for mouth rinsing.
10. Rinse your razor in the sink. Fill the sink with a few inches of warm water. This will rinse your razor just as well as running water, with far less waste of water.
11. Use your dishwasher and clothes washer for only full loads. Automatic dishwashers and clothes washers should be fully loaded for optimum water conservation. Most makers of dishwashing soap recommend not pre-rinsing dishes which is a big water savings. With clothes washers, avoid the permanent press cycle, which uses an added 20 liters (5 gallons) for the extra rinse. For partial loads, adjust water levels to match the size of the load. Replace old clothes washers. New Energy Star rated washers use 35 - 50% less water and 50% less energy per load. If you're in the market for a new clothes washer, consider buying a water-saving frontload washer.
12. Minimize use of kitchen sink garbage disposal units. In-sink 'garburators' require lots of water to operate properly, and also add considerably to the volume of solids in a septic tank which can lead to maintenance problems. Start a compost pile as an alternate method of disposing food waste.
13. When washing dishes by hand, don't leave the water running for rinsing. If you have a double-basin, fill one with soapy water and one with rinse water. If you have a single-basin sink, gather washed dishes in a dish rack and rinse them with a spray device or a pan full of hot water. Dual-swivel aerators are available to make this easier. If using a dishwasher, there is usually no need to pre-rinse the dishes.
14. Don't let the faucet run while you clean vegetables. Just rinse them in a stoppered sink or a pan of clean water. Use a dual-setting aerator.
15. Keep a bottle of drinking water in the fridge. Running tap water to cool it off for drinking water is wasteful. Store drinking water in the fridge in a safe drinking bottle..

## **Water conservation in the yard and garden...**

1. Plant drought-resistant lawns, shrubs and plants. If you are planting a new lawn, or overseeding an existing lawn, use drought-resistant grasses such as the new "Eco-Lawn". Many beautiful shrubs and plants thrive with far less watering than other species. Replace herbaceous perennial borders with native plants. Native plants will use less water and be more resistant to local plant diseases. Consider applying the principles of xeriscape for a low-maintenance, drought resistant yard.
2. Plant slopes with plants that will retain water and help reduce runoff.
3. Group plants according to their watering needs.
4. Put a layer of mulch around trees and plants. Mulch will slow evaporation of moisture while discouraging weed growth. Adding 2 - 4 inches of organic material such as compost or bark mulch will increase the ability of the soil to retain moisture. Press the mulch down around the drip line of each plant to form a slight depression which will prevent or minimize water runoff.
5. Don't water the gutter. Position your sprinklers so water lands on the lawn or garden, not on paved areas. Also, avoid watering on windy days.
6. Water your lawn only when it needs it. A good way to see if your lawn needs watering is to step on the grass. If it springs back up when you move, it doesn't need water. If it stays flat, the lawn is ready for watering. Letting the grass grow taller (to 3") will also promote water retention in the soil. Most lawns only need about 1" of water each week. During dry spells, you can stop watering altogether and the lawn will go brown and dormant. Once cooler weather arrives, the morning dew and rainfall will bring the lawn back to its usual vigor. This may result in a brown summer lawn, but it saves a lot of water.
7. Deep-soak your lawn. When watering the lawn, do it long enough for the moisture to soak down to the roots where it will do the most good. A light sprinkling can evaporate quickly and tends to encourage shallow root systems. Put an empty tuna can on your lawn - when it's full, you've watered about the right amount. Visit our natural lawn care page for more information.
8. Water during the early parts of the day; avoid watering when it's windy. Early morning is generally better than dusk since it helps to prevent the growth of fungus. Early watering, and late watering, also reduce water loss to evaporation. Watering early in the day is also the best defense against slugs and other garden pests. Try not to water when it's windy - wind can blow sprinklers off target and speed evaporation.
9. Add organic matter and use efficient watering systems for shrubs, flower beds and lawns. Adding organic material to your soil will help increase its absorption and water retention. Areas which are already planted can be 'top dressed' with compost or organic matter.

10. You can greatly reduce the amount of water used for shrubs, beds and lawns by:
  - a. the strategic placement of soaker hoses
  - b. installing a rain barrel water catchment system
  - c. installing a simple drip-irrigation system
11. Avoid over-watering plants and shrubs, as this can actually diminish plant health and cause yellowing of the leaves. When hand watering, use a variable spray nozzle for targeted watering.
12. Don't run the hose while washing your car. Clean the car using a pail of soapy water. Use the hose only for rinsing - this simple practice can save as much as 150 gallons when washing a car. Use a spray nozzle when rinsing for more efficient use of water. Better yet, use a waterless car washing system; there are several brands, such as EcoTouch, which are now on the market.
13. Use a broom, not a hose, to clean driveways and sidewalks
14. Check for leaks in pipes, hoses, faucets and couplings. Leaks outside the house may not seem as bad since they're not as visible. But they can be just as wasteful as leaks indoors. Check frequently to keep them drip-free. Use hose washers at spigots and hose connections to eliminate leaks.

Water conservation comes naturally when everyone in the family is aware of its importance, and parents take the time to teach children some of the simple water-saving methods around the home which can make a big difference.

### **Water Conservation Summary...**

In 1990, 30 states in the US reported 'water-stress' conditions. In 2000, the number of states reporting water-stress rose to 40. In 2009, the number rose to 45. There is a worsening trend in water supply nationwide. Taking measures at home to conserve water not only saves you money, it also is of benefit to the greater community.

Saving water at home does not require any significant cost outlay. Although there are water-saving appliances and water conservation systems such as rain barrels, drip irrigation and on-demand water heaters which are more expensive, the bulk of water saving methods can be achieved at little cost. For example, 75% of water used indoors is in the bathroom, and 25% of this is for the toilet. The average toilet uses 4 gallons per flush (gpf). You can invest in a ULF (ultra-low flush) toilet which will use only 2 gpf. But you can also install a simple tank bank, costing about \$2, which will save .8 gpf. This saves 40% of what you would save with the ULF toilet. Using simple methods like tank banks, low-flow showerheads and faucet aerators you can retrofit your home for under \$50.

By using water-saving features you can reduce your in-home water use by 35%. This means the average household, which uses 130,000 gallons per year, could save 44,000 gallons of water per year. On a daily basis, the average household, using 350 gallons per day, could save 125 gallons of water per day. The average individual, currently using 70 gallons per day, could save 25 gallons of water per day.

When buying low-flow aerators, be sure to read the label for the actual 'gpm' (gallons per minute) rating. Often, the big box retailers promote "low-flow" which are rated at 2.5 gpm, which is at the top of the low-flow spectrum. This may be needed for the kitchen sink, but we find that a 1.5 gpm aerator works fine for the bathroom sink and most water outlets, delivering the same spray force in a comfortable, soft stream.

Finally, it should be noted that installing low-flow aerators, showerheads, tank banks and other water-saving devices usually is a very simple operation which can be done by the homeowner and does not even require the use of tools. Water conservation at home is one of the easiest measures to put in place, and saving water should become part of everyday family practice.

### **Check out these additional websites for more water conservation information:**

[www.epa.gov/WaterSense](http://www.epa.gov/WaterSense)  
[www.environment.nationalgeographic.com/environment/freshwater/water-conservation-tips/wateruseitwisely.com/100-ways-to-serve/index.php](http://www.environment.nationalgeographic.com/environment/freshwater/water-conservation-tips/wateruseitwisely.com/100-ways-to-serve/index.php); [www.americanwater.com/49ways.php](http://www.americanwater.com/49ways.php);  
[www.epa.gov/greenhomes/ConserveWater.htm](http://www.epa.gov/greenhomes/ConserveWater.htm); [www.h2ouse.org/](http://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.

Hastings Municipal Authority  
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P.O. Box 559  
Hastings, PA 16646-0559

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## HASTINGS MUNICIPAL AUTHORITY

### 2016 DRINKING WATER REPORT

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

(This report contains important information about your drinking water. Translate it or speak with someone who understands it.)

**IF YOU HAVE ANY QUESTIONS ABOUT THIS REPORT** or concerning your water utility, please contact Mr. Thomas Kinney, Authority Chairman at 814-247-8240, Monday through Friday 8:00 a.m. to 4:00 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 meetings. They are held at 7:00 p.m. on the 2<sup>nd</sup> Thursday of each month at the Hastings Borough Building, 207-1 Fifth Avenue.



**SPECIAL NOTICE:** Customers are requested to inform the Authority of any changes in your account contact information, especially phone number changes, so that we may continue to be able to notify you via the Authority's Swiftreach Notification System in the event of a water service or water system emergency.