

# WATER QUALITY REPORT 2017 | COMMUNITY CONFIDENCE REPORT

#### THE CITY OF AUBURN HILLS WATER SUPPLY

In compliance with the federal Safe Drinking Water Act Amendments, the City of Auburn Hills is providing its customers with an annual water quality report. This report explains where your water comes from, what it contains, and how it compares to the Environmental Protection Agency (EPA) and state standards. The City of Auburn Hills is committed to providing you with information because informed customers are our best allies.

Drinking water quality is important to our community and the region. The City of Auburn Hills and the Great Lakes Water Authority (GLWA) are committed to meeting state and federal water quality standards including the Lead and Copper Rule. With the Great Lakes as our water source and proven treatment technologies, the GLWA consistently delivers safe drinking water to our community. Auburn Hills operates the system of water mains that carry this water to your home's service line. This year's Water Quality Report highlights the performance of GLWA and Auburn Hills water professionals in delivering some of the nation's best drinking water. Together, we remain committed to protecting public health and maintaining open communication with the public about our drinking water.

#### WHERE DOES MY WATER COME FROM?

The Great Lakes Water Authority provides drinking water to approximately 4 million people in 127 southeast Michigan communities. The system uses water drawn from three intakes. Two intakes are located in the Detroit River; one to the north near the mouth of Lake St. Clair and one to the south near Lake Erie. The third intake is located in Lake Huron. The Department has five water treatment plants. Four of the plants treat water drawn from the Detroit River intakes. The fifth water treatment plant, located in St. Clair County, uses water drawn from Lake Huron.

The City of Auburn Hills receives its water primarily from the Lake Huron Treatment Plant. There are three (3) feeds that branch from the 42 inch Detroit water main that enters the City from South Boulevard and runs north along Grey Road and Squirrel Road, and then proceeds west along Walton Boulevard. There are two (2) additional feeds that branch from a 30 inch Detroit main which extends from the 42 inch main at Walton Boulevard and travels north along Giddings Road to Brown Road.

**LAKE HURON PLANT** - Your source water comes from the lower Lake Huron watershed. The watershed includes numerous short, seasonal streams that drain to Lake Huron. The Michigan Department of Environmental Quality, in partnership with the U.S. Geological Survey, the Great Lakes Water Authority, and the Michigan Public Health Institute performed a source water assessment in 2013 to determine the susceptibility of potential contamination. The susceptibility rating is a seven-tiered scale ranging from "very low" to "very high" based primarily on geological sensitivity, water chemistry, and contaminant sources. The Lake Huron source water intake is categorized as having a moderately low susceptibility to potential contaminant sources. The Lake Huron water treatment plant has historically provided satisfactory treatment of this source water to meet drinking water standards.

#### IS MY WATER SAFE?

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. The City of Auburn Hills vigilantly safeguards its water supplies and once again we are proud to report that our system has never violated a maximum contaminant level or any other water quality standard. The Great Lakes Water Authority Facilities operate 24 hours a day, seven days a week. The treatment process begins with disinfecting the source water with chlorine to kill harmful microorganisms that can cause illness. Next, a chemical called alum is mixed with the water to remove the fine particles that make the water cloudy or turbid. Alum causes the particles to clump together and settle to the bottom. Fluoride is also added to protect our teeth from cavities and decay.

The water then flows through fine sand filters called beds. These filters remove even more particles and certain microorganisms that are resistant to chlorine. Finally, a small amount of phosphoric acid and chlorine are added to the treated water just before it leaves the treatment plant. The phosphoric acid helps control the lead that may dissolve in the water from household plumbing systems. The chlorine keeps the water disinfected as it travels through water mains to reach your home.

In addition to a carefully controlled and monitored treatment process, the water is tested for a variety of substances before treatment, during various stages of treatment, and throughout the distribution system. Hundreds of samples are tested each week in certified laboratories by highly qualified, trained staff. Detroit water not only meets safety and health standards, but also ranks among the top 10 in the country for quality and value.

GLWA voluntarily developed and received approval in 2016 for a source water protection program (SWIPP) for the Lake Huron Water Treatment Plant intake. The program includes seven elements that include the following: roles and duties of government units and water supply agencies, delineation of a source water protection area, identification of potential source water protection area, management approaches for protection, contingency plans, siting of new sources and public participation and education. If you would like to know more information about the Source Water Assessment or the SWIPP please, contact your water department at **248-391-3777.** 

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#### DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 for 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 800-426-4791.** 

## WHY ARE THERE CONTAMINANTS IN MY DRINKING WATER?

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 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 800-426-4791.** 

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 by-products 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 can be the result of oil and gas production and mining activities.

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 (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

#### **LEAD AND COPPER**

Safe drinking water is a shared responsibility. The water delivered by GLWA to our community does not contain lead. Lead can leach into drinking water through home plumbing fixtures, and in some cases, customer service lines. Corrosion control reduces the risk of lead and copper from leaching into your drinking water. Orthophosphates are added during the treatment process as a corrosion control method to create a protective coating in service pipes throughout the system, including in your home or business. Auburn Hills performs required lead and copper sampling and testing in our community as directed by the MDEQ. Water consumers also have a responsibility to maintain the plumbing in their homes and businesses, and can take steps to limit their exposure to lead.

Infants and young children are typically more vulnerable to lead in drinking water than the general population, if present elevated levels of lead can cause serious health problems. It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing the tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested by another agency. Additional information is available from the SAFE DRINKING WATER HOTLINE AT 800-426-4791 or at WWW.EPA.GOV/SAFEWATER/LEAD.

#### **PUBLIC PARTICIPATION**

The Great Lakes Water Authority, Board of Water Commissioners, meets each month. There are also public hearings and meetings open to the public. To confirm dates and times or for information on other activities happening in the Department, please contact our **PUBLIC AFFAIRS DIVISION AT 313-964-9570** or visit **WWW.GLWATER.ORG.** 



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#### 2017 KEY TO DETECTED CONTAMINANTS TABLE

#### >: GREATER THAN

°C: CELSIUS - A scale of temperature in which water freezes at 0° and boils at 100° under standard conditions.

**AL: ACTION LEVEL** - The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.

**HAA5: HALOACETIC ACIDS** - HAA5 is the total of bromoacetic, chloroacetic, dibromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total.

**LRAA: LOCATIONAL RUNNING ANNUAL AVERAGE** - the average of analytical results for samples at a particular monitoring location during the previous four quarters.

MCL: MAXIMUM CONTAMINANT LEVEL - 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.

**MCLG: MAXIMUM CONTAMINANT LEVEL GOAL** - The level of contaminant in drinking water below which there is no known or expected risk to health.

#### MRDL: MAXIMUM RESIDUAL DISINFECTANT LEVEL-

The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG: MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL - The level of a drinking water disinfectant below which there is no known or expected risk to health.

MRLDG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**N/A: NOT APPLICABLE** 

**ND: NOT DETECTED** 

**NTU: NEPHELOMETRIC TURBIDITY UNITS** - Measures the cloudiness of water.

**PCI/L: PICOCURIES PER LITER** - A measure of radioactivity.

PPB: PARTS PER BILLION (ONE IN ONE BILLION)-The ppb is equivalent to micrograms per liter. A microgram = 1/1000 milligram.

**PPM: PARTS PER MILLION (ONE IN ONE MILLION)** - The ppm is equivalent to milligrams per liter. A milligram = 1/1000 gram.

**RAA: RUNNING ANNUAL AVERAGE** - The average of analytical results for all samples during the previous four quarters.

**TT: TREATMENT TECHNIQUE** - A required process intended to reduce the level of a contaminant in drinking water.

**TTHM: TOTAL TRIHALOMETHANES** - Total Trihalomethanes is the sum of chloroform, bromodichloromethane, dibromoochloromethane and bromoform. Compliance is based on the total.

**UMHOS: MICROMHOS** - Measure of electrical conductance of water.



## **MORE INFORMATION**

If you have any questions, concerns, or comments about this report, please contact:

CITY OF AUBURN HILLS, DEPARTMENT OF PUBLIC WORKS - PUBLIC UTILITIES DIVISION

1500 BROWN ROAD, AUBURN HILLS, MI 48326
ATTN: MARK MICHLING

Phone: 248-391-3777 • Fax: 248-391-4895 Email: dpw@auburnhills.org

WWW.AUBURNHILLS.ORG

For more information about safe drinking water, visit

THE US ENVIRONMENTAL PROTECTION AGENCY WWW.EPA.GOV/SAFEWATER

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## CONTROL OUR PEAK... CONTROL OUR RATE...

While watering and maintaining your landscaping is an important part of enhancing the attractiveness and value of your property, what you may not know is that the time of day you water your lawn has an impact on our water rates. We encourage you to read the information below and do your part to help control our water rate.

#### **HOW OUR WATER RATE IS DETERMINED**

The City of Auburn Hills purchases wholesale water from the Great Lakes Water Authority (GLWA). GLWA determines wholesale water rates to suburban communities on an annual basis based on estimated revenue requirements for the upcoming season and based on each community's usage requirements. GLWA's rate to each community is based on the following main factors:

- Distance from the water treatment plant
- Elevation (it costs more money to pump at higher elevations)
- Annual water usage
- Maximum day demand (water usage in a 24 hour period during the summer)
- Peak hour demand (water usage over a one hour period during the summer)

The factor that has the most impact on our water rate is peak hour demand; peak demand represents 65% of our total rate from GLWA.

## **HELP CONTROL OUR WATER RATE BETWEEN 12AM AND 5AM**

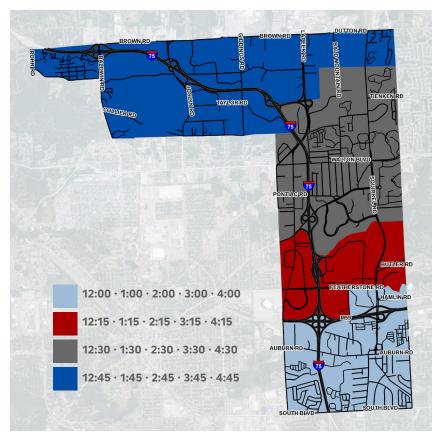
## HOW YOU CAN HELP SHIFT OUR PEAK DEMAND

Lawn irrigation is the main contributor to our peak hour demand. If we can shift when we water our lawns into non-peak hours (12AM - 5AM), we will be able to reduce the rate increases we have been receiving from GLWA. If you have an underground lawn irrigation system, please set your irrigation system to go "on" and "off" between the hours of 12AM and 5AM. In addition, the irrigation of property with an even-numbered street address should water on Monday, Wednesday, Friday and Sunday. Irrigation of property with an odd-numbered street address should water on Tuesday, Thursday, Saturday and Sunday. Furthermore, setting your irrigation clocks to quarter hour increments according to pressure zones (see map at right) can eliminate simultaneous top of the hour demand. For example, an irrigation system in Zone 2 should be set to a quarter past the hour between 12AM and 5AM.

By watering during non-peak hours, we will reduce our peak hour demand and by watering on alternate days, we will reduce our maximum day demand which will help control our water rates. For more information about our rates, please contact the **DEPARTMENT OF PUBLIC WORKS** at **248-391-3777** or at **DPW@AUBURNHILLS.ORG.** 

## **IRRIGATION** ZONES

START TIMES BETWEEN 12AM AND 5AM



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#### **OUR MISSION**

The City of Auburn Hills DPW, Water and Sewer Division, is dedicated to proper maintenance and operation of the water distribution and sanitary sewer systems. This ensures the water distribution system is clean and safe for both consumption and for fire protection needs and the sanitary sewer system has adequate wastewater discharge without disruption.

In order to do so, our crew of trained professionals maintains approximately 196 miles of water main and 128 miles of sanitary sewer main. The division is staffed by a Utilities Manager, two Crew Leaders, and eight Operators. The following are some of our programs that we actively pursue to achieve our mission.

#### **HYDRANT MAINTENANCE PROGRAM**

Hydrants, used for flushing and fire fighting, need periodic maintenance. This program is designed to provide scheduled maintenance to every City-owned hydrant. Each hydrant is also checked for operational integrity thus ensuring that, in an emergency, they are ready for use. The department also continues to emphasize hydrant painting as part of this program.



#### **VALVE MAINTENANCE PROGRAM**

The Valve Maintenance Program is designed to provide maintenance to the distribution system valves, making sure they are properly mapped, easily accessible, and operating correctly. This program will help avoid potentially serious problems when need for the valve arises, especially in emergencies.

#### **METER MAINTENANCE PROGRAM**

The Meter Program coordinates the planning, installation, testing and maintenance of water meters. Currently, meters are read at all service locations which include commercial, industrial, multi-family, and residential properties. The meter is read wirelessly each day. Scheduled checks of the meter occur periodically to be sure it is working correctly and repairs are made if necessary. The City replaces meters which are twenty years old or more. When the meter is due for this replacement, a notice will be mailed to the water consumer. There is no direct charge for this service.



#### WASTEWATER MAINTENANCE PROGRAM

The Wastewater Maintenance Program is responsible for cleaning, inspecting, televising, and repairing the City's sanitary sewer system. Cleaning the sewers involves using a vactor jet truck. This truck allows for crews to clean lines by using a high pressure water nozzle and a vacuum. Televising the sewer lines follows, and involves the use of a sewer line inspection system. A camera, mounted on a motorized sled, powers through the sewers, recording any defects found. All deficiencies are then documented, prioritized by severity, and repaired.

#### **CROSS CONNECTION CONTROL PROGRAM**

A very important component in monitoring water quality is the cross connection control program. A cross connection is a point in the system where the potable water system is in contact with an unapproved source and a back flow could occur. The program monitors all back flow devices that protect the system from a potential hazard which would contaminate the potable water supply. State and local ordinances require regular testing of the devices. The program monitors each account to see that every device is in good working condition and is protecting the water supply for all to enjoy.

#### **EMERGENCIES**

In the event of an emergency, please contact the **DEPARTMENT OF PUBLIC WORKS AT 248-391-3777**. After 5PM, weekends and holidays, please call the **POLICE DEPARTMENT AT 248-370-9444**. Please be prepared with the type of emergency, location, name of the caller, and contact information. Non-emergency questions and concerns can also be directed to the **DEPARTMENT OF PUBLIC WORKS** during the hours of 8AM to 5PM, Monday - Friday. Phone: **248-391-3777** Email: **dpw@auburnhills.org** 

#### **DELINQUENT CHARGES MADE A LIEN**

In September, City Council will review and approve the rollover of delinquent water/sewer billings to the property tax roll. Under the provisions of Section 74, Ordinance No. 634, "Any charges which on August 1 of each year have been delinquent for 90 days or more shall be transferred to the next City tax roll against the premises served and shall be collected and said lien enforced in the same manner as provided in respect to City taxes assessed and said roll." This tax transfer occurs in September/ October of each year, prior to the issuance of the winter property tax bill, and will include penalties added to the account and a fee for transferring the debt to the tax bill.

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### 2016 CITY OF AUBURN HILLS WATER QUALITY DATA TABLES

The tables below list all of the drinking water contaminants that were detected during the 2016 calendar year of this report. The presence of the contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, may be more than one year old.

INORGANIC CHEMICALS - MONITORING AT THE PLANT FINISHED WATER TAP									
REGULATED CONTAMINANT	TEST DATE	UNIT	HEALTH GOAL MCLG	ALLOWED LEVEL MCL	HIGHEST LEVEL DETECTED	RANGE OF DETECTION	VIOLATION YES/NO	MAJOR SOURCES IN DRINKING WATER	
Flouride	5/10/16	ppm	4	4	0.5	N/A	NO	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories	
Nitrate	5/10/16	ppm	10	10	0.46	N/A	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	

DISINFECTION BY-PRODUCTS - MONITORING IN DISTRIBUTION SYSTEM STAGE 2 DISINFECTION BY-PRODUCTS									
REGULATED CONTAMINANT	TEST DATE	UNIT	HEALTH GOAL MCLG	ALLOWED LEVEL MCL	HIGHEST LRAA	RANGE OF DETECTION	VIOLATION YES/NO	MAJOR SOURCES IN DRINKING WATER	
Total Trihalomethanes (TTHM)	2016	ppb	N/A	80	37.7	16-43.6	NO	By-product of drinking water chlorination	
Haloacetic Acids Five (HAA5)	2016	ppb	N/A	60	13.3	7-19	NO	By-product of drinking water disinfection	
DISINFECTION RESIDUALS MONITORING IN DWSD DISTRIBUTION SYSTEM BY TREATMENT PLANT									

DISINI ECTION RESIDUALS MONITORING IN DWSD DISTRIBUTION STSTEM BY TREATMENT FEATT										
REGULATED CONTAMINANT	TEST DATE	UNIT	HEALTH GOAL MRDGL	ALLOWED LEVEL MRDL	HIGHEST RAA	QUARTERLY RANGE OF DETECTION	VIOLATION YES/NO	MAJOR SOURCES IN DRINKING WATER		
Total Chlorine Residual	Jan-Dec 2016	ppm	4	4	0.79	0.61-0.85	NO	Water additive used to control microbes		

2016 TURBIDITY - MONITORED EVERY 4 HOURS AT PLANT FINISHED WATER TAP									
HIGHEST SINGLE MEASUREMENT CANNOT EXCEED 1 NTU	LOWEST MONTHLY % OF SAMPLES MEETING TURBIDITY LIMIT OF 0.3 NTU (MINIMUM 95%)	VIOLATION YES/NO	MAJOR SOURCES IN DRINKING WATER						
0.28 NTU	100%	NO	Soil Runoff						

Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

2016 MICROBIOLOGICAL CONTAMINANTS - MONTHLY MONITORING IN DISTRIBUTION SYSTEM									
REGULATED CONTAMINANT	MCLG	MCL	HIGHEST LEVEL DETECTED	VIOLATION YES/NO	MAJOR SOURCES IN DRINKING WATER				
Total Coliform Bacteria	0	Presence of Coliform bacteria > 5% of monthly samples	0	NO	Naturally present in the environment.				
E.coli Bacteria	0	A routine sample and a repeat sample are total coliform positive, and one is also fecal or E.coli positive	0	NO	Human waste and animal fecal waste.				

2014 LEAD AND COPPER MONITORING AT CUSTOMERS' TAP									
REGULATED CONTAMINANT	TEST DATE	UNIT	HEALTH GOAL MCLG	ACTION LEVEL AL	90TH PERCENTILE VALUE*	NUMBER OF SAMPLES OVER AL	VIOLATION YES/NO	MAJOR SOURCES IN DRINKING WATER	
Lead	2014	ppb	0	15	0	0	NO	Corrosion of household plumbing system; Erosion of natural deposits	
Copper	2014	ppm	1.3	1.3	0.0441	0	NO	Corrosion of household plumbing system; Erosion of natural deposits; Leaching from wood preservatives	

<sup>\*</sup>The 90th percentile value means 90% of the homes tested have lead and copper levels below the given 90th percentile value. If the 90th percentile value is above the AL additional requirements must be met.

Total Organic Carbon (ppm)

The Total Organic Carbon (TOC) removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. The TOC was measured each month and because the level was low, there is no requirement for TOC removal.

Erosion of natural deposits

RADIONUCLIDES 2014							
REGULATED CONTAMINANT	TEST DATE	UNIT	HEALTH GOAL MCLG	ALLOWED LEVEL MCL	LEVEL DETECTED	VIOLATION YES/NO	MAJOR SOURCES IN DRINKING WATER
Combined Radium Radium 226 and 228	5/13/2014	pCi/L	0	5	0.86 ± 0.55	NO	Erosion of natural deposits

CONTAMINANT	MCLG	MCL	LEVEL DETECTED	SOURCE OF CONTAMINATION
Sodium (ppm)	N/A	N/A	4.00	Erosion of natural deposits

## FREQUENTLY ASKED QUESTIONS

#### **HOW OFTEN ARE UTILITY BILLS MAILED?**

Bills are mailed on a monthly basis, and usually received by the 20th. Utility Bills are always due on the 15th of each month. If the 15th falls on a holiday or weekend, then the due date is extended to the next business day.

## HOW CAN I MAKE A PAYMENT ON MY UTILIT BILLING ACCOUNT?

The Treasurer's Office accepts cash, check, and credit/debit card payments. Payments must either be mailed or dropped off at City Hall. After hours payments may be put in the drop-box located outside of the Treasurer's Office. You can also make a payment with a Credit Card or E-Check by using the Oakland County website at **WWW.AUBURNHILLS.ORG.** 

#### WHEN IS MY UTILITY BILL PAYMENT DUE?

Water and sewer bills are always due on the 15th of each month. If the 15th falls on a holiday or weekend, then the due date is extended to the next business day. A 10% penalty is applied if bills are not paid by the due date. Failure to receive a bill does not waive any past due penalty.

#### WHY IS THERE A PENALTY CHARGE ON MY BILL?

By City Ordinance No. 634, Section 74-143, "If any bill is not paid when due, then a penalty of ten percent shall be added thereto."

#### WHERE IS MY WATER METER?

Your water meter is usually located in the basement, crawl space or in a utility room.

## WHAT IS THE PLASTIC BOX ON THE OUTSIDE OF MY HOUSE?

The black or gray plastic box on the outside of the house is a remote reading device. This remote reader is wired to the meter inside. Daily, the DPW gets meter readings via the remote, which is how we can accurately bill and is the reason why meter readers do not knock on your door every month asking to come inside to read your water meter.

## HOW CAN I TELL IF THE METER READ ON MY BILL IS AN "ACTUAL READ"?

The letter printed after the Previous Read number and the Current Read number should be an "A" if an "Actual Read" was taken from your meter. You can also verify the read by looking at your meter's odometer.

## HOW CAN I GET A PRINTOUT OF MY METER READ HISTORY OR WATER CONSUMPTION HISTORY?

You can go online to www.auburnhills.org and visit the Property Data search page or contact the Utility Billing Department by calling **248-370-9340** or via email at **UTILITYBILLING@AUBURNHILLS.ORG**.

#### WHY IS MY WATER BILL SO HIGH?

There are several reasons for a high water bill. During the summer months, watering new or existing grass or landscaping can cause the water bill to escalate. Seemingly small problems such as toilet or faucet leaks, a water powered sump pump, or a leaking humidifier can make a great impact on your water bill. You can check for leaks by looking at the small triangular leak indicator on the face of your water meter. If it is spinning when no water should be running, a leak is present. Another method of checking for leaks is to take a meter reading at night and another in the morning. If no water was used over night, the reading should remain the same.

## I AM SELLING MY HOUSE. CAN I GIVE YOU THE FINAL READ OFF MY METER?

Only Water Department personnel take final readings. To assure you get your final bill in time for your closing date, you will need to call and schedule a final reading appointment 48 hours before your closing. We will need access to your premises to read the water meter inside. You will then be able to pick up your final bill at the Treasurer's Office at City Hall the next business day and receive a receipt, or have it mailed, faxed or emailed to you.

## CAN I GET A SEPARATE METER FOR IRRIGATING MY LAWN?

Yes, a separate meter for "Irrigation Only" can be purchased. Please call for more information at **248-391-3777**.

### **CONTACT INFORMATION**

Questions? Contact us for more information:

248-370-9340 UTILITYBILLING@AUBURNHILLS.ORG

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### WHY WATER ISN'T FREE

#### **WATER DEMAND**

Tap water is one of the better values in southeast Michigan. For the price paid in a typical water bill, the quality of water in terms of taste, pressure and availability can't be beat. The plentiful supply from our faucets is the result of a significant infrastructure investment made by the Great Lakes Water Authority (GLWA) in the treatment and distribution system, and by local governments in their distribution systems. While the source water from the Detroit River is free, costs are incurred for chemicals, treatment, pumping, distribution system operation and maintenance, meter reading, billing and customer support services. Safe drinking water is delivered to our taps as a not-for-profit service that covers these water production expenses.

Our water infrastructure, its work force and the regulatory environment are rarely in the public eye, but a tremendous amount of work is going on to ensure water demands are met each day. Five water treatment plants (WTPs) produce potable water for nearly 4 million people in 127 communities in the GLWA service area. This system pumps an average of 610 million gallons of drinking water each day, delivering it to service area customers through 12,500 miles of distribution mains. A regional work force comprised of GLWA's and local communities' water departments operate, maintain and update this system to serve our needs and protect public health.

Four of GLWA's WTPs obtain water from the Detroit River and the fifth plant draws from Lake Huron. These are convenient water sources to all areas served and represent smart, shared use of local water resources. Water is produced as needed, in response to demand. The system is designed to treat and deliver water on a continuous basis. A 12- to 16-hour supply of treated water is typically kept in the reservoir at each plant to supply potable water throughout the distribution system. If demand increases, production increases.

#### **GUIDED BY MANY WORKERS**

Water production by GLWA staff is a 24/7 operation, 365 days a year. The five treatment plants, 22 booster pumping station, 34 reservoirs and transmission mains are always in operation, ready to meet demand. Three shifts of workers rotate through each plant every day to keep pace with demand. A water distribution sampling team travels throughout the system taking samples at customer taps and providing feedback to the WTPs so that they can make chlorine adjustments when needed. The Systems Control Group continuously monitors system performance and relays data to the WTPs to keep supply matching demand. The Maintenance and Repair and Meter Operations Groups provide additional support. Once water crosses a meter facility and flows into a suburban community's distribution system, it is entrusted to a new set of hands. In the City of Auburn Hills, we have a Water Department staff of 10 that includes 7 licensed distribution operators who manage the delivery of water to businesses and residents. Our system includes 196 miles of water main with five facility meter connections to Detroit, 2,461 valves and 2,873 fire hydrants that require routine maintenance. Valves are exercised, or turned, on a rotating basis to increase confidence that they will turn in an emergency situation. Fire hydrants are flushed to ensure they operate correctly, have adequate flow and pressure, and are ready for winter use. Meter reading, billing and customer service must also be provided for 5,701 water accounts.

Consumers create demand every time they turn on their faucets or sprinkler systems. The level of service provided to residents and businesses in the Detroit service area is dictated by the users' needs to optimize operations. Water consumption is impacted by the weather. If the area has ten days of heat and no rain, consumption goes up. Once it rains, consumption drops. As a result, the highest usage occurs during the summer. The day of highest water usage in the system, called maximum day, and the hour of that day when the greatest amount of water is used, called peak hour demand, are the ultimate conditions that GLWA must be prepared to deliver water under. As part of their contracts, suburban communities commit to a peak hour demand usage value that they will not exceed during the year. GLWA, in turn, commits to deliver these flow rates at a specific pressure range and sets its operation and capital improvements budgets around this flow rate.

Electrical consumption plays a role in rising costs to meet peak hour demand. As electrical rates climb during peak power usage, so does demand and the cost to transport water. Similar to DTE Energy's rate plan that gives customers a lower rate during off-peak hours, GLWA's wholesale rate formula allows suburban communities to balance summer water consumption by increasing use during off-peak hours which reduces their peak hour consumption on the highest demand day. Communities can reduce demand by moving automated water usage application to the off-peak hours.

The net effect is to balance the demands on the system and reduce pumping required during peak hours of electrical consumption. Several communities have successfully reduced their peak hour consumption using this approach.

## AN INDUSTRY MARKED WITH RISING EXPECTATIONS AND AGING INFRASTRUCTURE

New federal and state regulations are routinely implemented requiring detailed testing to assess the performance of the treatment process and implementation of updates if new standards are not being met.

Public health data also initiates changes. The Centers for Disease Control and Prevention recently recommended reducing the amount of fluoride added to water to promote dental health since we are getting fluoride from other sources now.

Aging infrastructure needs to be upgraded as it nears the end of its useful life and current technologies are incorporated into the treatment process. Water treatment plants, distribution mains and pump stations require rehabilitation.

#### THE VALUE OF CLEAN WATER

A reliable, safe drinking water supply brings tremendous value to a community. Water supply does positively impact our property values like sewer service, roads and schools. Water is a shared resource that must be used wisely and protected for future generations.

#### MONTHLY HOUSEHOLD COSTS BREAKDOWN

Gas 18%
Cell Phone 18%
Electric 15%
Internet 12%
Cable 11%
Telephone 8%
Sewer 8%

Water 6%

Newspaper 4%

BASED ON AVG. MONTHLY HOUSEHOLD BILLS OF \$367. SEWER CHARGES FALL NEAR THE BOTTOM OF EXPENDITURES AS A PERCENTAGE.

Our views about the value and price of water can be conflicting. Bottles of water are purchased at costs ranging from \$1.16 to \$8.00 per gallon while the water from our tap runs around \$0.03 per gallon. Next time you get your water bill, compare it to the other expenditures that keep your household running. Your water bill is likely the lowest monthly expense in the group.

## **CITY OF AUBURN HILLS**

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