

Drinking Water Report



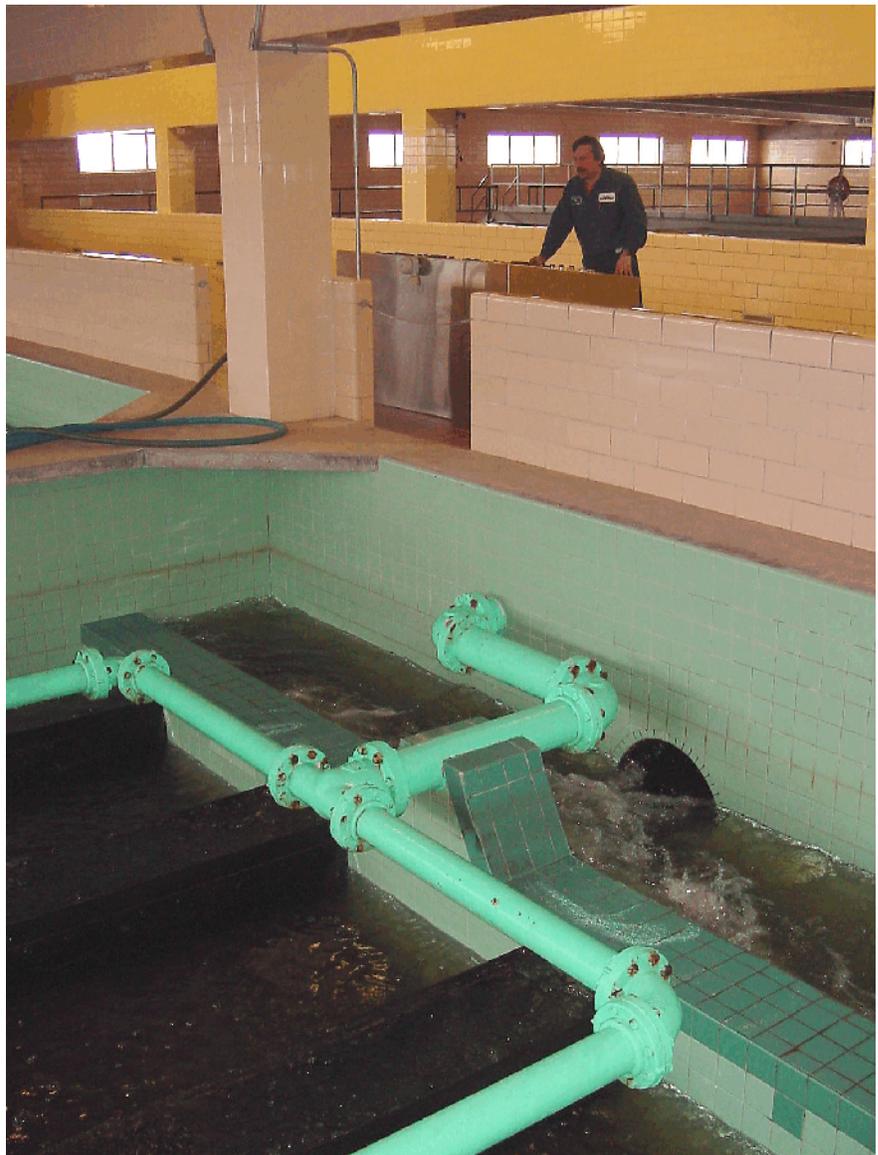
Safe
Drinking
Water is
#1!!

As you will see from the tables on pages 4-5 of this report, Wausau Water Works supplied excellent drinking water throughout 2006.

Why do we prepare this report annually? We want our valued customers to be informed about their drinking water. The federal government also wants you to be informed about what substances are in your water, and requires all water utilities in the United States to provide this information to their customers on an annual basis. You should feel assured that the water you receive from your tap is safe for you and your family, because "Quality on Tap is our Commitment, Our Profession", and providing quality drinking water to you, our residents, is our **number one** priority!

Questions About this Report?

If you have any questions regarding this report, or concerns about your water, please contact Joseph L. Gehin, Director of Administration - Public Works and Utilities, at 715-261-6530 or Dick Boers, Drinking Water Superintendent, at 715-261-7286. If you would like to learn more, please attend any of our regularly scheduled commission meetings which are



Tim Mesalk, plant operator, backwashes the sand filters at Wausau's Water Treatment Plant.

generally held the first Tuesday of each month, at 1:30 p.m., in City Hall. If you wish to have an item included on the agenda for Commission consideration, please contact Deb Geier at 715-261-6533 two weeks prior to the next scheduled meeting.



Ask Professor Faucet

**Professor,
what causes
mains to
break?**

A number of things can affect a main, be it water, sanitary or storm sewer. In our area, frost can be a big factor, either as it is going down or coming out. The frost can cause the ground to shift, which can stress mains. In some areas earthquakes can affect mains also, even hundreds of miles away.

Can you prevent a main break? Typically not, although if we have experienced that an area is having an increasing number of breaks, we will replace the main. We also assess the condition of mains during road reconstruction projects, and will replace if break history and pipe size warrant. Sewer mains are often sliplined, a process where a special liner is inserted into the main to extend its life.

How old are the City's water mains? Mains in some areas of the City can be quite old. The average life expectancy of a water main is around 100 years.

How do you know when a main has a break? With water main breaks, often the water will surface. Residents will often advise us that water is coming out of the middle of the road, or they may experience loss of water pressure. Occasionally, the water will find another outlet, such as a



sanitary or storm sewer, and may never surface. These are much harder to find, and often take longer to pinpoint to repair. In a case like that, special equipment is used to "listen" for the break to isolate its location.

How long does it take to repair a main break?

Once the leak is located, it can normally be repaired in a few hours. Crews are diligent to make sure repairs are made quickly to avoid inconvenience to our customers and excessive loss of water.

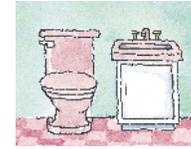


Can water or wastewater get into my home? Certainly, water from mains can enter through the basement walls, or if it has infiltrated a sanitary sewer, it can get in through your floor drains. We make every attempt to minimize these incidences, but unfortunately we can't predict when these types of breaks will happen.

Plugged sanitary sewers can also cause backups. Many times grease or other items that should not be disposed of through the toilet, such as diapers or personal hygiene products, are flushed into the mains. These items can block your own lateral or the mains, and cause backups for your home or business or your neighbors.

How can I prevent these type of backups? First off, never use your drain or toilet to replace a garbage can. Grease and oil should be disposed of with your garbage, not poured down the drain. The garbage can is also the correct means of disposal

for diapers, soiled towels, including paper towels, personal hygiene products, etc. Use your toilet only for its intended purpose.



Homeowners, and even renters, should consider having their sewer lateral cleaned on a regular basis. Preventive maintenance for your sewer lateral is just as important as checking the air pressure in your tires, or changing the oil in your car. Roots and other debris can accumulate and cause blockages and a great deal of mess, and expense.

If I experience a flooded basement, or sewer backup, is the City responsible for the damage? Not necessarily. We make every effort to ensure that repairs are made promptly, and that sewer mains are cleaned and inspected within a normal maintenance schedule. In order for a claim to be honored, there needs to be negligence found on the part of the utility. A broken main or plugged sewer is not something we traditionally have control over. Therefore, damage from flooding or back ups are typically not covered by our insurance carrier, and claims may be denied.

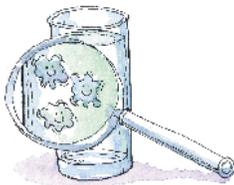
What can I do? Most homeowner policies allow a rider for sewer backups. This is not normally included in your policy, but can be added for a fee. Having this extra protection is recommended, as claims for this type of damage can often be expensive. Much more expensive than the cost of the insurance rider. Check with your homeowners insurance agent for more information.

Routine Water Quality Testing....

The Water Quality Test Results shown on pages 4-5 only lists substances which are required to be tested and are detected. **We run numerous tests for substances which are not detected.** We also run routine tests to help us evaluate water characteristics such as pH, alkalinity, hardness, etc. A summary of those results is shown below.

pH - Typical result: 8.5. Ideal range: 7 to 8.5. Measure of acidity - low values may indicate corrosive water.

Alkalinity - Typical result: 70 to 80 mg/l. Measure of water's ability to neutralize acids - is related to pH and hardness.



Hardness - Typical result: 80 to 100 mg/l or 4-1/2 to 6 grains/gallon. Wausau's water is moderately soft. Hard water is beneficial to health, but high levels can decrease soap's cleaning ability and cause scaling inside of pipes.

Iron - Typical result: less than 0.05 mg/l. Natural levels in our well water can be high, but it is removed by our treatment plant - not a health concern, but it can cause taste and odor problems and staining of laundry when bleach is used.

Manganese - Typical result: less than 0.04 mg/l. Like iron, a naturally occurring mineral that is removed at the treatment plant.

What these tests indicate is that we have high quality, good tasting water available right at our taps!



Did You Know?

All drinking water, including bottled drinking water, may be reasonably expected to contain naturally dissolved elements/minerals. It's important to remember that the presence of these constituents does not necessarily pose a health risk,



and generally are required for a balanced diet. All sources of drinking water are subject to potential contamination by constituents that are naturally occurring, or are manmade. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. All 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**.

In Memoriam

Wausau Water Works expresses its condolences to the family of Dennis Sefton who passed away on January 18, 2007. Dennis had retired in July of 2006 after serving as a certified operator/mechanic for the Wastewater Division for 35 years.

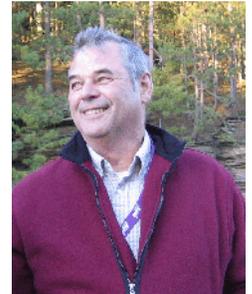
New Faces New Places

We'd like to welcome Matt Baker, who was hired in January to fill a vacancy on the Sewer Collection Crew. Congratulations go out to Mark Hilgendorf who was promoted from the position of sewer maintainer to plant maintenance mechanic. Congratulations are also extended to Bob Thompson who was recently promoted to the position of Assistant Superintendent of Water

Operations. Good luck to Matt, Mark and Bob in their new positions.

Geiger Retires

It was almost 34 years ago that Dennis Geiger was hired by the City of Wausau Department of Public Works. Dennis recalled that after one month he was ready to quit, and was actually scheduled to start work with another company when an opening came up at the Water Treatment Plant.



Dennis applied and got the job. A couple of years later he transferred to the Distribution Crew where he worked his way up to crew chief, and then in 2000 was promoted to Assistant Superintendent of Water Operations, a position he held until his retirement on March 2, 2007.

Dennis recalls back in the "olden days" how they would spend 16-18 hours on a jack hammer to break up the roadway or sidewalk, and would then shovel the material into a clam bucket to be loaded into a truck. That all made repairing broken water mains a lot tougher, and took longer to repair than with today's equipment. He fondly recalled the generosity of homeowners who would bring hot coffee to the workers during those frigid times when mains like to break.

Dennis and his wife Stephanie, who also retired on March 2nd, plan to spend their retirement doing a little traveling and spending time with their four children and six grandchildren. Dennis also said he plans to spend time taking care of his sheep and chickens at the family farm.

We thank Dennis for his many years of service to Wausau Water Works and wish him a happy retirement.



WATER QUALITY TEST RESULTS

Substance	Unit Measurement	MCLG	MCL	Level Detected	Violation Y/N	Likely Source of Substance
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Disinfection Byproducts

HAA5	ppb	60	60	2 average Range ND-5	NO 	Disinfection By-product
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Inorganic Contaminants

Arsenic (Last sample date 8/25/2005)	ppb	N/A	10	1 Range 1-1	NO 	Erosion of natural deposits.
Barium (Last sample date 8/26/2005)	ppm	2	2	.005 Range .004-.005	NO 	Erosion of natural deposits.
Copper (Last sample date 9/7/2005)	ppm	1.3	AL=1.3	0.1370 Range .0064-.1740	NO 	Corrosion of household plumbing systems.
Fluoride	ppm	4	4	1.1 average Range 1.0-1.3	NO 	Erosion of natural deposits; water additive which promotes strong teeth.
Lead (Last sample date 9/13/2005)	ppb	0	AL=15	15.3 Range .00-55.40	NO * 	Corrosion of service lines and household plumbing systems.
Nitrate (N03-N)	ppm	10	10	.50 average Range .31-.69	NO 	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium (Last sample date 8/26/2005)	ppm	N/A	N/A	12.60 Range 10.30-12.60	NO 	Naturally occurring, contained in corrosion control additive

* Systems exceeding a lead and/or copper action level must take actions to reduce lead and/or copper in the drinking water. The lead and copper values represent the 90th percentile of all compliance samples collected. If you want information on the number of sites or the actions taken to reduce these levels, please contact Wausau Water Works at 261-6530.

The tables on these two pages display the number of contaminants that were required to be tested in the last five years. The Drinking Water Report may contain up to five years worth of water quality results. If a water system tests annually, or more frequently, the results from the most recent year are shown on the Drinking Water Report. If testing is done less frequently, the results shown on the Drinking Water Report are from the past five years.

Substance	Unit Measurement	MCLG	MCL	Level Detected	Violation Y/N	Likely Source of Substance
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Unregulated Contaminants

Chloroform	ppb	N/A	N/A	.99 average Range .97-1.00	NO 	By-product of drinking water chlorination.
Sulfate <small>(Last sample date 8/25/2005)</small>	ppm	N/A	N/A	14.10 Range 12.50-14.10	NO 	Naturally occurring.

Volatile Organic Contaminants

TTHM (Total Trihalo-methane)	ppb	0	80	1.0 Range 1.0	NO 	By-product of drinking water chlorination.
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Radioactive Contaminants

Gross Alpha <small>(Excl. R&U) (Last sample date 3/07/2002)</small>	pCi/l	0	15	3.2 Range .0-3.2	NO 	Erosion of natural deposits.
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Microbiological Contaminants

Coliform	TCR	0	Presence of coliform bacteria in >=5% of monthly samples	4%	NO 	Naturally present in the environment
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Definition of Terms: The information provided in the tables on pages 4 and 5 contain many terms and abbreviations that may be unfamiliar. To help you better understand, we've provided the following definitions.

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

PPM Parts Per Million or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

PPB Parts Per Billion or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

pCi/l Picocuries per liter - (a measure of radioactivity).

MCL Maximum Contaminant Level - the "Maximum Allowed" (MCL) is 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 "Goal" (MCLG) is 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.

TCR Total Coliform Rule.

ND None detected.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Data presented in these tables represent the most current test results. Some tests are performed on a 3 year cycle.

Important Info

Infants and young children are typically more vulnerable to lead in drinking water than the general population. As a result of materials used in your home's plumbing, it is possible that lead levels at your home may be higher than at other homes in the community. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested, or you can flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the **Safe Drinking Water Hotline (1-800-426-4791)**.

Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

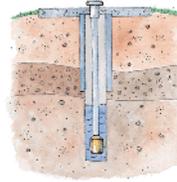


Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of 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 microbiological contaminants are available from the **Safe Drinking Water Hotline (800-426-4791)**.

You may also contact our office at 715-261-6530 if you have questions regarding your water quality, or to obtain information on lead testing in your home. Our office hours are 8:00 a.m. to 4:30 p.m. Monday through Friday.

Where Does Our Water Come From?

Wausau's drinking water comes from six municipal wells, all of which are located near the Wisconsin River. These wells range in depth from 95 feet to 160 feet, and pump anywhere from 900 to 3000 gallons per minute.



From the wells, the water travels to our Water Treatment Plant where it undergoes treatment to remove iron and manganese prior to distribution to your home or business.

Over 200 miles of water mains deliver the water from the Treatment Plant to more than 15,000 homes and business served by Wausau Water Works.

Thousands of Water Quality Tests Conducted

The substances shown on the tables on pages 4 and 5 indicate the contaminants that are detected in our drinking water. Other items that are tested, but are indicated as non-detects (meaning their amounts are so low, if at all present, that they are not detected during testing) include: Antimony, Beryllium, Cadmium, Chromium, Mercury, Selenium, Thallium, Aldicarb, Atrazine, Pentachlorophenol, Toxaphine, Benzene, Styrene, Vinyl Chloride,



Xylene, just to name a few.

Thousands of water quality tests are

performed annually to ensure that you are receiving the best possible quality of drinking water. Additional tests including inorganic substances, disinfection byproducts, radioactive

substances, unregulated contaminants, microbiological, volatile organic and synthetic organic substances which include pesticides and herbicides, are conducted on a three to five year cycle.

WWW Newsletter Receives 1st Place

Wausau Water Works received 1st place in the large utility category in the Wisconsin Rural Water Association's annual newsletter contest. This award represents the third time Wausau Water Works has received this very prestigious recognition.



Northwoods Mist - A Unique Gift

Are you planning a family reunion or wedding this summer? Looking for something unique to give to your friends or family? *Northwoods Mist*, Wausau's very own bottled water, is cool and refreshing, and a perfect gift to include in welcome packages, for students heading to college, or just for people on the go.

Northwoods Mist is available at Wausau City Hall.

Summer Hours

City Hall has switched to their summer hours, effective Memorial Day through Labor Day. Offices will be open from 8 a.m. to 4:30 p.m., Monday through Friday. After hours emergencies should be directed to our answering service at 715-848-7549.

Did You Know??

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 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 users.
- 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 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 that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

Lead Pipes Affect Water Quality

The City of Wausau has many older homes that were constructed when lead plumbing materials were commonly used. Lead pipes are sometimes found in homes built before about 1930, most homes built before about 1965 have lead service lines between the house and the water main, and lead solder was used with copper pipes up to 1984. Even today lead can be found in some new brass fixtures.

Lead is not found in our groundwater or water in the City distribution mains but is absorbed from lead service lines and lead plumbing materials. We recommend that residents with homes built before 1984 flush their water line before using water for cooking or drinking. It takes time for the water to absorb lead so the idea is to use water that has not been in contact with lead plumbing materials for more than a few hours.

Adequately flushing the water line can require running 1 to 2 gallons of water to draw fresh water from the water main. It would not be necessary to run as much water if the home does not have a lead service line or if water has recently been used elsewhere in the house, to flush a toilet or wash clothes for example.

The utility continues to monitor the corrosion potential of our drinking water to minimize the amount of lead absorbed from household plumbing.

Please contact Wausau Water Works at 261-6530 if you have questions regarding lead in drinking water, lead plumbing, or flushing requirements.



Water Tidbits

How much drinking water is produced in the entire United States each day, and how does that compare with the water used for industrial purposes and irrigations of crops?

Almost 40 billion gallons of tap water is produced each day for domestic use (homes, restaurants, hotels, small businesses, and so forth) in the United States, 60 percent from surface water and 40 percent from groundwater. Daily irrigation use is much larger, but the volume depends on the location and the time of year. It takes about 50 glasses of water just to grow enough oranges to produce one glass of orange juice, for example. One estimate puts the total amount used for irrigation at 141 billion gallons per day, 66 percent from surface water and 34 percent from groundwater. Of course, irrigation water is not treated as tap water is. Finally, industrial use is about 160 billion gallons per day.

Are we running out of water?

Globally, we have sufficient fresh water to satisfy the need for drinking water, but frequently it is not located where the high-use areas are. Thus, localized water shortages occur. Furthermore, droughts (below normal rainfall), often lasting several years, worsen water shortages in some areas.

How does nature recycle water?

The water cycle keeps the amount of total water on the globe constant. Water from oceans, lakes, rivers, ponds, puddles, and other water surfaces evaporates to become clouds. The clouds make rain, snow, or sleet that falls to earth to make rivers and streams, some of which seeps into the ground to form groundwater. All of this water flows to the ocean to start the cycle over again. Before returning to the ocean, some of this water is taken for drinking water and then is discharged as wastewater. The cycle is never-ending.

Source: Plain Talk About Drinking Water

Water Works Rate Schedule

Rates Effective March 1, 2006

Water Rates

Quarterly Service Charge

(based on size of water meter)

5/8 inch meter	\$ 15.00
3/4 inch meter	15.00
1 inch meter	24.00
1-1/4 inch meter	36.00
1-1/2 inch meter	42.00
2 inch meter	63.00
3 inch meter	114.00
4 inch meter	162.00
6 inch meter	306.00
8 inch meter	468.00
10 inch meter	687.00
12 inch meter	906.00

Plus Volume Charge below:

First 6,000 cubic feet used each quarter - \$1.64 per 100 cubic ft.
 Next 54,000 cubic feet used each quarter - \$1.49 per 100 cubic ft.
 Over 60,000 cubic feet used each quarter - \$1.13 per 100 cubic feet.

Sewer Rates

Quarterly Service Charge

(based on size of water meter)

5/8 inch meter	\$ 13.90
3/4 inch meter	15.60
1 inch meter	20.10
1-1/4 inch meter	24.20
1-1/2 inch meter	28.40
2 inch meter	43.00
3 inch meter	72.00
4 inch meter	113.00
6 inch meter	218.00

Plus Volume Charge below:

All volume, as recorded by the water meter each quarter, shall be charged at the rate of \$1.88 per 100 cubic feet.
 Unmetered sewer rate is \$64.38 per quarter outside the City of Wausau.

Private Fire Protection

(based on size of connection)

2 inch connection	\$12.00
3 inch connection	22.00
4 inch connection	37.00
6 inch connection	74.00
8 inch connection	117.00
10 inch connection	176.00
12 inch connection	256.00

Public Fire Protection

(based on size of water meter)

5/8 inch meter	\$8.70
3/4 inch meter	\$8.70
1 inch meter	\$21.60
1-1/4 inch meter	\$31.80
1-1/2 inch meter	\$42.90
2 inch meter	\$69.00
3 inch meter	\$129.00
4 inch meter	\$216.00
6 inch meter	\$432.00
8 inch meter	\$684.00
10 inch meter	\$1026.00

Payments must be received in the office of the Clerk/Customer Service, City Hall, by the 20th of each month. Payments received after the 20th of each month are subject to late payment charges, in the amount of 1% of the outstanding balance.

Payments made at grocery stores, electronically, or through the mail via the Milwaukee lockbox address should be made at least seven (7) days prior to the due date to ensure timely receipt.

Dlam ntawv tshabxuu nuav muaj lug tseemceeb heev nyob rau huv hws has txug cov dej mej haus. Kuas it tub paab txhais rau koj, los nrug ib tug kws paub lug thaam. Este informe contiene informacion importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hablé con alguien que lo entienda.

407 Grant Street ♦ Wausau, WI 54403-4783
Important Water Quality Information Enclosed

