DELAVAN WATER & SEWER UTILITY
123 S. SECOND STREET
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THE 2018 CONSUMER CONFIDENCE REPORT

The Water We Drink

We are pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality of the water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Sources of Water

Source ID	Unique Well Number	Source	Depth (in feet)	Location
Well #3	BH170	Groundwater	108	Edward Street Extension
Well #4	BH171	Groundwater	115	Wright Street
Well #5	BH172	Groundwater	65	Franklin Street
Well #6	EQ931	Groundwater	1,485	Edward Street
Well #7	WJ912	Groundwater	375	Elmhurst Avenue

All City water is treated with fluoride, chlorine and orthophosphate, and all are within the D.N.R. optimum ranges.

The Central Treatment Facility, located on Edward Street, is responsible for the treatment of water from the Wright Street and Edward Street shallow wells and the Edward Street deep well. The water from the Franklin Street well is treated on site.

The North Water Treatment Facility (NWTF), which became operational January, 2010, is located on Elmhurst Avenue. The NWTF is responsible for the treatment of water from Well #7 and was constructed with capacity to treat two additional wells that are planned to be located within close proximity to the treatment facility.

A source water assessment has been completed for the City of Delavan. The assessment identifies land areas that contribute water to each system, significant potential contaminant sources within those areas, and the susceptibility of the drinking water systems to contamination.

We are pleased to report that our drinking water is safe and meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact **Public Works Superintendent** Jim Piester at (262) 728-5585 ext. 140**.** 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 Public Works Committee meetings. They are held on the fourth Tuesday of each month at 5:30 p.m. at the City of Delavan's Municipal Building, 123 S. Second Street. Meetings are open to the public.**

Educational Information: 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 or 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 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.

Definition of Terms

Terms	Definition
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
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 a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
MFL	million fibers per liter
MRDL	Maximum residual disinfectant level: The highest level of a disinfectant allowed in the 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants
mrem/year	millirems per year (a measure of radiation absorbed by the body)
NTU	Nephelometric Turbidity Units
pCi/l	picocuries per liter (a measure of radioactivity)
ppm	parts per million, or milligrams per liter (mg/l)
ppb	parts per billion, or micrograms per liter (ug/l)
ppt	parts per trillion, or nanograms per liter
ppq	parts per quadrillion or picograms per liter
TCR	Total Coliform Rule
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

MICROBIOLOGICAL CONTAMINANTS

Contaminant	MCL	MCLG	Count of Positives			Violation	Typical Source of Contaminant
	coliform presence	0	0				
Coliform (TCR)	in 5% of monthly samples					No	Naturally present in the enviroment

DISINFECTION BYPRODUCTS

Contaminant (units)	MCL	MCLG	Level	Range	Sample Date (if prior to 2018)	Violation	Typical Source of Contaminant
TTHM (ppb)	80	0	1.3	0.29			By-product of drinking water
HAA5 (ppb)	60	0	0.29	1.3		NO	chlorination

INORGANIC CONTAMINANTS

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2018)	Violation	Typical Source of Contaminant
ARSENIC	10	n/a	1	nd-1	5/13/2014	NO	Erosion of natural deposits; Runoff from
(ppb)							orchards; runoff from glass and
							electronics production wastes
BARIUM	2	2	0.340	0.053-	6/20/2017	NO	Discharge of drilling wastes;
(ppm)				0.340			Discharge from metal refineries;
							Erosion of natural deposits
COPPER	AL=1.3	1.3	90th percentile	0 of 20	6/26/2017	NO	Corrosion of household plumbing
(ppm)			level 0.80	results were			systems; Erosion of natural
				above the			deposits; Leaching from wood
				action level			preservatives.

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2018)	Violation	Typical Source of Contaminant
FLUORIDE	4	4	1.6	0.2	6/20/2017	NO	Erosion of natural deposits; Water
(ppm)				1.6			additive which promotes strong
							teeth; Discharge from fertilizer
							and aluminum factories.
LEAD	AL=15	0	90th percentile	0 of 20	6/26/2017	NO	Corrosion of household plumbing
(ppb)			level 8.40	results were			systems; Erosion of natural
				above the			deposits.
				action level			
NICKEL	100		1.4000	0.7-	6/20/2017	NO	Nickel occurs naturally in soils, ground
(ppb)				1.4000			water and surface waters and is often
							used in electroplating, stainless steel
							and alloy products.
NITRATE	10	10	0.67	0.00-		NO	Runoff from fertilizer use; Leaching
(N03-N) (ppm)				0.67			from septic tanks, sewage;
THALLIUM	2	0.5	0.2	0.00-	6/20/2017		Leaching from ore- processing sites
(ppb)				0.2			
SODIUM	n/a	n/a	37.00	8.50-	6/20/2017	NO	n/a
(ppm)				37.00			

* 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 your water supply operator.

RADIOACTIVE CONTAMINANTS

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2018)	Violation	Typical Source of Contaminant
RADIUM, (226 + 228)	5	0	1.20	1.2		NO	Erosion of natural deposits
(pCi/l)							
GROSS ALPHA	15	0	0.80	0.8			
(pCi/l)							

UNREGULATED CONTAMINANTS

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2018)	Violation	Typical Source of Contaminant
METHYL-TERT-BUTYL-	n/a	n/a	0.22	0.22 -	2/24/2015	NO	n/a
ETHER (ppb)				0.22			

VOLATILE ORGANIC COMPOUNDS (VOC)

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2018)	Violation	Typical Source of Contaminant
TOLUENE	1	1	0.0001	0.0001	2/19/2014	NO	Discharge from petroleum factories
ppm				0.0002			
TETRACHLOROETHYLENE	5	1	0.01	0			Leaching from PVC pipes; Discharge from
ppb				0.3			factories and dry cleaners
TRICHLOROETHYLENE	5	1	0.02	0		NO	Discharge from metal degreasing sites
ppb				0.8			and other factories

Lead Testing: There was (0) detects out of 20 samples over the action level. The 90% percentile value was 8.40 ppb. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. This could be due to private lead services, lead pipe home plumbing, or lead solder joints in household plumbing. The Delavan Water & Sewer Utility is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. To help correct this situation, we are adding orthophosphate to coat piping in our water system. Orthophosphate forms a protective coating on the inside of water pipes. This will aid in preventing the leaching of lead and copper into the drinking water.

Health Effects of Lead: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

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.

Statement of Impact: Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. 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. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected; however, the EPA has determined that your water **IS SAFE** at these levels.

All sources of drinking water are subject to potential contamination by contaminants that are naturally occurring or manmade. Those contaminants can be microbes, organic or inorganic chemicals, or radioactive materials.

Health Information: Delavan Water Utility routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period from January 1, 2018 to December 31, 2018 (unless so noted). All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose 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 (800-426-4791).

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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.

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 systems disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the EPA's safe drinking water hotline (800-426-4791).

En Espanol

"Este informe contiene information muy importante. Traduscalo o hable con un amigo quien lo entienda bien."

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

"The Delavan Water Utility work around the clock to provide top quality water to every tap. We ask that all our customers help us protect and preserve our water sources, which are the heart of our community, our way of life and our children's future." *Mel Nieuwenhuis, Mayor City of Delavan.*