# Annual Drinking Water Quality Report

MARENGO	Source of Drinking Water	Drinking water, including bottled water, may
IL1110650	The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds reservoirs springs and wells As water	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
Annual Water Quality Report for the period of January 1 to December 31, 2019	travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can	contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Water Hotline at (800) 426-4791.
This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.	pick up substances resulting from the presence of animals or from human activity.	In order to ensure that tap water is safe to
The source of drinking water used by MARENGO is Ground Water	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.	drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.
For more information regarding this report contact:	<ul> <li>Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or</li> </ul>	Some people may be more vulnerable to contaminants in drinking water than the general population.
Name <u>STEVEN CLESCERI</u> Phone <u>815-568-7112</u> Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien gue la carticada bien	<ul> <li>domestic wastewater discharges, oil and gas production, mining, or farming.</li> <li>Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.</li> <li>Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum</li> </ul>	Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other
	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.	Drinking Water Hotline (800-426-4791). If present, elevated levels of lead 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. We 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.

# Source Water Information

Source Water Name		Type of Water	Report Status	Location
WELL 6 (20193)	PROSPECT & GREENLEE	GW		
WELL 7 (00849)	GREENLEE AND NORTH LYN	GW		
WELL 8 (01528)		GW		LOCATED BEHIND ROSATI'S PIZZA

#### Source Water Assessment

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall or call our water operator at <u>815-568-7112</u>. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

Source of Water: MARENGOTO determine Marengo's susceptibility to groundwater contamination, the following documents were reviewed: a Well Site Survey, published in 1989 by the Illinois EPA; a Hazard Review, published in 1990 by the Illinois EPA; and a Source Water Protection Plan prepared by the Village of Marengo and published by the Illinois Rural Water Association in May of 1997. Based on the information obtained in these documents there are 9 potential sources of groundwater contamination that could pose a hazard to groundwater utilized by the Marengo community water supply wells. Furthermore, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of Illinois EPA indicated several additional sites with on-going remediations which may be of concern. Based upon this information, the Illinois EPA has determined that the Marengo Community Water Supply's source water has a high susceptibility to VOC and SOC contamination. The basis for this determination includes the detection of VOC in well #6 and the land use within the recharge areas of the wells. This land use includes both industrial and agricultural properties. However, as a result of monitoring conducted at the wells and entry point to the distribution system, the land use activities and source water protection initiatives by the village (refer to the following section of this report), the Marengo Community Water Supply's source water has a low susceptibility to IOC contamination.

# Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	2		0	N	Naturally present in the environment.

#### Lead and Copper

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/12/2018	1.3	1.3	0.64	0	mqq	Ν	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

#### Water Quality Test Results

Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.				
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.				
Level 1 Assessment:	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system. During the past year we were required to conduct 1 Level 1 assessment. The Level 1 assessment was completed on July 10, 2019. In addition, we were required to take 2 corrective actions and we completed both of these actions.				
Level 2 Assessment:	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.				
Maximum Contaminant Level or 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 or MCLG:	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow				
Maximum residual disinfectant level or	for a margin of safety.				
MRDL: Maximum residual disinfectant level	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.				
	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not				
Coliform Definition:	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.				

Water Quality Test Results	reflect the benefits of the use of disinfectants to control microbial contaminants.
goal or MRDLG:	not applicable.
na:	millirems per year (a measure of radiation absorbed by the body)
mrem:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
ppb:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
ppm:	A required process intended to reduce the level of a contaminant in drinking water.

Treatment Technique or TT:

### Regulated Contaminants

		-						
Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2019	0.8	0.7 - 0.8	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Total Trihalomethanes (TTHM)	2019	1	1.404 - 1.404	No goal for the total	80	dqq	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	12/20/2018	0.06	0.06 - 0.06	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	12/20/2018	0.729	0.729 - 0.729	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	2019	1.5	0.58 - 1.8		1.0	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese	2019	175	150 - 160	150	150	ppb	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Nitrate [measured as Nitrogen]	2019	0.4	0 - 0.4	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	12/20/2018	2.6	2.6 - 2.6	50	50	dqq	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sodium	12/20/2018	76	76 - 76			mqq	N	Erosion from naturally occuring deposits. Used in water softener regeneration.
Zinc	12/20/2018	0.02	0.02 - 0.02	5	5	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	02/24/2015	2	0.861 - 2	0	5	pCi/L	N	Erosion of natural deposits.