Annual Drinking Water Quality Report

PANA	Source of Drinking Water	Drinking water, including bottled water, may reasonably be expected to contain at least small
IL0210500	The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water	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, 2021	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	Contaminants that may be present in source water include: - Microbial contaminants, such as viruses and	drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish
PANA is Surface Water	bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.	limits for contaminants in bottled water which must provide the same protection for public health.
For more information regarding this report contact:	 Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or 	Some people may be more vulnerable to contaminants in drinking water than the general population.
NameBrian BlodgettPhone217-562-2747	domestic wastewater discharges, oil and gas production, mining, or farming. - Pesticides and herbicides, which may come from a	Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have
Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.	<pre>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.</pre>	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 Safe Drinking Water Hotline (800-426-4791).
	- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.	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 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>217-562-2747</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: PANAIllinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems; hence, the reason for mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection. Primary sources of pollution in Illinois lakes can include agricultural runoff, land disposal (septic systems) and shoreline erosion.

2021 Regulated Contaminants Detected

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	09/28/2020	1.3	1.3	0.015	0	mqq		Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	09/28/2020	0	15	2.9	0	dqq		Corrosion of household plumbing systems; Erosion of natural deposits.

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.
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 for a margin of safety.
Maximum residual disinfectant level or 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 or 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 contaminants.
na:	not applicable.
mrem:	millirems per year (a measure of radiation absorbed by the body)
ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

Regulated Contaminants

Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chloramines	12/31/2021	1.9	1.38 - 2.2	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2021	35	6.01 - 39.7	No goal for the total	60	dqq	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2021	55	28.9 - 81.2	No goal for the total	80	ppb	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	2021	0.019	0.019 - 0.019	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2021	0.7	0.708 - 0.708	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2021	1	0.92 - 0.92	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	2021	28	28 - 28			ppm	N	Erosion from naturally occuring deposits. Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2021	1.707	1.707 - 1.707	0	5	pCi/L	N	Erosion of natural deposits.

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.14 NTU	Ν	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	100%	N	Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Some people who drink water co	ontaining silvex in ex	ccess of the MCL	over many years could experience liver problems.
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021	06/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
2,4-D			
Some people who drink water co or adrenal glands.	ontaining the weed kil	ller 2,4-D well	in excess of the MCL over many years could experience problems with their kidneys, liver,
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021	06/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because of
			this failure, we cannot be sure of the quality of our drinking water during the period indicated.
	-		this failure, we cannot be sure of the quality of our drinking water during the period indicated. CL over many years could have problems with their eyes, liver, kidneys, or spleen, or
	-	of getting cance	this failure, we cannot be sure of the quality of our drinking water during the period indicated. CL over many years could have problems with their eyes, liver, kidneys, or spleen, or
Some people who drink water co experience anemia, and may hav	ve an increased risk o	of getting cance	this failure, we cannot be sure of the quality of our drinking water during the period indicated. CL over many years could have problems with their eyes, liver, kidneys, or spleen, or r.
Some people who drink water co experience anemia, and may hav Violation Type	ve an increased risk over the violation Begin	of getting cance: Violation End	<pre>this failure, we cannot be sure of the quality of our drinking water during the period indicated. CL over many years could have problems with their eyes, liver, kidneys, or spleen, or r. Violation Explanation We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period</pre>
Some people who drink water co experience anemia, and may hav Violation Type MONITORING, ROUTINE MAJOR Aldrin Some people who drink water co	ve an increased risk over the second	of getting cances Violation End 06/30/2021 Idrin over a long	<pre>this failure, we cannot be sure of the quality of our drinking water during the period indicated. CL over many years could have problems with their eyes, liver, kidneys, or spleen, or r. Violation Explanation We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period</pre>
Some people who drink water co experience anemia, and may hav Violation Type MONITORING, ROUTINE MAJOR Aldrin Some people who drink water co	ve an increased risk over the second	of getting cances Violation End 06/30/2021	<pre>this failure, we cannot be sure of the quality of our drinking water during the period indicated. CL over many years could have problems with their eyes, liver, kidneys, or spleen, or r. Violation Explanation We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. g period of time may experience problems with their liver, nervous system, weakened immur increased risk of getting cancer.</pre>

Atrazine			
Some people who drink water correproductive difficulties.	ontaining atrazine we	ll in excess of	the MCL over many years could experience problems with their cardiovascular system or
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021	06/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
Benzo(a)pyrene			
Some people who drink water corisk of getting cancer.	ontaining benzo(a)pyre	ene in excess of	the MCL over many years may experience reproductive difficulties and may have an increased
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021	06/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
Carbofuran Some people who drink water co	ntaining carbofuran :	in excess of the	MCL over many years could experience problems with their blood, or nervous or reproductive
systems.	-		1
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021	06/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
Chlordane			
Some people who drink water co have an increased risk of gett		n excess of the 1	MCL over many years could experience problems with their liver or nervous system, and may
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021	06/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Dalapon Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.					
MONITORING, ROUTINE MAJOR 04/01/2021 06/30/2021 We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.					

Di (2-ethylhexyl) adipate

Some people who drink water containing di (2-ethylhexyl) adipate well in excess of the MCL over many years could experience general toxic effects or reproductive difficulties.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Di (2-ethylhexyl) phthalate

Some people who drink water containing di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Dibromochloropropane (DBCP)

Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Dieldrin			
			ong period of time may experience problems with their liver, nervous system, weakened ave an increased risk of getting cancer.
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021	06/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because o this failure, we cannot be sure of the quality of our drinking water during the period indicated.
Dinoseb			
Some people who drink water co	ontaining dinoseb well	l in excess of th	he MCL over many years could experience reproductive difficulties.
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021	06/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because o this failure, we cannot be sure of the quality of our drinking water during the period indicated.
Diquat			
Some people who drink water co	ontaining diquat in ex	cess of the MCL	over many years could get cataracts.
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021	06/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because o this failure, we cannot be sure of the quality of our drinking water during the period indicated.
Endothall			
Some people who drink water co	ontaining endothall ir	n excess of the I	MCL over many years could experience problems with their stomach or intestines.
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021	06/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because o this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Endrin			
Some people who drink water co	ontaining endrin in ex	ccess of the MCL	over many years could experience liver problems.
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021	06/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because o this failure, we cannot be sure of the quality of our drinking water during the period indicated.
Ethylene dibromide			
Some people who drink water co reproductive system, or kidney			s of the MCL over many years could experience problems with their liver, stomach, getting cancer.
Violation Type	Violation Begin	Violation End	Violation Explanation
		06 (20 (2021	
MONITORING, ROUTINE MAJOR	04/01/2021	06/30/2021	this failure, we cannot be sure of the quality of our drinking water during the period indicated. Because of indicated.
Heptachlor Some people who drink water co			this failure, we cannot be sure of the quality of our drinking water during the period
Heptachlor			Indicated. MCL over many years could experience liver damage and may have an increased risk of
Heptachlor Some people who drink water co getting cancer.	ontaining heptachlor i	in excess of the	this failure, we cannot be sure of the quality of our drinking water during the period indicated. MCL over many years could experience liver damage and may have an increased risk of
Heptachlor Some people who drink water co getting cancer. Violation Type	ontaining heptachlor i	in excess of the Violation End	<pre>this failure, we cannot be sure of the quality of our drinking water during the period indicated. MCL over many years could experience liver damage and may have an increased risk of Violation Explanation We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period</pre>
Heptachlor Some people who drink water co getting cancer. Violation Type MONITORING, ROUTINE MAJOR Heptachlor epoxide Some people who drink water co	ontaining heptachlor i Violation Begin 04/01/2021	in excess of the Violation End 06/30/2021	<pre>this failure, we cannot be sure of the quality of our drinking water during the period indicated. MCL over many years could experience liver damage and may have an increased risk of Violation Explanation We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period</pre>
Heptachlor Some people who drink water co getting cancer. Violation Type MONITORING, ROUTINE MAJOR Heptachlor epoxide	ontaining heptachlor i Violation Begin 04/01/2021	in excess of the Violation End 06/30/2021	<pre>this failure, we cannot be sure of the quality of our drinking water during the period indicated. MCL over many years could experience liver damage and may have an increased risk of Violation Explanation We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.</pre>

Some people who drink water co adverse reproductive effects,			of the MCL over many years could experience problems with their liver or kidneys, or tting cancer.
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021	06/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because o this failure, we cannot be sure of the quality of our drinking water during the period indicated.
Hexachlorocyclopentadien	ne		
Some people who drink water co stomach.	ontaining hexachlorocy	vclopentadiene we	ell in excess of the MCL over many years could experience problems with their kidneys or
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021	06/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
Lindane			
Some people who drink water as	ntaining lindana in a	waaga of the MCI	Lower many years could experience problems with their kidneys or liver
Some people who drink water co	ontaining lindane in e	excess of the MCI	L over many years could experience problems with their kidneys or liver.
Some people who drink water co Violation Type	violation Begin	excess of the MCI Violation End	· · · · · · · · · · · · · · · · · · ·
Violation Type	Violation Begin	Violation End	Violation Explanation We failed to test our drinking water for the contaminant and period indicated. Because o this failure, we cannot be sure of the quality of our drinking water during the period
Violation Type MONITORING, ROUTINE MAJOR Methoxychlor	Violation Begin 04/01/2021	Violation End	Violation Explanation We failed to test our drinking water for the contaminant and period indicated. Because o this failure, we cannot be sure of the quality of our drinking water during the period
Violation Type MONITORING, ROUTINE MAJOR Methoxychlor	Violation Begin 04/01/2021	Violation End	<pre>Violation Explanation We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.</pre>

Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021	06/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Pentachlorophenol

Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Picloram				
Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.				
Violation Type	Violation Begin	Violation End	Violation Explanation	
MONITORING, ROUTINE MAJOR	04/01/2021	06/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.	

Simazine			
Some people who drink water co	ontaining simazine in	excess of the M	CL over many years could experience problems with their blood.
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021	06/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
Toxaphene			
Some people who drink water co an increased risk of getting c		n excess of the 1	MCL over many years could have problems with their kidneys, liver, or thyroid, and may have
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2021	06/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.