

Northwest Regional Water District Drinking Water Consumer Confidence Report For 2015

The **Northwest Regional Water District** has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

- [Source Water Information](#)

The **Northwest Regional Water District** receives its drinking water from **Scioto County Regional Water District No. 1** (water1.org) in Lucasville, Oh. The water we supply comes from nine wells located in the Teays Valley Aquifer near St. Rt. 348. The water is pumped from wells and is softened using lime. The water is then stabilized using carbon dioxide to prevent excessive buildup inside pipes. Chlorine is added to the water to kill any bacteria that may be present. The water then moves through nine filters, which remove any remaining particulate matter that may be present in the water. Fluoride is added to the water, as required. Finally, chlorine is added one more time to guarantee adequate amounts will remain in the water throughout the distribution system.

If you have any questions concerning the source water you can call Water1's treatment plant, they have state certified lab analysts working every day. For more information, call 740-259-2301 or water1.org



Call 811 or 1-800-362-2764 Before You Dig: It's The Law!

- [Sources of contamination to drinking water](#)

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: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) 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; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) 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; (E) 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, USEPA 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.

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 Federal Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

- [Who needs to take special precautions?](#)

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 from infection. 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 (1-800-426-4791).

- [About your drinking water.](#)

The EPA requires regular sampling to ensure drinking water safety. All contaminants required to be analyzed in 2014 did not exceed any maximum contaminant levels set by the EPA. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one-year-old. **In 2014 we had an unconditioned license to operate our water system.**

Your drinking water met all Ohio EPA standards

- [Boil Advisory Information](#)

For the most up to date boil advisory information, check our website at NWRwater.com, [Facebook](#), or sign up for our [notification system](#) (One Call Now). Also, any other important information concerning the quality of your water will be posted.



- [Cross Connection Control Survey](#)

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

- [Public Participation Information](#)

Regularly scheduled board meetings are held in the Thomas E. Slye Annex, located behind our office on Smith St in McDermott. They are held the third Tuesday of every month @ 7:30 p.m. If you have any questions regarding the information contained in this report, please contact our office @ 740-259-2789 Toll free 800-933-9170 Fax: 740-259-2102 [Email](#)

- [Table of Detected Contaminants](#)

Listed below is information on those contaminants that were found in the drinking water.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL, TT, or MRDL</u>	<u>Level Found</u>	<u>Range</u>	<u>Date</u>	<u>Violation</u>	<u>Typical Source</u>
Residual Disinfectants							
Chlorine (as Cl ₂) (ppm)	MRDLG = 4	MRDL = 4	1.07	.88-1.4	2015	No	Water additive used to control microbes
Disinfection Byproducts							
TTHMs [Total Trihalomethanes] (ppb)	N/A	80	47.2	29.1-57.3	2015	No	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	N/A	60	9.9	6.0 – 13.1	2015	No	By-product of drinking water chlorination
Inorganic Contaminants							
Lead - action level at consumer taps (ppb)	0	Action Limit =15	< 0.005	N/A	2014	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper - action level at consumer taps (ppm)	1.3	Action Limit =1.3	< 0.050	N/A	2014	No	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate [measured as Nitrogen] (ppm)	10	10	1.05	N/A	2015	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Fluoride (ppm)	4	4	1.07	.84 -1.16	2015	No	Water additive which promotes strong teeth; Erosion of natural deposits
Radioactive Contaminants							
Gross Alpha (pCi/L)	0	15	3.93	NA	2014	No	Erosion of natural deposits
Synthetic Organic Contaminants							
Alachlor	0	2	0	0-0	2015	No	Runoff from herbicide on row crops
Astrazine	3	3	0	0-0	2015	No	Runoff from herbicide on row crops
Simazine	4	4	0	0-0	2015	No	Herbicide Runoff
Unregulated Contaminates							
Contaminate	Range			Average			
Molybdenum	4.2 - 4.6			4.5			
Strontium	160 - 190			170			
Vanadium	.5 - .8			.67			
Chromium-6	.18 - .29			.22			
1,4-dioxane	.08			.08			
Chromium(total)	.3			.3			

- [Lead Educational Information](#)

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.

Northwest Regional Water District is responsible for providing high quality drinking water, but 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 at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

- [Definitions](#)

Maximum Contaminant Level Goal (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 Contaminant level (MCL): The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Parts per Million (ppm) or Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

Parts per Billion (ppb) or Micrograms per Liter (µg/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of 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.

Maximum Residual Disinfectant Level (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.

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

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

The "<" symbol: A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.

Picocuries per liter (pCi/L): A common measure of radioactivity

IDSE Monitoring

Under stage 2 Disinfectants/Disinfection Byproducts Rule (D/DBPR), our public water system was required by the USEPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE), and is intended to identify locations in our distribution system with an elevated disinfection byproduct concentrations. The locations selected for the IDSE may be used for compliance monitoring under Stage 2 DBPR, beginning 2013. Disinfection byproducts are the result of organic matter naturally occurring in the source water. Disinfection byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). USEPA sets standards for controlling the levels of disinfectants and disinfectant byproducts in drinking water, including both TTHMs and HAA5s. 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. It can also pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or can result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) 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; (E) Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, the 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. 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 systems 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 1-800-426-4791



2015 Table of Detected Contaminants

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	MCLG	MCL	Level Found	Range of Detections	Violation	Year Sampled	Typical Source of Contamination
<i>Residual Disinfectants</i>							
Chlorine (ppm)	MRDLG = 4	MRDL = 4	1.16	0.44 - 1.64	No	2015	Water additive to control microbes
<i>Inorganic Contaminants</i>							
Lead (ppm)	0	Action Limit = 15	< 5.0	N/A	No	2014	Corrosion of household plumbing systems; erosion of natural deposits
	Zero out of thirty samples were found to have lead levels in excess of the action level of 0.015ppm						
Copper (ppm)	1.3	Action Limit = 1.3	< 50	N/A	No	2014	Corrosion of household plumbing systems; erosion of natural deposits, leaching from wood preservatives.
	One out of thirty samples were found to have copper levels in excess of the action level of 1.3 ppm						
Nitrate (ppm)	10	10	1.05	N/A	No	2015	Runoff from fertilizer use; erosion of natural deposits
Fluoride (ppm)	4	4	1.07	0.84 - 1.16	No	2015	Water additive which promotes strong teeth; erosion of natural deposits
<i>Disinfection By-Products</i>							
Total Trihalomethanes (ppb)	N/A	80	36.6	18.0 - 44.3	No	2015	By-product of drinking water chlorination
Five Haloacetic Acids (ppb)	N/A	60	8.5	0.00 - 9.9	No	2015	
<i>Radiological Contaminants</i>							
Gross Alpha (pCi/L)	0	15	3.93	N/A	No	2013	Erosion of natural deposits
<i>Synthetic Organic Contaminants</i>							
Alachlor (ppb)	0	2	0	0 - 0	No	2015	Runoff from herbicide used on row crops
Atrazine (ppb)	3	3	0	0 - 0	No	2015	Runoff from herbicide used on row crops
Simazine (ppb)	4	4	0	0 - 0	No	2015	Herbicide runoff
<i>Unregulated Contaminants</i>							
Contaminant	Sample Location		Average (ppb)	Range (ppb)			
Chromium	Plant Tap		0.31	0.28 - 0.34			
Chromium	Distribution		0.38	0.36 - 0.40			
Chromium-6	Plant Tap		0.26	0.25 - .27			
Chromium-6	Distribution		0.3	0.28 - 0.32			
Molybdenum	Plant Tap		3.56	3.08 - 4.07			
Molybdenum	Distribution		3.63	3.39 - 3.86			
Strontium	Plant Tap		168.83	144.74 - 192.92			
Strontium	Distribution		178	176.37 - 179.63			
Vandium	Plant Tap		0.63	0.60 - 0.66			
Vandium	Distribution		0.62	0.61 - 0.62			
1,4-dioxane	Plant Tap		0.04	0 - 0.073			