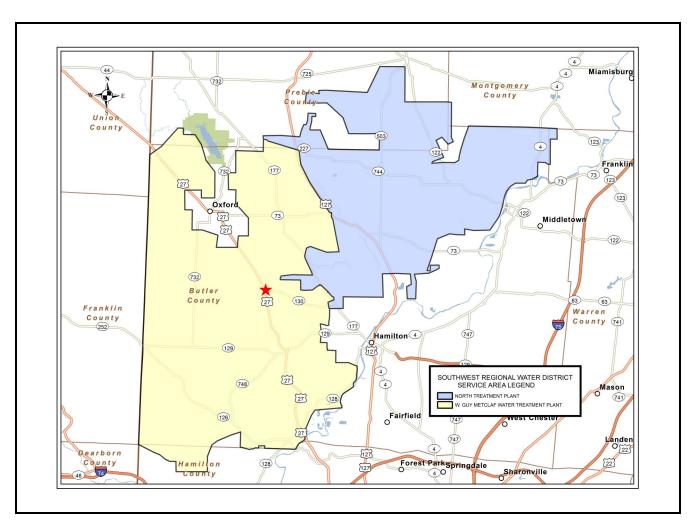
# 2018 CONSUMER CONFIDENCE REPORT SOUTHWEST REGIONAL WATER DISTRICT



The boundary line above separates the North and South service areas under normal operating conditions.

At times we use water from one service area to supply customers in the other.



The District's main office is at 3640 Old Oxford Road, Hamilton, 45013. Information about us is available at www.swwater.org or you may call us at 513-863-0828 or 800-232-5330. Our Board of Trustees meets regularly in public session at 7 p.m. on the fourth Tuesday of each month.

#### ABOUT THIS REPORT

This report is a summary of the quality of the water that we provided to our customers in 2018. Our record reflects hard work by our employees to deliver water that meets or exceeds all regulatory standards. We have included information about where your water comes from and how it compares to standards set by the regulatory agencies (the Ohio EPA, for example). We provide this information because well-informed customers are our best allies in supporting our commitment to maintain the highest drinking water standards.

We have a current, unconditioned license to operate our water system.

## WHERE DOES YOUR WATER COME FROM AND HOW IS IT PROTECTED?

The District has two water treatment facilities. The W. Guy Metcalf Water Treatment Plant is located in Ross Township. It began operation in 1972, was expanded in 1980, and is capable of producing 3.6 million gallons per day (an average household uses about 200 gallons per day). The production wells are about 90 feet deep and each one can produce 2.3 million gallons per day. In 2018 the plant produced 845 million gallons. Approximately 9,000 customers are currently served by this plant under the normal operating conditions illustrated on page one. The North Water Treatment Plant is located in St. Clair Township. It began operation in 1997, was expanded in 2005, and is capable of producing 6 million gallons per day. The production wells are about 180 feet deep and each can produce 2 million gallons per day. In 2018 this plant produced 512 million gallons. Approximately 6,900 customers are currently served by this plant under normal operating conditions.

The District also has emergency supply connections with the cities of Hamilton, Middletown, and Trenton. During 2018 these emergency connections were not utilized.

The wells at both treatment plants draw water from the Great Miami Buried Valley Aquifer. The Ohio EPA, in 2003, determined that this very productive aquifer has high susceptibility to contamination, owing to the sensitivity of the aquifer itself and to the presence of potential contaminant sources. The high susceptibility is confirmed by the presence of nitrates in our treated water. This indicates manmade influence, but the concentrations are well below the federal and state drinking water standard of 10 parts per million. This report is available for viewing at http://www.app.epa.ohio.gov/gis/swpa/OH0903912.pdf.

The District is a member of the Hamilton to New Baltimore Ground Water Consortium. Along with Butler County Water & Sewer Dept., the cities of Hamilton, Fairfield and Cincinnati, Miller-Coors Brewery, and Southwestern Ohio Water Company, we share the costs associated with monitoring and protecting the aquifer and our wells. Consortium members have worked very hard to develop and implement a comprehensive Source Water Protection Plan to help prevent contaminants from entering the aquifer. The plan contains an education component, source water protection strategies, and a contingency/emergency plan. The Consortium's website has more information at www.gwconsortium.org.

The District belongs to the National Rural Water Association, and the Ohio Rural Water Association, both of which represent water systems on issues with the EPA and other governmental entities that regulate and protect water supplies and finished water quality. District employees maintain individual memberships with the American Water Works Association.

# WHAT ARE SOURCES OF CONTAMINATION TO DRINKING WATER?

The sources of drinking water, both tap and bottled, 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 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 the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (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 USEPA's Safe Drinking Water Hotline at 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 healthcare providers. Environmental Protection Agency and Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

# SPECIAL INFORMATION ON LEAD AND COPPER

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. Southwest 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 http://www.epa.gov/safewater/lead.

In June through September of 2018, the District conducted sampling of lead and copper at 30 residences throughout the system. None of the samples indicated an elevated lead level. Results are included on page 4 of this document.

#### WATER QUALITY MONITORING INFORMATION

During 2018 the District performed all water quality monitoring required by the Ohio EPA under the Ohio Administrative Code. Since 2001 we have conducted testing required by USEPA to monitor for several currently unregulated contaminants. We test raw water in our own labs daily for hardness, alkalinity, pH, chlorides and fluoride. For finished water we conduct the same daily tests plus iron, stability, coliform bacteria and chlorine. You may make arrangements to review any of our testing data by calling Dave Morrison, Treatment Supervisor at 513-863-0828.

#### **DEFINITIONS AND ABBREVIATIONS**

- MCL Maximum Contaminant Level Highest allowed level of a contaminant in drinking water.
- MCLG Maximum Contaminant Level Goal Level of a contaminant below which there is no known or expected health risk.
- MRDL Maximum Residual Disinfectant Level—Highest allowed level of a disinfectant.
- MRDLG Maximum Residual Disinfectant Level Goal—Level of disinfectant below which there is no known or expected health risk.
- mg/L milligrams per liter or parts per million (ppm). About one inch in 16 miles or one penny in 10 thousand dollars.
- ug/L micrograms per liter or parts per billion (ppb). About one inch in 16,000 miles or one penny in 10 million dollars.
- pCi/L Picocuries per liter is a measure of radioactivity in water. A Picocurie is 10<sup>-12</sup> curies and is the quantity of radioactive material producing 2.22 nuclear transformations per minute.
- AL Action Level (for lead and copper) The 90th percentile detection level must exceed the AL before action is required.
- < Less than.
- NA Not Applicable.
- ND Non-Detect.

#### WATER THEFT IS ILLEGAL

Ohio Revised Code 4933.19 requires each water-works company to notify its customers, on an annual basis, that tampering with or bypassing a meter constitutes a theft offense that could result in the imposition of criminal sanctions.

"This institution is an equal opportunity provider and employer."

If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at http://www.ascr.usda.gov/complaint filing cust.html, or at any USDA office, or call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, by fax (202) 690-7442 or email at program.intake@usda.gov."

# 2018 Water Quality Data Table

All samples were taken in 2018 unless otherwise noted

				North Treatment Plant			W.Guy Metcalf Treatment Plant			
				Level	Range *	MCL	Level	Range	MCL	Typical Sources of
Contaminant	Units	MCL	MCLG	Detected	Detected	Violation	Detected	Detected	Violation	Contaminants
Nitrate	mg/L	10	10	2.44	NA	no	2.48	NA	no	Fertilizers, sewage, and natural deposits
Fluoride	mg/L	4	4	1.03	0.68 - 1.14	no	1.00	0.85 - 1.06	no	Naturally present; added during treatment
Barium (2017)	mg/L	2	2	ND	NA	no	0.034	NA	no	Drilling wastes, metal refineries and natural deposits
									-	
				Distribution System						
Total Chlorine	mg/L	MRDL = 4	MRDLG = 4	0.90	0.84 - 0.95	no	0.90	0.84 - 0.95	no	Water additive used to control microbes
TTHMs (Total Trihalomethanes)	ug/L	80	NA	10.7	NA	no	8.4	NA	no	Byproduct of drinking water chlorination
HAA5 (Haloacetic Acids)	ug/L	60	NA	<6.0	NA	no	<6.0	NA	no	Byproduct of drinking water chlorination
										Corrosion of household plumbing and
Lead	ug/L	AL = 15	0	<5.0 **	<5.0 **	no	<5.0 **	<5.0 **	no	natural deposits
				1 out of 30 samples was found to have a Lead level of 18.5 ug/L in excess of the Action Level of 15 ug/L						
										Corrosion of household plumbing and
Copper	mg/L	AL = 1.3	1.3	1.04 **	1.04 **	no	1.04 **	1.04 **	no	natural deposits
2 out of 30 samples were found to have Copper levels in excess of the Action Level of 1.3 mg/L  ** 90th percentile of samples tested; value required for reporting							of 1.3 mg/L			
					** 90th percer					

			Unregulate	ed contaminant					
		Secondary	Average	Range *	MCL	Average	Range	MCL	Typical Sources of
Contaminant	Units MCL	MCL	Level	Detected	Violation	Level	Detected	Violation	Contaminants
Manganese (UCMR4)	ug/L Not regulated	50	0.42	0.42	NA	ND	ND	NA	Naturally occurring
HAA5 (UCMR4)	ug/L 60	NA	3.79	3.49 - 4.08	no	5.28	5.23 - 5.34	no	Byproduct of drinking water chlorination
HAA6Br (UCMR4)	ug/L Not regulated	NA	7.54	6.92 - 8.16	NA	8.83	8.71 - 8.94	NA	Byproduct of drinking water chlorination
HAA9 (UCMR4)	ug/L Not regulated	NA	8.61	7.96 - 9.26	NA	11.76	11.71 - 11.81	NA	Byproduct of drinking water chlorination

<sup>\*</sup> Some contaminants require collection and analysis of a single sample during this reporting period, which is reported as a single value in the "Range Detected" column

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.