



Water Quality Report 2017

PWS ID# 1150002

The City of Rome is proud to announce that the City's Drinking Water continues to be safe for your consumption. This is an annual report on the City's drinking water quality. Included in this report are details about where your water comes from, what it contains, and how it compares to standards set by Federal and State regulatory agencies. The efforts of the Rome Water Department's 105 employees insure that the water provided is absolutely safe. All Water Treatment Plant operators are State Certified. This certification requires educational achievement, apprenticeship, and successfully passing State of Georgia examinations.

Sources of Rome's Drinking Water

The City of Rome gets its water from surface water sources: the Oostanaula and Etowah Rivers. Rome is fortunate to have an abundant water supply that is provided by these two rivers.

Contaminates can enter these waterways as water travels over land or through the ground and can be polluted by animal and human activity. Some typical contaminants found in raw water include: biological, such as microorganisms; inorganic contaminants, such as metals; pesticides and herbicides; and chemicals from industrial and petroleum use. The presence of contaminants does not necessarily pose a health threat. These contaminants if present are removed by the water treatment process at the Bruce Hamler Water Treatment Facility to safe concentration levels. *More Information about contaminants and potential health effects can be obtained by calling the U.S. EPA Safe Drinking water Hotline at 1-800-426-4791.*



Lead Safety at Home: If present, elevated levels of lead can cause serious health problems, especially for pregnant individuals and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Rome 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, 1-800-426-4791 or at www.epa.gov/safewater/lead.

Cryptosporidium: Based on results of the 24-month initial water monitoring for cryptosporidium, the Rome Water System has been classified as a BIN 1 facility. This means that the calculated highest arithmetic mean of all sample concentrations in 12 consecutive months was less than 0.075 oocysts per liter. Based on our BIN 1 classification, no additional treatment for cryptosporidium will be required for the Bruce Hamler Water Treatment Facility.

Notice to Immuno-compromised People: Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons 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 microbial contaminants are available from the Safe Drinking Water Hotline 1-800-426-4791.*

A Consumer Confidence Report is required for all community water systems by the 1996 Safe Drinking Water Act Amendments.

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ROME WATER SYSTEM: Water Quality Analysis Report

Unregulated Contaminant Monitoring List/Results

The Detected Contaminants Table on page 2 list all of the drinking water contaminants that were detected during the 2016 calendar year. The presence of these contaminants in the water does not necessarily indicate the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing performed January 1 - December 31, 2016. The EPD requires monitoring once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

UNREGULATED CONTAMINANT MONITORING LIST/RESULTS DETECTED DURING THE 2015 CALENDAR YEAR

Sampling Location: Bruce Hamler Water Treatment Facility			
Analyte	Minimum Detection Level	Average Result	Units
Chromium	0.2	0.1	PPB
Cobalt	1.0	ND	PPB
Molybdenum	1.0	ND	PPB
Strontium	0.3	67.75	PPB
Vanadium	0.2	0.45	PPB
Chromium, Hexavalent	0.03	0.1375	PPB
Chlorate	20	ND	PPB
1,4-Dioxane	0.07	0.2825	PPB
Bromochloromethane	0.06	ND	PPB
Bromomethane	0.2	ND	PPB
1,3-butadiene	0.1	ND	PPB
Chlorodifluoromethane	0.08	ND	PPB
Chloromethane	0.2	ND	PPB
1,1-dichloroethane	0.03	ND	PPB
1,2,3-Trichloropropane	0.03	ND	PPB
Perfluorobutanesulfonic acid (PFBS)	0.09	0.24	PPB
Perfluoroheptanoic acid (PFHpA)	0.01	0.0275	PPB
Perfluorohexanesulfonic acid (PFHxS)	0.03	ND	PPB
Perfluorononanoic acid (PFNA)	0.02	ND	PPB
Perfluorooctane sulfonate (PFOS)	0.04	0.095	PPB
Perfluorooctanoic acid (PFOA)	0.02	0.055	PPB

Sampling Location: Water Distribution System			
Analyte	Minimum Detection Level	Average Result	Units
Chromium	0.2	0.275	PPB
Cobalt	1.0	ND	PPB
Molybdenum	1.0	ND	PPB
Strontium	0.3	69.25	PPB
Vanadium	0.2	0.5	PPB
Chromium, Hexavalent	0.03	0.1875	PPB
Chlorate	20	ND	PPB

Unregulated Contaminants Monitoring List (UCML): The regulation requires monitoring of twenty-one (21) contaminants, beginning in 2015. These results must be provided as the average of all samples and the full range of detections. Included is the list and results of the twenty-one (21) contaminants. ND - Not Detected: Analyzed for but not detected.

La ciudad de Roma tiene el orgullo de anunciar que el agua potable de la ciudad sigue siendo segura para su consumo. Si usted tiene alguna pregunta, por favor llame al 706-236-4527.

Your Views are Welcome!

If you are interested in learning more about the water department, water quality, source water assessment or have questions relating to this water quality report, please contact:

Mike Hackett - Division Director, 706-236-4560 or Wayne Stanley - Water Treatment Facility Director, 706-236-4527

Rome Water System: Water Quality Analysis Report

Detected Contaminants

Parameter	Maximum Amount Detected	MCL	MCLG	Typical Source of Contaminant	Health Effects
Copper Testing last performed in July 2014	90th Percentile = 120 ug/l (ppb)	Action Level: 90% of the homes tested must have copper levels less than 1300 ug/L (ppb) No samples were above the action level.	1300 ug/L (ppb)	Corrosion of household plumbing systems; erosion of natural deposits.	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal physician if the amount of copper in the water exceeds the action level.
Lead Testing last performed in July 2014	90th Percentile = 2.5 ug/l (ppb)	Action Level: 90% of the homes tested must have lead levels less than 15 ug/l (ppb) No samples were above the action level	0 ug/L (ppb)	Corrosion of household plumbing systems; erosion of natural deposits	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 disabilities. Adults who drink this water over many years could develop kidney problems and high blood pressure.
Fluoride	0.86 mg/L (ppm) yearly average Range: 0.2-1.4 mg/L (ppm)	4 mg/L (ppm)	4 mg/L (ppm)	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories	Some people who drink water containing fluoride well in excess of the MCL over many years could develop bone disease, including pain and tenderness of the bones. Children may get mottled teeth.
TTHM (Total Trihalomethanes)	Highest locational running annual average for year: 51.35 ug/L (ppb) Range of quarterly LRAA: 29.98- 51.35	80 ug/L (ppb)	N/A	Byproduct of drinking water disinfection	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased chance of getting cancer.
Turbidity	Highest single measurement: 0.13 ntu. Lowest monthly percentile: 100% of filtered water samples were 0.30 ntu or less	95% of filtered water samples must be 0.30 ntu or less. At no time can turbidity exceed 1.0 ntu	N/A	Soil runoff	Turbidity is a measure of the cloudiness of water. It is used to indicate water quality and filtration effectiveness. Higher turbidity levels are associated with higher levels of disease-causing microorganisms such as viruses, parasites and some bacteria. These organisms can cause short term symptoms such as nausea, cramps, diarrhea, and associated headaches.
Nitrate/Nitrite	0.36 mg/L (ppm) (measured as Nitrogen)	10 mg/L (ppm)	10 mg/L (ppm)	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion from natural deposits	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
HAA5 (Haloacetic Acids)	Highest locational running annual average for year: 36.35 ug/L (ppb) Range of quarterly LRAA: 16.25 – 36.35 ug/L (ppb)	60 ug/L (ppb)	N/A	Byproduct of drinking water disinfection	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Chlorine (as Cl₂)	1.78 mg/L (ppm) yearly average Range: 1.3 - 2.15 mg/L (ppm)	4mg/L (ppm)	4 mg/L (ppm)	Water additive used to control microbes	Some people who use water containing chlorine well in excess of the maximum residual disinfectant level could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the maximum residual disinfectant level could experience stomach discomfort.

Other contaminants (including Pesticides and Herbicides), and Volatile Organic Contaminants required to be monitored by the Safe Drinking Water Act were analyzed for and if detected were below the MCL.

Definitions:

Action Level: The concentration of a contaminant that triggers treatment or other requirement that a water system must follow. Action levels are reported at the 90th percentile for homes at greater risk.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health.

LRAA: Locational Running Annual Average

ND: Not Detected: Analyzed for, but not detected.

PPB: Part-Per-Billion (The equivalent to one gallon of a substance to one billion gallons of water)

PPM: Part-Per-Million (The equivalent to one gallon of a substance to one million gallons of water)

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

TURBIDITY (NTU): Measurement of suspended particles in the water

EPA: United States Environmental Protection Agency

ICR: Information Collection Rule. A program of the EPA to gather information on potential contaminants under current review and evaluation.

CDC: Center of Disease Control

Contaminants: "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 Environmental Protection Agency's Safe Drinking Water Hotline 1-800-426-4791."

Oostanaula River Intake

Overall Source Water Susceptibility Score: MEDIUM

High Priority Potential Pollution Sources	40	22%
Medium Priority Potential Pollution Sources	50	28%
Low Priority Potential Pollution Sources	90	50%

Conclusion:

The overall susceptibility score for the Oostanaula River intake is medium. The score was determined by using the GAEPD Surface Water Assessment Program (SWAP) guidance to determine release and risk potential for each identified potential pollution source. The table above shows the distribution of each potential pollution source in the LOW, MEDIUM, and HIGH priority categories. The overall susceptibility score is not an indication of existing water quality but is a determination of the potential for contamination to be used in local source water protection planning.

The Oostanaula River intake is one of the two surface water intakes that supply the City of Rome with water. The Oostanaula River is formed by the confluence of the Conasauga and Coosawattee Rivers just northeast of Calhoun, Georgia in Gordon County. The watershed for the intake is large enough to meet the GAEPD SWAP guidance of 20 miles upstream of the intake for the Outer Management Zone (OMZ) assessment area. The Inner Management Zone (IMZ) and the OMZ include portions of four counties with pieces of Rome, Calhoun and Adairsville.

Many potential pollution sources (180) were identified for this large watershed including point and non-point sources. The IMZ sources are in the high and medium priority categories whereas most of the OMZ sources are within the medium to low priority. The high priority IMZ sources include industry, sewer lift stations, primary and secondary road bridges, fuel facilities, railroad crossings, and non-point urban. The high priority sources in the OMZ include land application systems (LAS), sewer lift stations, industry, agriculture, and urban non-point, primary and secondary road bridges, and railroad crossings. Half of the potential pollution sources (90) are found within the low priority category. This intake does not fit within a GAEPD specified percentage for the overall source water susceptibility score, therefore the medium score was preferred as a balance since more than half of the IMZ sources are in the high priority but half of all of the sources in the IMZ and OMZ are in the low priority percentage for the overall source water susceptibility score, therefore the medium score was preferred as a balance since more than half of the IMZ sources are in the high priority but half of all the sources in the IMZ and OMZ are in the low priority.

Etowah River Intake

Overall Source Water Susceptibility Score: MEDIUM/LOW

High Priority Potential Pollution Sources	36	13%
Medium Priority Potential Pollution Sources	74	28%
Low Priority Potential Pollution Sources	156	59%

Conclusion:

The overall susceptibility score for the Etowah River intake is medium/low. The score was determined by using the GAEPD SWAP guidance to determine release and risk potential for each identified potential pollution source. The table above shows the distribution of each potential pollution source in the LOW, MEDIUM, And HIGH priority categories. The overall susceptibility score is not an indication of existing water quality but is a determination of the potential for contamination to be used in local source water protection planning.

The Etowah River is one of two surface water intakes that supply the City of Rome with water. The Etowah River begins in the Blue Ridge Mountains near Dahlonega, Georgia and flows in a southwesterly direction to its confluence with the Coosa River in Rome, Georgia. The Etowah is impounded at Lake Allatoona upstream of the City of Cartersville. The watershed for the intake is large enough to meet the GAEPD SWAP guidance for 20 miles upstream of the intake for the OMZ assessment area. The IMZ and the OMZ include portions of four counties and parts of Rome and Cartersville.

Many potential pollution sources (266) were identified for this large watershed including point and non-point sources. The IMZ sources are all in the high and medium priority category except one. The majority of the OMZ sources are in the medium to low priority category. None of the points identified have a high release and high risk ranking. The high priority sources in the IMZ include primary and secondary road bridges, LAS, sewer lift stations, mines, pipeline crossings, and urban non-point. The high priority sources in the OMZ include primary and secondary road bridges, railroad crossings, LAS, agriculture, and urban non-point. This intake does not fit within the GAEPD specified percentage for the overall source water susceptibility score. An overall susceptibility score of medium/low was used for this intake since the majority of the IMZ sources are in the high to medium priority but more than half of the sources are within the low priority category.