

Annual Drinking Water Quality Reports for 2012

City of Rome Water System - PWS ID# NY3202405

Including Purchase Systems

Town of Lee Water District - PWS ID# NY3202394

Town of Floyd Water District - PWS ID# NY3222694

Mohawk Correctional Facility - PWS ID# NY3233160

Spencer Settlement Water District (Town of Westmoreland) - PWS ID# NY3233173

To comply with State regulations, public water systems such as those listed above are required to issue a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. These reports provide an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

Since the City of Rome sells water to the systems listed above. In addition, the Mohawk Correctional Facility, Town of Lee and Town of Floyd sell some water back to the City of Rome. Therefore, although water from Floyd may never reach Westmoreland, the residents of Rome, Floyd, Lee and Westmoreland are to be provided with the reports of each water system.

The City of Rome report includes all general information, required notification language and definitions. All purchase system reports include only that information specific to each system.

All reports are included in the following pages.

The following reports can be downloaded from <http://www.romenewyork.com/document/waterreport.pdf>.

Please contact the Oneida County Health Department at 315-798-5064 if you have any questions regarding these reports.

Annual Drinking Water Quality Report for 2012
City of Rome Water System
198 North Washington Street, Rome, NY 13440
(Public Water Supply ID# NY3202405)

INTRODUCTION

To comply with State regulations, the City of Rome Bureau of Water will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact Frank Tallarino, Commissioner of Public Works at 336-6000, or Tom Andrews, Chief Water Operator at 339-7777. We want you to be informed about your drinking water. Copies of this report will be available upon request at the City Clerk's Office at the Rome City Hall. In addition, the report will be available on the City's website at <http://www.romenewyork.com/document/waterreport.pdf>.

WHERE DOES OUR WATER COME FROM?

In general, 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 can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The City's water supply originates over 20 miles north of the City, in the Tug Hill area of Lewis County. The Tug Hill Region is one of the most remote and sparsely populated areas of the state. One hundred square miles of the 155 square mile watershed of the East Branch of the Fish Creek flows into Tagasoke Reservoir, a 1.4 billion-gallon impoundment. As the creek flows from this reservoir it converges with the flow from an additional 55 square miles of watershed to Kessinger Dam which is eight miles downstream. Here, the water is diverted into a rock tunnel, approximately 1 mile long. Water then flows from the tunnel into a 48-inch reinforced concrete cylinder pipe, and on to the filtration plant. Fish Creek is typically a low solids, low turbidity water source, with significant amounts of color. As it is a surface supply, it is very susceptible to seasonal and weather-related stream flow variation. Last year, our system did not experience any restriction of our water source.

SOURCE WATER ASSESSMENT INFORMATION

A Source Water Assessment has been completed by the New York State Department of Health for the CITY OF ROME Water System. Possible and actual threats to drinking water source(s) were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the source(s). The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. The Source Water Assessment Program (SWAP) is designed to compile, organize and evaluate information to make better decisions regarding protecting sources of public drinking water. The report does not address the safety or quality of treated finished potable tap water. The source water assessment report is based on reasonably available information, primarily from statewide databases. Although efforts have been made to check the source water assessment report for accuracy, the large scope of this program and the nature of the available data make the elimination of all errors from these reports nearly impossible. It is important to note that source water assessment reports estimate the potential for untreated drinking water sources to be impacted by contamination. A copy of the assessment, including a map of the assessment area, can be obtained by contacting us, as noted above.

The land uses around the CITY OF ROME Water System source were rated for their potential to cause contamination to the source. This assessment found an elevated susceptibility to contamination for this source of drinking water. The amount of pasture in the assessment area results in a high potential for protozoa contamination. No permitted discharges are found in the assessment area. There are no likely contamination threats associated with other discrete contaminant sources, even though some facilities were found in low densities. Finally, it should be noted that hydrologic characteristics (e.g. basin shape and flushing rates) generally make reservoirs highly sensitive to existing and new sources of phosphorus and microbial contamination. See section "*Are there contaminants in our drinking water?*" for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

Based upon the SWAP Report determinations, good judgment should be used and caution should be exercised when determining land use near the source. We work hard to ensure that the source of water for our system is protected from contamination. In fact, the City of Rome has existing Watershed Rules and Regulations (10NYCRR Chapter III Part 130.1) that regulate the land use and potential contamination sources around the water source. This is accomplished through a combination of land ownership and policing of the watershed area. One-third of the area is rural while two-thirds are managed forest lands. The City of Rome has control of the Tagasoke Reservoir. Access is limited in the area and transmission pipes

and waterways.

WATER TREATMENT

Turbidity is a measurement of the amount of light that is scattered. This scattering is due to suspended particles in the water. These particles, microscopic in size, may be made up of silt, algae, bacteria, and / or protozoa. To remove this turbidity, Rome built the Water Filtration Plant, which went on-line in 1987. The water enters the flocculation / sedimentation basins to remove the majority of the turbidity at the Water Filtration Plant then flows through adsorption clarifiers then on to the filters, where it is filtered yet again. It then enters the reservoirs, which have a combined storage capacity of 65 million gallons.

Although the filtration process alone removes 99.9% of the turbidity, New York State Public Health Code Part 5 requires that the water be disinfected to kill bacteria that may still be present in the water. This is accomplished through chlorination as the water leaves the reservoirs.

Rome also treats the water to control the corrosion of plumbing that may contain metals such as lead or copper. Lead rarely occurs naturally in water. It enters drinking water primarily as a result of corrosion or wearing away of materials containing lead such as lead service lines, solder and brass plumbing fixtures in the home. Rome adds zinc orthophosphate, which is a corrosion inhibitor, in small amounts to react with the corrosive components of the water and piping to halt this corrosive process.

FACTS AND FIGURES

The City of Rome, New York supplies drinking water to approximately 30,000 people through approximately 10,000 service connections, located within the City of Rome (including Griffiss Industrial Park). Additional service is provided to customers in water districts in the towns of Western, Lee, Floyd, and Westmoreland as well as the Mohawk/Oneida Correctional Facility). During 2012, the Rome Water System provided 2.9 billion gallons of treated water. The total water consumed and billed by metered accounts was 1.3 billion gallons. As the majority of Rome's Water System is not metered, the balance of the water, 1.6 billion gallons, was either billed and consumed through flat-rate water accounts, used for fighting fires, flushing mains, or was lost through leaks in the distribution system. The average water consumption in the Water System for 2012 was 7.9 million gallons per day with the highest flow during the month of July 2012 (average of 13.7 million gallons per day). In 2012, metered water customers were charged anywhere from \$0.87 to \$3.70 per 1,000 gallons of water used (plus meter fees). Single-family homes were charged an annual fee of \$305 for water use.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. Each year, we conduct tests for a variety of contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, lead and copper, nitrate, nitrite, disinfection byproducts, volatile organic compounds, and synthetic organic compounds. We detected several of those contaminants, but most were not detected in our water. The table presented below depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, may be reasonably 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 EPA's Safe Drinking Water Hotline (800-426-4791) or the Oneida County Health Department at 315-798-5064.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG / MRDLG	Regulatory Limit (MCL, MRDL, TT or AL)	Likely Source of Contamination
Physical Parameters							
Turbidity (EP) ⁽¹⁾	No	6/22/2012	0.22 (highest single measurement)	NTU	N/A	TT = <1.0 NTU	Soil Runoff.
Turbidity (EP) ⁽¹⁾		All months	100% ≤ 0.3 (lowest monthly percentage of samples meeting specified limits)			TT = 95% of samples <0.3 NTU	
Turbidity (Distribution)		Daily / monthly	0.20 ⁽²⁾ (range = 0.06 – 3.7)			TT = <5 NTU	
Total Organic Carbon (Raw Water)	No	Monthly	4.0 ⁽³⁾ (range = 2.2 – 6.6)	mg/l	N/A	N/A	Naturally present in the environment.
Total Organic Carbon (Finished Water)			1.8 ⁽³⁾ (range = 1.0 – 2.6)				
Radioactive Contaminants							
Gross alpha activity (including radium – 226 but excluding radon and uranium)	No	11/11	0.328	pCi/l	0	MCL = 15	Erosion of natural deposits.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG / MRDLG	Regulatory Limit (MCL, MRDL, TT or AL)	Likely Source of Contamination
Beta particle and photon activity from manmade radionuclides	No	11/11	1.52	pCi/l	0	MCL = 50 ⁽¹⁾	Decay of natural deposits.
Radium – 228	No	11/11	0.450	pCi/l	0	MCL = 5	Decay of natural deposits.
Inorganic Contaminants							
Barium	No	5/12	0.0048	mg/l	2	MCL = 2	Erosion of natural deposits.
Chloride	No	5/12	2.58	mg/l	N/A	MCL = 250	Naturally occurring.
Chromium	No	5/12	2.73	ug/l	100	MCL = 100	Erosion of natural deposits.
Copper	No	9/12	0.067 ⁽⁴⁾ (range = 0.0037 – 0.068)	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead	No	5/11	4.95 ⁽⁶⁾ (range = ND – 13.9)	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.
Magnesium	No	4/09	1.46	mg/l	N/A	N/A	Naturally occurring.
Manganese (Treated Water)	No	4/09	3	ug/l	N/A	MCL = 300 ⁽⁵⁾	Naturally occurring.
Odor	No	5/12	1	units	3	N/A	Organic or inorganic pollutants; natural sources.
Sodium	No	4/09	2.58	mg/l	N/A	See Health Effects ⁽⁷⁾	Naturally occurring.
Sulfate	No	5/12	11.7	mg/l	N/A	MCL = 250	Naturally occurring.
Zinc	No	5/08	0.084	mg/l	N/A	MCL = 5	Naturally occurring.
Inorganics – Nitrate and Nitrite							
Nitrate	No	Quarterly	0.15 ⁽⁸⁾ (range = 0.09 – 0.28)	mg/l	10	MCL = 10	Erosion of natural deposits.
Disinfectants							
Chlorine Residual	No	Daily/ Monthly	0.74 ⁽⁹⁾ (range = 0.03 – 2.1)	mg/l	N/A	MRDL = 4 ⁽¹⁰⁾	Water additive used to control microbes.
Disinfection Byproducts							
Haloacetic Acids (mono-, di-, and trichloroacetic acid, and mono- and dibromoacetic acid)	No	Quarterly	14.7 ⁽¹¹⁾ (range = 3.7 – 34)	ug/l	N/A	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes (TTHMs – chloroform, bromodichloromethane, dibromochloromethane and bromoform)	No	Quarterly	41.5 ⁽¹¹⁾ (range = 11 – 65.7)	ug/l	N/A	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.

Notes:

- 1 - Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest single entry point (pre-distribution system) turbidity measurement (0.22 NTU) for the year occurred on (June 26, 2012). State regulations require that turbidity must always be below 5 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU. All levels recorded last year were within the acceptable range allowed.
- 2 - Turbidity is measured on a daily basis in the distribution system. All levels recorded last year were within the acceptable range allowed.
- 1 - The State considers 50 pCi/l to be the level of concern for beta particles.
- 3 - This level represents the annual average and range of values calculated from sample submission results.
- 4 - The level presented represents the 90th percentile of the thirty (30) sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, the 90th percentile was the twenty-seventh highest value. The action level for copper was not exceeded at any of the thirty (30) sites tested.
- 6 - The level presented represents the 90th percentile of the thirty (30) sites tested. The action level for lead was not exceeded at any of the sites tested.
- 7 - Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.
- 8 - This level represents the average and range of values calculated from sample submission results.
- 9 - This level represents the annual average and range of values calculated from sample submission results.
- 10 - Value presented represents the Maximum Residual Disinfectant Level (MRDL) which is a level of disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects. MRDLs are currently not regulated but in the future they will be enforceable in the same manner as MCLs.
- 11 - This level represents the annual average of quarterly sample results and the range of values calculated from all samples submitted. Although two Total Trihalomethane (TTHM) samples exceeded the MCL (81.6, 94.2), compliance determination is based upon the Running Annual Average. Therefore, we did not exceed the MCL for TTHMs.

Definitions:

ACTION LEVEL	AL	The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
MAXIMUM CONTAMINANT LEVEL	MCL	The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.
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 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.

Definitions:		
MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL	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 contamination.
MILLIGRAMS PER LITER	mg/l	Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).
MICROGRAMS PER LITER	ug/l	Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).
NEPHELOMETRIC TURBIDITY UNIT	NTU	A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
NON-DETECTED	ND	Laboratory analysis indicates that the constituent is not present.
PICOCURIES PER LITER	pCi/l	A measure of the radioactivity in water.
TREATMENT TECHNIQUE	TT	A required process intended to reduce the level of a contaminant in drinking.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, most of these contaminants were detected below the level allowed by the State.

In previous years, samples have indicated the presence (though very low presence) of Cryptosporidium and Giardia. Therefore, we are required to provide the following information:

CRYPTOSPORIDIUM AND GIARDIA INFORMATION

Cryptosporidium is a microbial pathogen found in surface water and groundwater under the influence of surface water. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. During 2008, as part of our "Grandfathering" sampling for compliance with the Surface Water Treatment Rule, 24 samples of Raw (untreated, unfiltered) source water were collected and analyzed for Cryptosporidium oocysts. Of these samples, three collected in 2008 were found to contain Cryptosporidium oocysts. Therefore, our monitoring indicates the presence of Cryptosporidium in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

Giardia is a microbial pathogen present in varying concentrations in many surface waters and groundwater under the influence of surface water. Giardia is removed/inactivated through a combination of filtration and disinfection or by disinfection. During 2008, as part of our "Grandfathering" sampling for compliance with the Surface Water Treatment Rule, 24 samples of Raw (untreated, unfiltered) source water were collected and analyzed for Giardia cysts. Of these samples, thirteen (13) samples were found to contain Giardia cysts at varying numbers. Therefore, our monitoring indicates the presence of Giardia in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Giardia may cause giardiasis, an intestinal illness. People exposed to Giardia may experience mild or severe diarrhea, or in some instances no symptoms at all. Fever is rarely present. Occasionally, some individuals will have chronic diarrhea over several weeks or a month, with significant weight loss. Giardiasis can be treated with anti-parasitic medication. Individuals with weakened immune systems should consult with their health care providers about what steps would best reduce their risks of becoming infected with Giardiasis. Individuals who think that they may have been exposed to Giardiasis should contact their health care providers immediately. The Giardia parasite is passed in the feces of an infected person or animal and may contaminate water or food. Person to person transmission may also occur in day care centers or other settings where handwashing practices are poor.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

Last year, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

LEAD INFORMATION

The Federal Lead and Copper Rule requires us to include the following information about Lead in drinking water with our Annual Water Quality Report. "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. Our water system 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 or at <http://www.epa.gov/safewater/lead>."

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Some people may be more vulnerable to disease causing microorganisms or pathogens 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 infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life;
- Saving water reduces the cost of energy required to pump water and the need to construct pumping systems and water towers; and
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it up and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.

SYSTEM IMPROVEMENTS

The City of Rome improved the water system in several ways in 2012. The following were done to improve the capacity and operations of the City of Rome Water System:

- Finished installation and programming of new 1720E Turbidimeters. All filters, composite, supernatant and raw water turbidimeters and controllers have been completed with all work done by water system staff.
- Installed reactors and fuse blocks in each of three low lift pump variable frequency drive units for electrical surge protection. All work performed by water staff.
- Major repairs performed on both travelling screens at Kessinger Dam.
- Purchased and installed new 1 ton Chlorine container lifting bar to comply with OSHA standards.
- Took down and cleaned sludge from two lagoons and both sedimentation basins. All work was done in-house.
- Drained and cleaned impoundment area of Kessinger Dam. All work done in-house.
- A new 8-inch water main was installed along Depeyster Street.

Each of these improvements and the planned upgrades for portions of our system will ensure continued operation of our water system for years to come. We are expecting to perform extensive work on several components of our system beginning in 2013 to ensure compliance with regulations and provide necessary improvements to ensure continued operation of our system.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of our community and our way of life. Please call our office at 336-6000 or 339-7777 if you have questions.

For customers of purchasing water districts (i.e. Floyd Water District, Spencer Settlement Water District, Lee Water District, and Mohawk Correctional Facility), see respective reports for additional information regarding additional sampling, treatment and contact information.

Annual Drinking Water Quality Report for 2012

Town of Lee Water District

PO Box 201 – Lee Center, NY 13363

(Public Water Supply ID# NY3202394)

TOWN OF LEE WATER DISTRICT CONTACT INFORMATION

If you have any questions about this report or concerning your drinking water, please contact the Town of Lee Clerk's Office at 336-3438. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Town board meetings. The meetings are held at 7:30pm on the second Tuesday of each month, at the Lee Town Hall (5808 Stokes-Lee Center Road).

WHERE DOES OUR WATER COME FROM?

The Town of Lee Water District is a purchase water system of the City of Rome Water System, meaning all water is purchased from the City of Rome and distributed through our water mains to customers. (See the *City of Rome Report for additional information on where our water comes from*).

Our water system serves a population of approximately 3150 through 1,250 service connections. There are no meters on our system. The total water produced in 2012 was over 173,575,000 gallons. The amount of water delivered back to Rome customers was over 27,761,000. There is unaccounted for water which was treated water used to flush mains, fight fires, street cleaning, and leakage. Since we don't utilize meters, we don't know how much water is unaccounted for. Water customers inside the water district are charged a flat rate of \$268/yr or \$282/yr with a swimming pool.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

In addition to the City of Rome sample results (see *Rome AWQR*), the Town of Lee Water District routinely tests your drinking water for asbestos, lead and copper, coliform bacteria, disinfection byproducts and disinfection residuals. The table presented below depicts which compounds were detected in your drinking water.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG / MRDLG	Regulatory Limit (MCL, MRDL, or AL)	Likely Source of Contamination
Inorganic Contaminants							
Copper	No	7/12	0.033 ⁽¹⁾ (range = 0.0014 – 0.14)	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits.
Disinfectants							
Chlorine Residual	No	Daily/ Monthly	0.8 ⁽³⁾ (range = 0.4 – 1.2)	mg/l	N/A	MRDL = 4 ⁽⁴⁾	Water additive used to control microbes.
Disinfection Byproducts							
Haloacetic Acids (mono-, di-, and trichloroacetic acid, and mono- and dibromoacetic acid)	No	8/09	55 (range = 14 – 81) ⁽⁵⁾	ug/l	N/A	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes (TTHMs – chloroform, bromodichloromethane, dibromochloromethane and bromoform)	No	8/09	39 (range = 12 – 76) ⁽⁵⁾	ug/l	N/A	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
See City of Rome AWQR for additional sample information - Physical Parameters, Radioactive Contaminants, Inorganic Contaminants, Synthetic Organic Contaminants, Principal Organic Contaminants, Lead and Copper							

Notes:

- 1 - The level presented represents the 90th percentile of the ten (10) sites tested in Lee WD. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, ten (10) samples were collected at your water system and the 90th percentile was the ninth highest value. The action level for copper was not exceeded at any of the sites tested.
- 2 - The level presented represents the 90th percentile of the ten (10) samples collected. The action level for lead was not exceeded at any of the sites tested.
- 3 - The levels presented represent the average and range of the levels reported on the microbiological sampling reports.
- 4 - Value presented represents the Maximum Residual Disinfectant Level (MRDL) which is a level of disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects. MRDLs are currently not regulated but in the future they will be enforceable in the same manner as MCLs.
- 5 - The levels presented represent the range of the levels reported on the Stage 2 DBP Rule sample reports (collected quarterly from 2008-2009). These tests were conducted to help us determine the appropriate locations for sampling in the future. This sampling is not used to determine compliance as compliance with the MCL is based upon the Running Annual Average (RAA) of the samples collected at the point of Maximum Retention during the year. The RAA for HAA5 was below the established MCL (60 ug/l). We will begin sampling for Disinfection Byproducts in compliance with the Stage 2 Disinfection Byproduct Rule in 2013.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

Last year, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

SYSTEM IMPROVEMENTS

Last year, our assistant water operator resigned and we canvassed for a new assistant, hired and began training a new assistant operator. We

replaced the entrance gate to the pump house, worked on water tank maintenance including sealer, exterior paint, and roof vent. We rebuilt the pressure reducing valve in Stokes. We continued updates on our mapping of the system, and upgraded maintenance tools for the distribution system. We moved our Dig Safely fax line to the pumphouse and installed a printer/fax machine.

CLOSING

Thank you for allowing us to continue to provide your family with quality water this year. We ask all our customers help us protect our water system, which is the heart of our community and our way of life. Please contact the Town Clerk's Office at 336-3438 if you have any questions.

See City of Rome Report for additional sampling, treatment and water source information.

Annual Drinking Water Quality Report for 2012

Town of Floyd Water District

8299 Old Floyd Road – Rome, NY 13440

(Public Water Supply ID# NY3222694)

TOWN OF FLOYD WATER DISTRICT CONTACT INFORMATION

If you have any questions about this report or concerning your drinking water, please contact Michelle Kotary, Water Operators, at 865-4256 ext. 24. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Town board meetings. The meetings are held on the first Tuesday of each month, at the Floyd Town Hall (8299 Old Floyd Road), at 7:00 PM.

WHERE DOES OUR WATER COME FROM?

The Town of Floyd Water District purchases all of its water from the City of Rome (see the *City of Rome Report for additional information on where our water comes from*). The Town of Floyd adds liquid chlorine to the water to ensure adequate disinfection as needed. Water is served to approximately 1710 people through 810 service connections.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

In addition to the City of Rome sample results (see *City of Rome AWQR*), the Town of Floyd Water District routinely tests your drinking water for lead and copper, disinfection byproducts, coliform bacteria and disinfection residuals. The table presented below depicts which compounds were detected in your drinking water.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG / MRDLG	Regulatory Limit (MCL, MRDL or AL)	Likely Source of Contamination
Microbiological Contaminants							
Total Coliform	Yes	9/19/12 12/12/12	Present ⁽¹⁾ in three samples	N/A	0	MCL = Any positive sample	Naturally present in the environment.
Inorganic Contaminants							
Copper	No	8/12	0.35 ⁽²⁾ (range = 0.058 – 0.11)	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems.
Lead	No	8/12	1.1 ⁽³⁾ (range = ND – 55)	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.
Disinfectants							
Chlorine Residual	No	Daily/ Monthly	0.25 ⁽⁴⁾ (range = 0.2 – 0.33)	mg/l	N/A	MRDL = 4 ⁽⁵⁾	Water additive used to control microbes.
Disinfection Byproducts							
Haloacetic Acids (mono-, di-, and trichloroacetic acid, and mono- and dibromoacetic acid)	No	Quarterly	34 ⁽⁶⁾ (range = 4 – 70)	ug/l	N/A	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes (TTHMs – chloroform, bromodichloromethane, dibromochloromethane and bromoform)	No	Quarterly	48 ⁽⁶⁾ (range = 27 – 96)	ug/l	N/A	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
See City of Rome AWQR for additional sample information - Physical Parameters, Radioactive Contaminants, Inorganic Contaminants, Synthetic Organic Contaminants, Principal Organic Contaminants, Lead and Copper							

Notes:

- 1 – On September 19, 2012, total coliform bacteria were detected in two compliance samples collected in the system. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful bacteria may be present. Nine (9) additional samples were subsequently collected and total coliforms were not detected in those samples. It should be noted that E. Coli, associated with human and animal fecal waste, was not detected in any of the samples collected. In addition a single sample collected on December 12, 2012 was found to contain total coliform bacteria. Subsequent samples were found to be free from contamination.
- 2 - The level presented represents the 90th percentile of the ten (10) sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, ten (10) samples were collected at your water system and the 90th percentile value was the ninth highest value. The action level for copper was not exceeded at any of the sites tested.
- 3 - The level presented represents the 90th percentile of the 10 sites tested. The action level for lead was exceeded at one of the sites tested (55 ug/l).
- 4 - This level represents the Running Annual Quarterly Average (RAA) of chlorine residuals as noted on submitted bacteriological samples submitted.
- 5 - Value presented represents the Maximum Residual Disinfectant Level (MRDL) which is a level of disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects. MRDLs are currently not regulated but in the future they will be enforceable in the same manner as MCLs.
- 6 - This level represents the average and range of results of quarterly sampling. Since compliance with the MCL for Haloacetic Acids and Trihalomethanes is based upon the Running Annual Average (RAA) of the samples collected during four consecutive quarters, although a single sample of each contaminant group (HAA5 = 70 ug/l, TTHM = 96 ug/l) exceeded the respective MCLs (HAA5 = 60 ug/l, TTHM = 80 ug/l), our system's RAAs never exceeded the MCLs for each contaminant group.

WHAT DOES THIS INFORMATION MEAN?

The table shows that we had an MCL violation for total coliform. On September 19, 2012, both of the monthly samples collected indicated the presence of total coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. Because two samples were found with coliform bacteria, the MCL was violated. Additional samples were subsequently collected – these samples were free from coliform contamination. We believe the samples were improperly collected. No additional measures were taken to address the issue. It should be noted that E. Coli, associated with human and animal fecal waste, was not detected in any of the samples collected.

In addition a single sample collected on December 12, 2012 was found to contain total coliform bacteria. Repeat samples collected following the December sample were free from contamination.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

Last year, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

CLOSING

Thank you for allowing us to continue to provide your family with quality water this year. We ask all our customers help us protect our water system, which is the heart of our community and our way of life. Please call our office at 865-4256 ext. 24 if you have any questions.

See Attached City of Rome Report for additional source, treatment, sampling and other required information.

Annual Drinking Water Quality Report for 2012

Mohawk Correctional Facility

6100 School Road – Rome, NY 13440

(Public Water Supply ID# NY3233160)

MOHAWK CORRECTIONAL FACILITY CONTACT INFORMATION

If you have any questions about this report or concerning your drinking water, please contact Terry Whitaker, Plant Superintendent, Mohawk Correctional Facility at 315-339-5232 Ext. 3950 (Monday - Friday - 7:30AM - 3:30PM). We want you to be informed about your drinking water.

WHERE DOES OUR WATER COME FROM?

The system is a purchase water system of the City of Rome Water System, meaning all water is purchased from the City of Rome and distributed through our water mains to customers. Last year, the Oneida Correctional Facility closed and the population was reduced following that closure. At this time our water system serves security and civilian staff, inmate population, DDSO facilities numbering approximately 2,367 people, as well as a small private residential population in and around the Oneida and Mohawk Correctional Facilities. When needed, the water is disinfected with chlorine prior to entering the distribution system. Two storage tanks provide a total of 3.5 million-gallons of storage for treated water.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

In addition to the City of Rome sample results (see published AWQR), the Mohawk Correctional Facility water system routinely tests your drinking water for lead and copper, disinfection byproducts, coliform bacteria and disinfection residuals. The table presented below depicts which compounds were detected in your drinking water.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG / MRDLG	Regulatory Limit (MCL, MRDL, TT or AL)	Likely Source of Contamination
Microbiological Contaminants							
Total Coliform	No	7/11/2012 8/15/2012 10/18/2012	Present ⁽¹⁾ in one sample on each sample date	N/A	0	MCL = Any positive sample	Naturally present in the environment.
Inorganic Contaminants							
Copper	No	9/12	0.080 ⁽²⁾ (range = 0.0069 – 0.096)	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead	No	9/12	ND ⁽³⁾ (range = ND – 1.5)	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.
Disinfectants							
Chlorine Residual	No	Daily/ Monthly	0.4 ⁽⁴⁾ (range = 0.02 – 2.2)	mg/l	N/A	MRDL = 4 ⁽⁵⁾	Water additive used to control microbes.
Disinfection Byproducts							
Haloacetic Acids (mono-, di-, and trichloroacetic acid, and mono- and dibromoacetic acid)	YES ⁽⁶⁾	Quarterly	62 ⁽⁷⁾ (range = 35 – 90)	ug/l	N/A	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes (TTHMs – chloroform, bromodichloromethane, dibromochloromethane and bromoform)	No	Quarterly	56 ⁽⁷⁾ (range = 30 – 74)	ug/l	N/A	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
See City of Rome AWQR for additional sample information - Physical Parameters, Radioactive Contaminants, Inorganic Contaminants, Synthetic Organic Contaminants, Principal Organic Contaminants, Lead and Copper							

Notes:

- 1 - On July 11th, August 15th and October 18, 2012, total coliform bacteria were detected in individual compliance samples collected in the system. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful bacteria may be present. Nine (9) additional samples were subsequently collected following the positive results in the distribution system and total coliforms were not detected in those samples. It should be noted that E. Coli, associated with human and animal fecal waste, was not detected in any of the samples collected.
- 2 - The level presented represents the 90th percentile of the ten (10) sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, the 90th percentile was the ninth highest value. The action level for copper was not exceeded at any of the ten (10) sites tested.
- 3 - The level presented represents the 90th percentile of the ten (10) samples collected. The action level for lead was not exceeded at any of the sites tested.
- 4 - This level represents the annual quarterly average calculated from sample submission results.
- 5 - Value presented represents the Maximum Residual Disinfectant Level (MRDL) which is a level of disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects. MRDLs are currently not regulated but in the future they will be enforceable in the same manner as MCLs.
- 6 - Since compliance with the MCL for Haloacetic Acids (HAA5) is based upon the Running Annual Average (RAA) of the samples collected during four consecutive quarters, our system was in violation for exceedance of the HAA5 MCL in the fourth quarter of the year.
- 7 - This level represents the Running Annual Quarterly Average (RAA) for the samples submitted.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system has experienced a violation for Haloacetic Acids (HAA5s). Since compliance with the MCL for HAA5s is based upon the Running Annual Average (RAA) of the samples collected during four consecutive quarters, our system was in violation for exceedance of the HAA5 MCL in the fourth quarter of the year. Due to the existence of a violation, we are required to provide the following information related to Haloacetic Acids.

INFORMATION REGARDING HALOACETIC ACIDS

Haloacetic acids are a group of chemicals that includes mono-, di- and trichloroacetic acids and mono- and dibromoacetic acids. Haloacetic acids are formed in drinking water during treatment by chlorine, which reacts with certain acids that are in naturally-occurring organic material (e.g., decomposing vegetation such as tree leaves, algae or other aquatic plants) in surface water sources such as rivers and lakes. The amount of haloacetic acids in drinking water can change from day to day, depending on the temperature, the amount of organic material in the water, the amount of chlorine added, and a variety of other factors. Drinking water is disinfected by public water suppliers to kill bacteria and viruses that could cause serious illnesses. Chlorine is the most commonly used disinfectant in New York State. For this reason, disinfection of drinking water by chlorination is beneficial to public health.

Some studies of people who drank chlorinated drinking water for 20 to 30 years show that long term exposure to disinfection by-products (possibly including haloacetic acids) is associated with an increased risk for certain types of cancer. However, how long and how frequently people actually drank the water as well as how much haloacetic acids the water contained is not known for certain. Therefore, we do not know for sure if the observed increased risk for cancer is due to haloacetic acids, other disinfection by-products, or some other factor. The individual haloacetic acids dichloroacetic acid and trichloroacetic acid cause cancer in laboratory animals exposed to high levels over their lifetimes. Dichloroacetic acid and trichloroacetic acid are also known to cause other effects in laboratory animals after high levels of exposure, primarily on the liver, kidney and nervous system and on their ability to bear healthy offspring. Chemicals that cause effects in animals after high levels of exposure may pose a risk to humans exposed to similar or lower levels over long periods of time.

Also, on three occasions during the year (i.e. 7/11/12, 8/15/12, 10/18/12), sampling indicated the presence of Total Coliform Bacteria in routine samples. Nine (9) additional samples were collected following each initial sample. None of these samples indicated the presence of Total Coliform bacteria. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful bacteria may be present. It should be noted that E. Coli, associated with human and animal fecal waste, was not detected in any of the samples collected.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

Last year, our system was in general compliance with applicable State drinking water operating, monitoring and reporting requirements.

CLOSING

Thank you for allowing us to continue to provide you with quality water this year. We ask all our customers help us protect our water system, which is the heart of our community and our way of life. Please call our office at 339-5232 if you have any questions.

See City of Rome Report for additional sampling, treatment and water source information.

Annual Drinking Water Quality Report for 2012

Spencer Settlement Water District

P.O. Box 310 - Westmoreland, NY 13490

(Public Water Supply ID# NY3233173)

SPENCER SETTLEMENT WATER DISTRICT CONTACT INFORMATION

If you have any questions about this report or concerning your drinking water, please contact Theodore Flint, Water Plant Operator, 853-1746. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Town board meetings. The meetings are held on the 2nd Monday of each month, at 7:00 PM at the Westmoreland Town Hall (100 Station Road, Westmoreland).

WHERE DOES OUR WATER COME FROM?

The Spencer Settlement Water District is a purchase water system of the City of Rome Water System, meaning all water is purchased from the City of Rome and distributed through our water mains to customers. Our water system serves approximately 30 people through 20 service connections. (See the City of Rome Report for additional information on where our water comes from).

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

In addition to the City of Rome sample results (see attached), the Spencer Settlement Water District Water System routinely tests your drinking water for coliform bacteria and disinfection residuals. The table presented below depicts which compounds were detected in your drinking water.

TABLE OF DETECTED CONTAMINANTS

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg / Max) (Range)	Unit Measurement	MCLG / MRDLG	Regulatory Limit (MCL, MRDL, or AL)	Likely Source of Contamination
Microbiological Contaminants							
Total Coliform	No	12/18/2012	Present ⁽¹⁾ in one sample	N/A	0	MCL = Any positive sample	Naturally present in the environment.
Disinfectants							
Chlorine Residual	No	Daily / Monthly	0.25 ⁽²⁾ (range = 0.2 - 0.4)	mg/l	N/A	MRDL = 4 ⁽³⁾	Water additive used to control microbes.
See City of Rome AWQR for additional sample information - Physical Parameters, Radioactive Contaminants, Inorganic Contaminants, Synthetic Organic Contaminants, Principal Organic Contaminants, Lead and Copper							

Notes:

- 1 - On December 18, 2012, total coliform bacteria were detected in a routine compliance sample collected in the system. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful bacteria may be present. Nine (9) additional samples were subsequently collected following the positive result in the distribution system and total coliforms were not detected in those samples. It should be noted that E. Coli, associated with human and animal fecal waste, was not detected in any of the samples collected.
- 2 - The levels presented represent the average and range of the levels reported on the microbiological sampling reports.
- 3 - Value presented represents the Maximum Residual Disinfectant Level (MRDL) which is a level of disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects. MRDLs are currently not regulated but in the future they will be enforceable in the same manner as MCLs.

WHAT DOES THIS INFORMATION MEAN?

We have learned through our testing that some contaminants have been detected. On December 18, 2012, sampling indicated the presence of Total Coliform Bacteria in a routine sample. Nine (9) additional samples were collected following this sample. None of these samples indicated the presence of Total Coliform bacteria. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful bacteria may be present. It should be noted that E. Coli, associated with human and animal fecal waste, was not detected in any of the samples collected.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

Last year, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. Please call our office if you have questions.

See City of Rome Report for additional sampling, treatment and water source information.