

# Annual Drinking Water Quality Report for 2009

The Village of Gouverneur  
33 Clinton Street, Gouverneur, NY 13642  
(Public Water Supply Federal ID# NY4404385)

## INFORMATION:

To comply with State regulations, the **Village of Gouverneur**, annually issues 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 standard. Last year, we conducted tests for over 80 contaminants. We detected five (5) of those contaminants, and none of them were at a level higher than the State allows. This report also includes lead and copper test results from 2008. Of the 20 sites tested for lead, one site exceeded the action level for lead. However, the 90<sup>th</sup> percentile level for the lead samples required to be collected was below the action level, which did not require any remediation on the part of the Village. 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 **Earl Measheaw, Senior Operator, at (315) 287-0310**. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings. **The meetings are held on the third Tuesday of each month at 7:00 PM in the Municipal Building Courtroom, located at 33 Clinton Street, Gouverneur, NY 13642.**

## 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 and the FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source is the Oswegatchie River. The water is filtered by rapid sand filtration after which it is disinfected with a sodium hypochlorite solution. Fluoride is then added for the prevention of dental cavities. Orthophosphate is added at the Water Plant for corrosion control. The finished water is then pumped through a dedicated transmission line to a one million five hundred thousand (1,500,000) gallon concrete storage tank before entering the distribution system. The Water Filtration Plant produces about nine hundred thousand (900,000) gallons of finished water each day. During the year 2009, our system did not experience any restriction of our water source.

## FACTS AND FIGURES:

The Village of Gouverneur water system serves a population of 4,263 through approximately 1,900 service connections. The total water produced in 2009 was 246,496,800 gallons. The daily average of water treated and pumped into the distribution system was 675,334 gallons per day. Our highest single day of production was on February 23<sup>rd</sup> with the production of 1,107,800 gallons. In 2009, the annual average water charge per user was \$292.00.

## SOURCE WATER ASSESSMENT SUMMARY:

The New York State Department of Health (NYSDOH) has evaluated this Public Water Supply's (PWS's) susceptibility to contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraphs below. It is important to stress that these assessments were created using available information and only estimate the potential for untreated drinking water sources to be impacted by contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for this PWS.

This PWS provides treatment and regular monitoring to ensure the water delivered to consumers meet all applicable standards. General drinking water concerns for PWS's which use surface water sources include: storm and environment generated turbidity, wastewater, toxic sediments, transportation routes, related spills, mines, landfills, inactive hazardous waste sites (IHWS), chemical bulk storage facilities, and major oil storage facilities.

This assessment found an elevated susceptibility to contamination for this source of drinking water. Land cover and its associated activities within the assessment area does not increase the potential for contamination. While there are some facilities present, permitted discharge does not likely represent an important threat to source water quality, based on their density in the assessment area or total combined wastewater flows. There is 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 relatively high flow velocities make river drinking water supplies highly sensitive to existing and new source of microbial contamination.

### **INFORMATION ON FLUORIDE ADDITION:**

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.8 to 1.2 mg/l (parts per million). To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires that we monitor fluoride levels on a daily basis. During 2009, monitoring showed fluoride levels in your water were in the optimal range 92.3% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

### **ARE THERE CONTAMINANTS IN OUR DRINKING WATER?**

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. 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, is 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 (1-800-426-4791)** or the **New York State Department of Health – Canton District Office, 58 Gouverneur Street, Canton, NY 13617-3200, (315) 386-1040.**

<b>Table of Detected Contaminants</b>
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Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Turbidity (1)	NO	Daily	(.075 / .311) (.031 – .311)	NTU	N/A	TT – 0.3	Soil Run-off
<b>Inorganic Contaminants</b>							
Fluoride	NO	Daily	(.95 / 1.60) (.40 – 1.60)	mg/l	N/A	2.2	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Barium	NO	10/2009	18	ug/l	2000	2000	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Sodium (2)	NO	10/2009	16	mg/l	N/A	(see notes)	Naturally occurring; Road salt; Water softeners; Animal waste
Nitrate as N	NO	6/2009	.28	mg/l	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Mercury	NO	10/2009	.60	ug/l	2	2	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
Copper (3)	NO	9/2008	.28 (.0025 - .53)	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives
Lead (4)	NO	9/2008	2.5 (1 – 18)	ug/l	0	AL=15	Corrosion of household plumbing systems; Erosion of natural deposits

<b>Disinfection By-products</b>							
Total Trihalomethanes (TTHM's) (5)	NO	2009 Yearly Average	35.0 (26.3 – 43)	ug/l	0	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHM are formed when source water contains large amounts of organic matter
Haloacetic Acids (HAA5) (6)	NO	2009 Yearly Average	14.98 (1 – 29)	ug/l	N/A	60	By-product of drinking water chlorination

**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 turbidity measurement for the year occurred on 7/7/2009 (0.311 NTU). 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.

(2) - 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. Our sample tested at 16 mg/l.

(3) - The level presented represents the 90<sup>th</sup> percentile of the 20 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 90<sup>th</sup> percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, 20 samples were collected at your water system and the 90<sup>th</sup> percentile value was the 0.045 mg/l value. The action level for copper was not exceeded at any of the 20 sites tested.

(4) - The action level for lead was exceeded at 1 of the 20 sites tested. However, the 90<sup>th</sup> percentile level for the 20 sites was 2.5 ug/l, which does not exceed the action level set by the State.

(5) - TTHM's are made up of chloroform, bromodichloromethane, dibromochloromethane, and bromoform.

(6) - HAA5's are made up of mono-, di-, and trichloroacetic acid, and mono- and di- bromoacetic acid.

**Definitions:**

**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.

**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.

**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.

**Non-Detects (ND):** Laboratory analysis indicates that the constituent is not present.

**Nephelometric Turbidity Unit (NTU):** A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**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).

**Picocuries per liter (pCi/L):** A measure of the radioactivity in water.

## **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?**

During 2009, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

## **DO I NEED TO TAKE SPECIAL PRECAUTIONS?**

Although our drinking water met or exceeded state and federal regulations, 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 (1-800-426-4791)**.

## **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 costly new wells, pumping systems and water towers.
- 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 can save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, and then check the meter after 15 minutes, if it moved you have a leak.
- Limit the amount of time that you spend watering your lawn.

## **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. Please call our office if you have questions at (315) 287-0310.