Annual Drinking Water Quality Report for 2005

Town of Big Flats Water Districts 2 and 3

Public Water Supply ID# 0701011 and 0701006

May 2006

To comply with State regulations, the Town of Big Flats is issuing its annual 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.

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 Jay Boudreau, Water Systems Supervisor at 607-562-8443, extension 212.

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.

Our water sources are three wells. Our system is interconnected so all 3 wells serve Districts 2 & 3 in some capacity. The water is chlorinated at the acceptable level of 0.1 to 0.7 mg/L prior to distribution to your home. Our water system serves about 3500 people through 1100 service connections. During 2005 our system did not experience any restriction of our water source.

Source Water Assessment Program (SWAP)

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source 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 wells. 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. 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.

As mentioned before, our water is derived from 3 drilled wells. The source water assessment has rated these wells as having a high susceptibility to microbials, nitrates, industrial solvents, metals and other industrial contaminants. These ratings are due primarily to the close proximity of a permitted discharge facility (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government); a toxic chemical release facility; and agricultural land in relation to the wells. In addition, the wells draw from an unconfined aquifer with high hydraulic conductivity. Please note that, while the source water assessment rates our wells as being susceptible to microbials, our water is disinfected to ensure that that the finished water delivered into your home meets the New York State drinking water standards for microbial contamination.

A copy of this assessment, including a map of the assessment area, can be obtained by contacting us.

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, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, 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.

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 the 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 Chemung County Health Department at 737-2019.

Contaminants Detected in 2005 (or latest test)

Definitions used in the table:

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.

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

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).

Not Detected (**N/D**): The contaminant was not detected in the laboratory test.

Not Applicable (**N/A**):

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

Distribution System

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measure-ment	MCLG	Regulatory Limit MCL (AL)	Likely Source of Contamination
Trihalomethanes	N	8/05	6.9	ug/L	N/A	80	By-product of drinking water chlorination
Lead 20 samples **Note 1**	N	9/04	90^{th}%=7 Range ND-26	ug/L	N/A	15 (AL)	Corrosion of household plumbing
Haloacetic Acida	N	8/05	1.2	Ug/L	N/A	60	By-product of drinking water chlorination

Note 1: The 90^{th} Percentile (90^{th} %) means that 90% of the results were less than or equal to the number reported. Lead and Copper tests were conducted in 2004 for Districts 2 and 3. For lead, 2 samples exceeded the Action Level of 15 ug/L. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

Consumer Square Well

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measure-ment	MCLG	Regulatory Limit MCL (AL)	Likely Source of Contamination
Alpha emitters	N	2/02	2	PCi/L	0	15	Erosion of natural deposits.
Chloride 30 samples	N	Weekly Feb-Dec 05	Average 190 Range 131-248	mg/L	N/A	250	Naturally occurring or indicative of road salt contamination.
Nitrate 1 sample	N	8/05	2.18	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage;
Sodium	N	8/05	88	mg/L	N/A	**Note 1**	Naturally occurring; Road salt; Water softeners; Animal waste.
Sulfate	N	2/02	21	mg/L	N/A	250	Erosion of natural deposits.
1,1,1-Trichloroethane	N	10/05	Average 1.5 Range 1.2 – 1.8	ug/L	5	5	Industrial solvent used for cleaning & degreasing.

Note 1: 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.

Carpenter Road Wells

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measure-ment	MCLG	Regulatory Limit MCL (AL)	Likely Source of Contamination
Barium	N	8/05 (2)	Average 0.15 Range 0.11 – 0.19	mg/L	2	2	Erosion of natural deposits.
Chloride 3 samples	N	5/05 (1) 8/05 (2)	Average 80 Range 63–102	mg/L	N/A	250	Naturally occurring or indicative of road salt contamination.
Nitrate 21 samples **Note 1**	N	2005	Average 6.8 Range 5.5-7.9	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage;
Sodium 2 samples	N	8/05	Average 43.5 Range 32-45	mg/L	N/A	**Note 2**	Naturally occurring; Road salt; Water softeners; Animal waste.
Sulfate 2 Samples	N	8/05	Average 33.5 Range 33-34	mg/L	N/A	250	Erosion of natural deposits.
Zinc 2 samples	N	8/05	Average 0.018 Range 0.018-0.018	mg/L	N/A	5	Naturally occurring; Mining waste.

Note 1: Nitrate in drinking water at levels above 10 mg/l is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from you health care provider. We test the water weekly to make sure we identify any sudden changes.

Note 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.

What does this information mean?

As you can see by the table, our system had no violations. We have learned through our testing that other 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?

Our system was in compliance with all state regulations.

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 (800-426-4791).

How can I help save water?

Saving water lessens the strain on the water system during a dry spell or drought. 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:

- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes. If it moved, you have a leak.
- Check every faucet in the house for leaks or drips. Just a slow drip can waste 15-20 gallons a day.
- Check your toilet for leaks by placing food coloring in the tank. If the color leaches into the bowl you have a leak. These unseen leaks could lose up to 100 gallons a day or more.

Closing

Please help us protect our Water System by reporting any suspicious activity to the Police and the Town of Big Flats Water Department.

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.

Annual Drinking Water Quality Report for 2005

Harris Hill Manor (Big Flats Water District #4)
Public Water Supply ID# 0701005

May 2006

To comply with State regulations, the Town of Big Flats is issuing its annual 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 has never violated 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 Jay Boudreau, Water Systems Supervisor at 607-562-8443, extension 212.

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.

We maintain the proper level of disinfection against microbial contaminants as determined by our chlorine residual sample results that fall within the acceptable range of 0.3 mg/L to 1.0 mg/L. Our water system serves about 200 people through 77 service connections. During 2005, our system did not experience any restriction of our water source.

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.

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 the 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 Chemung County Health Department at 737-2019.

Contaminants Detected in 2005 (or most recent test)

District 4 Well

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measure-ment	MCLG	Regulatory Limit MCL (AL)	Likely Source of Contamination
Barium	N	8/05	0.1	mg/L	2	2	Erosion of natural deposits.
Beta particle and photon activity from	N	1/01	0.8	pCi/L	0	50	Decay of natural deposits and man-made emissions.

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measure-ment	MCLG	Regulatory Limit MCL (AL)	Likely Source of Contamination
manmade radionuclides							
Chloride	N	8/05	12	mg/L	N/A	250	Naturally occurring.
Fluoride	N	2/04	0.1	mg/L	N/A	2.2	Naturally occurring.
Nitrate	N	8/05	0.75	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage
Sodium	N	7/02	14	mg/L	N/A	**Note 1**	Naturally occurring; Road salt; Water softeners; Animal waste.
Sulfate	N	8/05	31	mg/L	N/A	250	Naturally occurring.

Note 1: *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.*

Distribution System

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measure-ment	MCLG	Regulatory Limit MCL (AL)	Likely Source of Contamination
Lead 5 samples **Note 1**	N	4/05	90th Percentile 1 Range ND– 1.5	ug/L	0	15	Corrosion of household plumbing
Haloacetic Acids	N	8/04	2.5	ug/L	N/A	60	By-product of drinking water chlorination needed to kill harmful organisms.
Trihalomethanes	N	8/04	3.2	ug/L	N/A	80	By-product of drinking water chlorination needed to kill harmful organisms.

Note 1: The number reported is the 90th Percentile. This means that 90 percent of homes tested were less than or equal to the level reported. We conducted one round of testing in 2005. No samples exceeded the action level of 15 ug/L for lead. We remind you that infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. You can also flush your faucet for 30 seconds to 2 minutes each morning and after long periods of no use to remove corrosion products. Never consume water from a hot water tap. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

Definitions used in the table:

Maximum Contaminant Level (**MCL**): 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.

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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**): Picocuries per liter is a measure of the radioactivity in water.

Not Detected (**ND**): The contaminant was not detected in the laboratory test.

Not Applicable (**N/A**)

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 2005, our system met all applicable state regulations.

Source Water Assessment Program (SWAP)

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source 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 wells. 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. 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.

As mentioned before, our water is derived from 1 drilled well. The source water assessment has rated these wells as having a medium-high susceptibility to microbials. While no significant sources of contamination have been identified in the assessment area, the well draws from an unconfined aquifer with high hydraulic conductivity. Please note that while the source water assessment rates our well as being susceptible to microbials, our water is disinfected to ensure that that the finished water delivered into your home meets the New York State drinking water standards for microbial contamination.

County and state health departments will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning, and education programs. A copy of the assessment, including a map of the assessment area, can be obtained by contacting us.

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 (800-426-4791).

How can I help save water?

Saving water lessens the strain on the water system during a dry spell or drought. 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:

- 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.

- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes, if it moved you have a leak.

Closing

Please help us protect our Water System by reporting any suspicious activity to the Police and the Town of Big Flats Water Department.

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.