

Village of Sidney
Annual Drinking Water Quality Report for 2018
21 Liberty Street Sidney, NY 13838

INTRODUCTION

To comply with State and Federal regulations, the Village of Sidney 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. 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.

We want you to be informed about your drinking water. If you have any questions about this report or concerning your drinking water, please contact Shane Nordberg, Chief Water Operator (607) 561-2330.

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, New York 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.

Water for the Village of Sidney is supplied by two well supplies. The Village also has two reservoir supplies currently not in use but available for backup if needed.

Primary Well – Developed in 1988. This is our primary water supply and pumps at a rate of 780-800 gallons per minute. An 800 gallon per minute pump restriction was placed on this well due to the proximity of the former Amphenol lagoons.

Secondary Well – Developed in 1946. This well is our secondary supply and is exercised but generally is not pumped for any extended periods of time. It has a pumping capacity of 425 gallons per minute. (The water from this well tends to have a higher manganese content than our primary well).

Storage Tank – The Village of Sidney has one in-system storage tank constructed of pre-stressed concrete with a storage capacity of 2 million gallons.

Additional Storage – The Village of Sidney has an upland reservoir system as standby storage with a capacity of 86 million gallons.

We are fortunate to have a very prolific aquifer capable of furnishing about 4 times our normal water requirement, although we have had some problems with manganese, a naturally occurring dissolved metal very similar to iron with associated problems of staining and black particles in water that are considered a nuisance.

FACTS AND FIGURES

The Village of Sidney Water System serves a population of approximately 3,900 residents in the Village of Sidney and portions of Riverside, East Guilford and adjacent areas. There are approximately 1,500 service connections including residential, commercial and industrial customers. The total water produced in 2018 was **238,037,000** gallons. The daily average of water treated and pumped into the distribution system from our primary and/or secondary well is 652,158 gallons per day. Our highest single day usage was 1,152,000 gallons. Water usage

included all water furnished for consumption, fire flows and losses. Because water usage for Village residential customers is not metered, the amount of losses in the system is unknown. In 2001 the water rate was lowered by 5% the flat rate per unit was \$25.41 per quarter and the metered rate was \$2.032 per 1000 gallons. Those rates remained constant in 2002, 2003, and 2004. In 2005 the flat rate increased to \$27.95 per unit, and the metered rate went to \$2.236 per 1000 gallons. Those rates remained constant in 2006, and 2007. In 2008 the flat rate increased to \$34.10 per unit and the metered rate went to \$2.728 per 1000 gallons. In 2010 the flat rate increased to \$36.85/quarter per unit and the metered rate went to \$2.948 per 1000 gals. The typical annual flat rate charge for a residential water customer is \$147.40 billed in equal quarterly installments of \$36.85 and remained the same rates in 2012 and 2013.

WATER TREATMENT

Our water system includes a treatment facility which treats water from our primary well or secondary well or both. Controls are capable of handling variable flow rates automatically. Treatment consists of:

- **Sequestering** – to control manganese. Sequestering also has the effect of providing corrosion control.
- **Fluoridation** – to adjust the fluoride level from a natural level of less than 0.2 ppm to 0.7 part per million.
- **Chlorination** using liquid chlorine – Controls include automatic pacing of chlorine added, based on water flow rate, automatic analysis for monitoring the end result, and alarms with a dialer system to warn if levels are not within acceptable limits. The chlorine level at the treatment facility is 1.2 ppm. We are required to maintain a detectable residual throughout the system.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

The Village of Sidney performs all testing as required by New York State regulations. We routinely test your drinking water for numerous contaminants. The water system is operated by and samples are collected and processed by New York State licensed operators. Samples are analyzed at our laboratory and at NYS certified commercial laboratories.

Daily testing consists of:

1. Chlorine Residual – twice per day to verify the disinfection system operation.
2. Fluoride – to monitor our adjusted fluoride level, and
3. pH

Monthly testing consists of:

1. 4 samples for coliform bacteria
2. Manganese levels .
3. Phosphate Testing
4. Volatile Organic Compounds (VOC's) which include solvents and cleaning fluid compounds such as TCE (trichloroethylene), Cis 1,2 dichloroethylene, chloroform, benzene, carbon tetrachloride, trihalomethanes, and MTBE (methyl-tert-butyl-ether, a gasoline additive).

We test for 54 compounds in this group. Maximum contamination levels (M.C.L.'s) are 5 ppb (parts per billion) of each item. Of these, typically we have no detection of 52 of these compounds.

In the past we have generally detected TCE levels from 1.9 to 4.0 parts per billion and Cis 1,2 dichloroethylene at levels from 1.2 to 2.5 parts per billion at our primary well. In 2018, the monthly average for TCE was 1.86 ppb. The monthly average for Cis 1,2 dichloroethylene was 1.39 ppb. These levels have been historically very consistent. In 2001 we detected benzene in 1 of the 12 samples at a level of 0.9 ppb. In 2002, 2003, 2004 and 2005 benzene was not detected in any sample and has not been detected since 2005. In 2005 we detected bromodichloromethane (a byproduct of chlorination for disinfection), in 1 of the 12 samples at a level of 0.73 ppb. In 2006 we detected bromodichloromethane in 1 of 12 samples at a level of 0.9 ppb and Chlorobromomethane in 2 of 12 samples at levels of 0.51 ppb and 1.0 ppb. In 2008 we had no detection of bromodichloromethane, or Chlorobromomethane. In 2008 we detected Chloromethane (also a byproduct of chlorination for disinfection) in 1 of 12 samples at a level of 0.8 ppb. In 2010, 2011, 2012, 2013, 2014 and 2015 we had no detection of

bromodichloromethane, Chlorobromomethane, Chloromethane.

The greatest concern with respect to these items is whether they would increase to exceed acceptable limits. Groundwater studies of flows, flow directions and groundwater qualities are ongoing.

Quarterly testing consists of:

Quarterly tests for VOC's are performed on our secondary well (standby well) with results similar to our primary well.

Annual testing consists of:

* Nitrate – 2018 result = 1.0 mg/L (MCL 10.0 mg/l)(02/14/18)

* Manganese: The latest certified manganese sampling was above the MCL for manganese.

* The Village adds a sequestering agent to the water (health department approved) to help control the effects of manganese in the water (i.e.; black flakes and staining); the Village performs monthly sampling to further monitor manganese levels. This process testing has indicated that levels of manganese in the last year may be as high as 0.54 ppm with an average of 0.498 ppm.

* The Village is required to perform testing for disinfection by-products once per year.

* Synthetic Organic Compounds (SOC's) – Tested one time every 18 months. 2018 result including pesticides – no detection.(02/14/18)

3 year testing consists of:

1. Primary Inorganic Chemicals are tested every three years and are due to be tested in 2019.
2. 20 samples for lead (2016 result) - 20 samples were tested for lead with none exceeding the action level of 0.015 mg/l. All samples returned a non detectable result for Lead.
3. 20 samples for copper (2016 result) - 20 samples were tested for copper with 90 % being less than 0.386mg/L.

9 year testing

Radiological & Radon

Radiological testing was performed in 2010. The results were Gross Alpha 2.28 +/- 1.02 pCi/l, which has an (MCL of 15 pCi/l) Gross Beta 4.03 +/-1.03 pCi/L (MCL of 15), Radium 226 & 228 0.19 pCi/l (MCL of 5 pCi/l)

In 2004 additional testing conducted by the U.S. Department of the Interior throughout the Upper Susquehanna River Basin consisted of a wide range of elements and chemicals including nutrients, trace metals, common anions and cations, volatile organic compounds and Radon 222. Radon 222 was detected at a level of 1050 pCi/l. No mcl has been established for Radon at this time. A complete list of the analytes detected, and their detection limits is on file and can be viewed at the Village Clerk's office in the Sidney Civic Center 21 Liberty Street.

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 NYS Department of Health, Oneonta District Office (607-432-3911).

DEFINITIONS

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible.

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

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

Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts (parts per million – ppm).

Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts (parts per billion – ppb).

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

Table of Detected Contaminants

<u>Contaminant</u>	<u>Violation Yes/No</u>	<u>Date of Sample</u>	<u>Level Detected (Average) (Range)</u>	<u>Unit Measure -ment</u>	<u>MCLG</u>	<u>Regulatory Limit (MCL, TT or AL)</u>	<u>Likely Source of Contamination</u>
Nitrate	No	02/14/18	1.0	mg/l		10.0 mg/l	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	No	09/12/18	38.0	mg/l		N/A	Naturally occurring; Road salt; Water softeners; Animal waste.
Chloride	No	09/12/18	85.0	mg/l		250 mg/l	Naturally occurring or indicative of road salt contamination
Sulfate	No	09/12/18	19.0	mg/l		250 mg/l	Naturally occurring
Barium	No	09/12/18	.020	mg/l		2.0 mg/l	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

Manganese	Yes	Monthly	0.498	mg/l		.300 mg/l	Naturally occurring; Indicative of landfill contamination.
Lead	No	1/28/16	ND	mg/l	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits
Copper*	No	1/28/16	0.020	mg/l 1.3	1300	AL=1300 ug/l	Corrosion of household plumbing systems; erosion of natural deposits
Radon	No	1/28/16	634 pCi/l	pCi/l	N/A	N/A	Decay of natural deposits
<u>Trichloroethylene</u>		2018					
Primary Well	No	Monthly	Avg. 1.86 1.6-2.3	ug/l	0	5 ug/l	Discharge from metal degreasing sites and other factories.
Secondary Well	No	Quarterly	Avg. 0.785 < 0.5- 1.2				
<u>Cis 1,2 Dichloroethylene</u>		2018					
Primary Well	No	Monthly	Avg. 1.39 1.1- 2.4	ug/l	N/A	5 ug/l	Discharge from Industrial factories
Secondary Well	No	Quarterly	Avg. 0.585 < 0.5- 0.84				
Gross Alpha	No	4/15/10	2.28 +/- 1.02	pCi/l		15 pCi/l	Erosion of Natural Deposits
Radium 226	No	1/28/16	.0585 +/- 0.08	pCi/l		226 + 228 = 5 pCi/l	Erosion of Natural Deposits
Radium 228	No	1/28/16	.0722 +/- 0.44	pCi/l			Erosion of Natural Deposits

Nickel	No	09/12/18	0.0012	mg/l		No MCL	Naturally Occurring
Calcium	No	09/12/18	77.0	mg/l		No MCL	Naturally Occurring
Hardness	No	09/12/18	220	mg/l		No MCL	Naturally Occurring
Color	No	09/12/18	< 5	Color Units		Secondary Standard 15 units	Large quantities of organic chemicals, inadequate treatment, high disinfectant demand and the potential for production of excess amounts of disinfectant byproducts such as trihalomethanes, the presence of metals such as copper, iron and manganese; Natural color may be caused by decaying leaves, plants, and soil organic matter.
Arsenic	No	09/12/18	< 0.001	mg/l		0.01	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Total Haloacetics	No	08/01/18	1.60	ug/l		60 ug/l	By-product of drinking water chlorination
Total Trihalomethanes	No	08/01/18	6.20	ug/l		80 ug/l	By-product of drinking water chlorination
Chloromethane	No	9/4/08	0.8****	ug/l		5 ug/l	Used in organic chemistry; used as an extractant for greases, oils, and resins; as a solvent in the rubber industry; as a refrigerant, blowing agent and propellant in polystyrene foam production; as an anesthetic; as an intermediate in drug manufacturing; as a food additive, a fumigant and a fire extinguisher.

** - 1 of 12 Samples *** - 2 of 12 Samples **** - 1 of 12 Samples

Notes:

* - The level presented represents the 90th 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 90th percentile is equal to or greater than 90% of the copper values detected in a water system. In this case, 20 samples were collected from selected sites throughout the Village, meeting criteria established by the NYS Department of Health. The 90th percentile value was the third highest value detected. (0.386 mg/l or 386 ug/l). The action level for copper (1.3 mg/l or 1300 ug/l) was not exceeded at any of the sites tested.

WHAT DOES THIS INFORMATION MEAN?

We have learned through our testing that some contaminants have been detected; Trichloroethylene (TCE) was detected but below the MCL. It was detected in our primary well and our secondary well at the average of 1.86 ppb and 0.0.785 ppb respectively. Cis 1,2 Dichloroethylene was also detected but below the MCL. It was detected in our primary well and our secondary well at the average of 1.39 ppb, and 0.585 respectively. The likely source of this type of contamination is through discharge from industrial factories or metal degreasing sites. The source of these low levels of contamination has been identified and an action plan has been established through the combined effort of the Village of Sidney, The NYS Department of Environmental Conservation, The NYS Department of Health and the local industry believed to be responsible for the contamination. This action plan is on file at the Sidney Civic Center and may be implemented if the contaminants were to reach the MCL during a testing period.

IS OUR WATER SYSTEM MEETING OTHER REGULATIONS THAT GOVERN OPERATIONS?

NOTICE OF HIGH MANGANESE LEVELS Sidney Village Water System

The manganese levels in the two wells serving the Sidney Village water system contain average concentrations of manganese that exceed the maximum contaminant level (MCL) of 0.3 milligrams per liter (mg/L). The Village samples for manganese from the primary well, Well #2-88, each month. From January 1, 2017 through December 31, 2017 the average manganese concentration in Well #2-88 was 0.46 mg/L and results ranged from 0.41 mg/L to 0.51 mg/L. The Village samples for manganese from the rarely used backup well, Well #1-46, each quarter. From January 1, 2017 through December 31, 2017 the average manganese concentration in Well #1-46 was 1.8 mg/L and results ranged from 1.7 mg/L to 2.0 mg/L. Water suppliers are required to provide written public notification to consumers when an MCL is exceeded.

Manganese is a common element in rocks, soil, water, plants, and animals. Manganese occurs naturally in water after dissolving from rocks and soil. Contamination of drinking water may occur if manganese gets into surface or groundwater after dissolving from rocks and soil. It may also occur if manganese gets into surface or groundwater after improper waste disposal in landfills or by facilities using manganese in the production of steel or other products.

Manganese is an essential nutrient that is necessary to maintain good health. However, exposure to too much manganese can cause adverse health effects. There is some evidence from human studies that long-term exposure to manganese in drinking water is associated with nervous system effects in adults (e.g., weakness, stiff muscles and trembling of the hands) and children (learning and behavior). The results of these studies only suggest an effect because the possible influences of other factors were not adequately assessed. There is supporting evidence that manganese causes nervous system effects in humans from occupational studies of workers exposed to high levels of manganese in air, but the relevance of these studies to long term drinking water exposure is less clear because the exposures were quite elevated and by inhalation, not by ingestion.

During 2018, our system was in compliance with all applicable State drinking water requirements (except

manganese) The Village takes its responsibilities for a safe water supply very seriously. Currently, the Village completes a well rehabilitation every two to three years, to clean out well screens and media in order to reduce manganese levels. In addition, the Village routinely adds a blended phosphate to the well water, to reduce the likelihood of developing colored water related to manganese. The Village is also currently using a fire hydrant flushing program in order to reduce manganese sediment in the system. The Village is currently working with engineers on a water system upgrade project. As part of this project, the Village is currently in the process of further developing an expected well site. The site currently has test wells that will further be developed into production wells. Preliminary testing has shown that this site is free of manganese. The Village has awarded the contract for this well development, through a bid process, to Layne Christensen Company. This process will get underway during the spring of 2019. Also see manganese under “annual testing” and “system improvements planned”. A supplement to this report containing analytical testing results from samples collected from the Village of Sidney water supply is available for inspection at the Village of Sidney Civic Center. For additional information on the Village of Sidney Annual Drinking Water Quality Report for 2018, please contact Shane Nordberg, Chief Operator, 21 Liberty Street, Sidney, New York 13838 (607)561-2330.

CRYPTOSPORIDIUM AND GIARDIA INFORMATION

New York State law requires water suppliers to notify their customers about the risk of cryptosporidium and giardia. Cryptosporidiosis and giardiasis are intestinal illnesses caused by microscopic parasites. Cryptosporidiosis can be very serious for people with weak immune systems, such as chemotherapy, dialysis or transplant patients, and people with Crohn’s disease or HIV infection. People with weakened immune systems should discuss with their health care providers the need to take extra precautions such as boiling water, using a certified bottled water or a specialty approved home filter. Individuals who think they may have cryptosporidiosis or giardiasis should contact their health care provider immediately. For additional information on cryptosporidiosis or giardiasis, please contact the NYS Department of Health, Oneonta District Office at (607) 432-3911 to obtain detailed fact sheets or call the DOH Duty Officer at 1-866-881-2809 during non-office hours.

The Village of Sidney obtains all of its water from drilled wells. As the Health Department fact sheets note:

- Properly drilled and maintained wells that use ground water are generally protected from surface contamination and are UNLIKELY to contain cryptosporidiosis or giardiasis.

INFORMATION ON RADON

Radon is a naturally occurring radioactive gas found in soil and outdoor air that may also be found in drinking water and indoor air. Some people exposed to elevated radon levels over many years in drinking water may have an increased risk of getting cancer. Radon can enter indoor air from soil under homes. The main risk to persons exposed to radon through indoor air is lung cancer. There currently is no MCL for radon. For additional information call the NYS Radon Program (1-800-458-1158) or call EPA’s Radon Hotline (1-800-SOS-Radon).

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Other than manganese, 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).

Note: Water customers who are on home dialysis should contact the Village of Sidney at 561-2330 in order to be placed on our water prioritization list.

WATER CONSERVATION

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; 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.

Water metering is generally considered the first step toward water conservation. Industrial, commercial and some multi-family residences are metered. Single family and ALL multi family residences are in the process of becoming metered due to State and Federal mandates..

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:

- ♦ Checking inside faucets for leaks. Even a faucet with a small drip can waste a lot of water.
- ♦ Keeping showers to five minutes or less in length, or by taking baths.
- ♦ Turning off the water when brushing your teeth.
- ♦ Installing water saving shower heads or flow restrictors.
- ♦ Keeping a pitcher of water in the refrigerator, so you won't have to run the tap to cool it.
- ♦ Using Automatic dishwashers and clothes washers for full loads only.
- ♦ Checking 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.
- ♦ Using a broom to sweep your driveway, garage or sidewalk instead of using water.
- ♦ Planting drought resistant trees and plants.
- ♦ Saving dishwater, bath water and air conditioning water for use on ornamental plants (only if chemicals have not been used.) A little soap won't hurt plants.
- ♦ Using water only when needed. Always turn the faucet off when you are finished using water.

Water System events during flood of June 2006

Flood waters shutdown Wells 2-88 and 1-46 and the Treatment Building approximately 2 AM Thursday June 29, 2006. The water tank was then used to supply the Village until noon of 6-29-06 when it was shut off and the Pinehill Reservoir supply was brought on line with chlorination and a boiled water notice. A spare motor was located and installed on well 2-88 and put back on line July 3, 2006, Pinehill Reservoirs were shut off, and the water tank turned back on. The boiled water order stayed in effect until July 12, 2006 when a series of bacteria tests indicated the water to be safe for human consumption. The boiled water order remained in effect until July 19, 2006 for customers north of the Guilford Creek due to replacing the 6" water line that had been washed out from the flood. Except for a few customers in East Guilford, at no time were any Village of Sidney water customers without water during or after the flood.

Water System events during Flood of September 2011

Due to flooding NYSEG shut down the power at approximately 11am on September 8, 2011 shutting down the well supply. The water tank was then used to supply the Village until 3:50pm on September 9, 2011 when the tank was shut off due to low water and the Pine Hill reservoir supply was brought on line with chlorination and a Health Dept. boil water order. NYSEG power came back on at 8pm on September 10, 2011, Well 2-88 was turned back on, the water tank was brought back on line and Pine Hill Reservoir supply was turned off. The boil water order remained in effect until September 14, 2011 when the second round of bacteria samples indicated the water to be safe for human consumption. Numerous water services in the flooded areas had to be turned off. The water supply overall was not disrupted.

SYSTEM IMPROVEMENTS NEEDED OR PLANNED

- Manganese removal system: The village has performed a feasibility study for removal of manganese and a new well source of water that has no manganese and is not prone to flooding. The Village is in the process of developing a new well source to replace the current wells.
- Water Storage Tank Inspection (Required by NYS DOH every 5 years) Was completed September 2017 and was given an “A” rating.
- Rehabilitation of Well 2-88 July 2019
- Distribution system improvements.
- Additional transmission main improvements on the main from the 2 million gallon storage tank at Pine Hill.
- Water valve rehabilitation and exercise program.
- Fire hydrant replacement program.
- Repair spillways on Pine Hill reservoirs #2 and #3.
- Relocate a 200ft section of the 10” transmission line from Peckham Reservoir
- Protect the 6” water line crossing Guilford Creek
- Replacement of the River Crossings at the Susquehanna and Unadilla Rivers could possibly be completed by the Fall 2019
- Installing 2 new security gates at our Emergency water source

Note: The Village of Sidney is presently updating its back flow prevention program as required by the New York State Department of Health. Those water customers that have a back flow preventer or customers that have hot water boilers for heating their house are asked to contact the Village Clerk’s Office at 561-2324 so we can update our list.

* The Village was awarded a \$3 million grant with an additional 30 year 0% loan of \$5 million. This money will be used to improve some of the infrastructure of the water system. Some of the improvements include: addressing manganese issues, inadequate pressure issues, replacing and installing water meters, and inadequate pipe size in some areas of the village.

MAJOR IMPROVEMENTS COMPLETED

- Performed a leak detection study throughout the Village water system in 1999. During this study, 18 leaks were identified. These leaks consisted of fire hydrant leaks, valve leaks and service leaks with an estimated total daily leakage of 120,000 gallons per day. Repairs were made accordingly. In 2000 we located and corrected more leaks in the distribution system totaling in excess of 200,000 gallons per day.
- Rehabilitation of our primary well in July 2017. In 2017 the specific capacity had reduced to less than 60% of its original specific capacity (a measure of the potential output of the well). Following rehabilitation, the specific capacity was returned to nearly the original specific capacity of the well.
- Performed vibration analysis on our primary well pump and motor. In 2006, vibration was found to be within acceptable limits.
- Developed a water system security plan to minimize the risk of accidental or intentional disruption at our facilities and updated our Emergency Response Plan in 2012.
- Upgraded the chlorination system in 2002 – Replaced the gas chlorination system with a liquid chlorine (sodium hypochlorite) system for improved safety.
- Installed a security gate on our primary well supply and Treatment Building.
- Replaced 5 fire hydrants under our replacement program in 2003, 5 fire hydrants in 2004 and 6 fire hydrants in 2008, 4 in 2009, 1 in 2010, 1 in 2011, 2 in 2012, 2 in 2013, and 2 in 2014.
- Rebuilt portions of Pine Hill #3 Reservoir spillway and Peckham Reservoir spillway in 2003.

- Installed a new valve on Peckham Reservoir transmission line at the reservoir discharge in 2005.
- Installed a blow-off valve for Pine Hill #2 Reservoir in 2005.
- Installed a security and fire alarm system at the treatment building in 2005.
- Well #2-88 (primary well) underwent rehab in 2005, 2008, 2010 , 2012 and 2015
- Replaced 6” Water line across Guilford Creek in 2006.
- Took emergency protective measures to repair the spillway and embankment of the Peckham Reservoir following the June 2006, and September 2011 Flooding
- Took emergency protective measures to repair the broken 10” water line and secure a 200ft section of the water line coming from Peckham Reservoir, better secured the 6” water line crossing Guilford Creek, covered a 10ft section of 16” water line coming from the water tank, and replaced a section of culvert pipe and back filled over the 12” water main that runs under Rt. 8
- Peckham Brook water crossing replaced and added a blow off for flushing. Conducted analysis of Peckham Reservoir embankment, spillway and piping damages caused by 2006 flooding, set up inspection and maintenance schedules for Peckham Reservoir and Pine Hill Reservoirs. Began measuring and recording water levels at Peckham Reservoir and groundwater levels using the Two newly drilled piezometers on the dam. Increased security at Peckham Reservoir by installing new gates and made improvements to the access road. Decommissioning of the Dam is currently underway and expected to be completed by Fall 2019.
- Repaired the access road to Pine Hill reservoirs in 2007, damaged by the flood of 2006.
- Installed submersible well pumps and motors on our primary and secondary wells to prevent future damage from flooding
- Replaced controls and wiring and raised above flood level at well 2-88, well 1-46, and The water Treatment Building
- Replaced the booster pump at the Siver and Loomis Booster pump station in 2016.
- Replaced the bridge culvert which is our access to the water storage tank.
- Replaced the Level sensor on the water storage tank.
- New FL2 system paid for by The American Dental Association.
- Replaced 2 stage pump, Impellers. Wear Rings and 8” discharge for primary well 2-88 due to typical wear during the well rehabilitation in July 2015.

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NOTEWORTHY

CLOSING

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

**Sidney Village Water System
NY1200270
AWQR Summary**

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to the drinking water sources 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 be contaminated. While nitrates (and other inorganic contaminants) were detected in our water, 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 from natural sources. The presence of contaminants does not necessarily indicate that the water poses a health risk. The nitrate levels present in our sources is not considered high for this area. Organic contaminants have also been detected in our sources and are related to existing hazardous waste sites. We continue to work with the appropriate agencies to ensure the impacts to our water sources are minimal. See section “Are there contaminants in our drinking water?” for a list the contaminants that have been detected.

As mentioned before, our water is derived from 2 drilled wells. The source water assessment has rated these wells as having a high susceptibility to microbials, nitrates, industrial solvents, and other industrial contaminants. These ratings are due primarily to the close proximity of permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government), low intensity residential activities, chemical bulk storage facilities, and hazardous waste sites within the assessment area. In addition, the well(s) draws from an unconfined aquifer of unknown hydraulic conductivity. While the source water assessment rates our well(s) as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered to your home meets New York State’s drinking water standards for microbial contamination. A copy of the assessment, including a map of the assessment area, can be obtained by contacting the Village Clerk’s Office at (607) 561-2324.