

Wannacomet Water Company 2011 ANNUAL WATER QUALITY REPORT

We are pleased to present our 2011 annual water quality report. It is being delivered to all customers, the Nantucket Board of Health, the Massachusetts Department of Public Health (DPH), and the Massachusetts Department of Environmental Protection (DEP). We strive to provide high quality drinking water that exceeds all Federal and Commonwealth drinking water standards, provide the highest level of customer and water related support services achievable, educate and inform the public of the need to protect Nantucket's water resources, and to accomplish this by using prudent utility practices and responsible fiscal management. To ensure that we provide the highest quality of water available, your water system is operated by Massachusetts certified operators who oversee the routine operations of our system. The Commonwealth of Massachusetts has very specific laws requiring licensed Drinking Water Supply Operators for water systems providing drinking water to the public. This certification is obtained by passing tests and meeting experience and training requirements. Operators must also complete continuing education requirements to retain this license. We currently have six staff members with various levels of Drinking Water Supply Facilities Operator

Certificates. As your water provider, we are carefully monitoring your water, improving our aging infrastructure and expanding service areas to make sure that it's safe and available 24/7. We welcome your interest in Nantucket's water system.

SDWA is administered by the U. S. Environmental Protection Agency (EPA) and its state partners. The SDWA requires public notification of water systems violations, other notices and annual reports (Consumer Confidence Reports) to customers on contaminants found in their drinking water - www.eap.gov/safewater/ccr.



This report is mandated by the federal government and presents many topics of interest along with the results of our 2011 Water Quality Data completed from January 1, 2011 through December 31, 2011 and summarizes the past year's activities at Wannacomet Water Company. It is intended to inform the public about the quality of the water and the effort made by us to maintain it. We are committed to ensuring the quality of your water and strive to adopt new and better methods for delivering drinking water to you.

Congress passed the Safe Drinking Water Act (SDWA) in 1974 to protect public health by regulating the nation's public drinking water supply and protecting sources of drinking water. A public water system (PWS) is defined as one that serves piped water to at least 25 persons or 15 service connections for at least 60 days each year.

*Please take a moment
to read this report
as there is a great deal
of information enclosed.*

YOUR WATER SYSTEM - WHERE THE WATER COMES FROM

Wannacomet's water is a groundwater supply. Our customers receive their drinking water from two different levels of the aquifer. Water is pumped from three different groundwater wells located in Nantucket's Sole Source Aquifer (geologic formations containing water). The wells are located throughout the mid-island. The water is distributed through a network of water mains ranging in size from 2 inches to 16 inches in diameter. We depend on rainfall to recharge our water supply. The annual recharge to the aquifer from an average of 43 inches of precipitation more than makes up for the amount of water pumped from all sources.



Our constant goal is to provide you with a safe and dependable supply of drinking water.

Major water issues are presented at monthly water commission meetings.

The public is invited to participate in and voice its concerns about our drinking water.

LIGHTNING STRIKES AT LOVERS LANE PUMP STATION



On Memorial Day weekend of 2011 the well and controls at the David D. Worth Pump Station off Ticcoma Way suffered extensive damage from a lightning strike. This well produces 1,000,000 gallons per day and is the workhorse of our production system. Fortunately, the loss was mitigated by the issuance of an emergency operating permit for the new well at North Pasture by the Massachusetts Department of Environmental Protection. This enabled repairs to be scheduled for the winter of 2012 thus realizing substantial savings. Prior to the installation of the rebuilt pump and controls the well casing and screen were videoed and found to be in excellent condition. We wish to recognize the efforts of the R.H. White Company, Haley and Ward Engineers, Harbor Controls and Ewing Electric Company for their emergency response and expertise in restoring the well and pump to operational capacity.

Wannacomet continues to strengthen its distribution system by installing new water mains to improve fire flows and circulation patterns. Upgrades have been undertaken and completed for water mains, services, gate valves and fire hydrants.



Water Conservation

Wasting water can add up quickly. We take our water supplies for granted, yet they are limited. The average American uses about 90 gallons of water each day in the home. By using water wisely, we can save money and help the environment. More efficient water use can reduce the impact on the water supply and on your wallet:

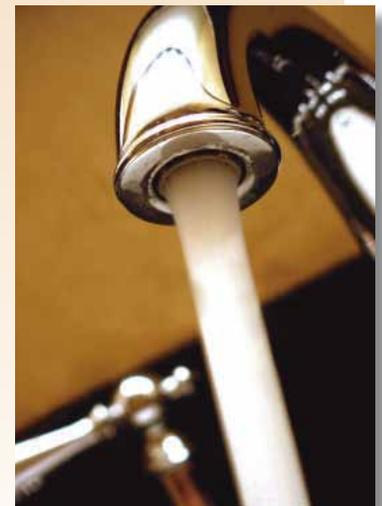
 Turn off the tap while brushing your teeth or shaving: save 1-2 gallons per minute.

 That trickling sound you hear in the bathroom could be a leaky toilet wasting 50 gallons of water a day or more. But sometimes it leaks silently. Try this: **Crush a dye tablet in its envelope and carefully empty the contents into the center of the toilet tank and allow it to dissolve. Wait about 10 minutes. Inspect the toilet bowl for signs of blue dye indicating a leak.**

If the dye has appeared in the bowl, your flapper or flush valve may need to be replaced. Parts are inexpensive and fairly easy to replace. If no dye has appeared in 10 minutes time, you probably don't have a leak.

WATER DEMAND & STATISTICS

Wannacomet Water Company during 2011 produced and delivered 544,336 million gallons of drinking water from all of our wells. Our highest pumpage day in 2011 was 3,624,992 gallons on August 5, 2011. Upgrades to the SCADA system, which monitors the water system were performed during the year. Total measured rainfall reported on Nantucket for the year 2011 was 29 inches. We installed 72 new service connections, 17 new fire hydrants and 15,542 feet of new water mains were extended into the system.



REMINDER: *Emergency on-call person – 7 days a week – 24 hours a day. We have an emergency on-call utility person available during non-business hours, weekends and holidays. In the event of an emergency during non-business hours please contact us through the Nantucket Police Department at 508-228-1212.*

WHAT THE EPA SAYS ABOUT DRINKING WATER CONTAMINANTS

Contaminants in Bottled Water and Tap Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained from the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

In order to ensure that tap water is safe to drink, Massachusetts DEP and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) and the Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Contaminants

General 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, in some cases, radioactive material, and can pick up substances resulting from animal or human activity. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- **Radioactive contaminants**, which can be naturally occurring or the result of oil and gas production and mining activities;
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water run off, and residential uses;
- **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban storm water run off, industrial or domestic waste water discharges, oil and gas production, mining, or farming;
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water run off and septic systems.

Special Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons undergoing chemotherapy, persons who have under gone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infection. These people should seek advice about drinking water from their health care providers. Environmental Protection Agency (EPA) and Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

What is SWAP?

The Source Water Assessment and Protection (SWAP) program, established under the federal Safe Drinking Water Act, requires every state to:

- inventory land uses within the recharge areas of all public water supply sources;
- assess the susceptibility of drinking water sources to contamination from these land uses; and
- publicize the results to provide support for improved protection.

Source Water Assessment and Protection (SWAP) Report

The SWAP report was compiled by the Massachusetts Department of Environmental Protection with assistance from the Wannacomet Water Company staff to inventory land uses within the Wellhead Protection District (WPD) and assess their potential to negatively impact the aquifer.

Wannacomet Water Company's complete SWAP report can be viewed at:
<http://www.mass.gov/dep/water/drinking/4197000.pdf>

IMPORTANT CONTACTS

Massachusetts Department of Environmental Protection

www.state.ma.us/dep (617) 292-5500

Massachusetts Department of Public Health

www.state.ma.us/dph (617) 624-6000

Town of Nantucket

www.nantucket-ma.gov

US Centers for Disease Control & Prevention

www.cdc.gov (800) 232-4636

Environmental Protection Agency

www.epa.gov (800) 426-4791

List of Certified Water Quality Testing Labs

www.mwra.com (617) 242-5323

Wannacomet Water Company

www.wannacomet.org for our staff directory (508) 228-0022

The U.S. EPA Office of Water (www.epa.gov/watrhme) and the Centers for Disease Control and Prevention (www.cdc.gov) websites provide a substantial amount of information on many issues relating to water resources, water conservation and public health. Also, the Massachusetts Department of Environmental Protection has a website (www.state.ma.us/dep) that provides complete and current information on water issues in our state.

Our Public Water Supply (PWS) ID # MA 4197000
Member: American Water Works Association (AWWA),
New England Water Works Association (NEWWA),
Barnstable County Water Utility Association (BCWUA),
Massachusetts Water Works Association (MWWA),
The Groundwater Foundation

Office Update

Paperless Statements Electronic bills (e-bills) are available. Customers now enjoy the convenience of paperless statements and quick online bill payment. This service is free and highly secure and makes bill paying quick and simple. We urge our customers to take advantage of our secure and easy to use system. For information and to enroll contact us at ebill@wannacomet.org.

On-Line Bill Payment Option Wannacomet accepts payments on-line using Unibank Financial Services. Customers can securely access and pay their bills either using their credit card (Mastercard and Discover) or bank account. Visit on the web at www.wannacomet.org.

Water Rates Effective 7/1/11 the water rate remained unchanged at \$3.50 per 100 cubic feet. Visit our website at www.wannacomet.org for current rates and important notices.

Sewer Rates The Board of Selectmen acting as the Board of Sewer Commissioners review sewer rates on an annual basis. The rates were unchanged in 2011. Rate payers should routinely check the town's website (www.nantucket-ma.gov) and search budget information for the latest in proposed sewer rate increases and current project proposals under consideration by the town.

Nantucket Disc Golf

Wannacomet Water Company supported the efforts of the Nantucket Disc Golf and the Massachusetts Department of Conservation and Recreation to establish a Disc Golf Course by allowing a portion of the course to be constructed around the David D. Worth Well and Pumping Station off Ticcoma Way. Additionally, space was provided for the storage of course maintenance equipment.



Staff News – Service Awards



On October 12, 2011 at the Public Safety Facility Community Room the Board of Selectmen recognized and presented service award pins to the following Wannacomet staff:
Jeffrey Johnsen – 35 years
Christopher Pykosz – 35 years
Heidi Holdgate – 20 years
Kyle Roberts – 5 years

Staff Ethics Training Wannacomet staff completed the mandatory on-line training program offered by the State Ethics Commission.

Water Commission Commissioner Reinhard was voted chairman of the commission effective May 12, 2011.

Nantucket Arts Council

Wannacomet Water Company was proud to host and be the site for the 2011 Nantucket Arts Council Giant Magic Daffodil Garden.



Photo courtesy: Sharon Corkish

PV Solar Project – Feasibility Study

The Town of Nantucket, on behalf of the Nantucket Water Commission, issued a Request for Proposals (RFP) for the development of a solar generation array to be installed at Wyer's Valley and North Pasture. However, because of metering restrictions imposed by National Grid the Water Commission suspended the project until the metering issues are resolved.

Nantucket Historical Association

Wannacomet General Manager Bob Gardner was a guest speaker at the Nantucket Historical Association's "Food for Thought" brown-bag lunch & lecture series at the Whaling Museum on March 17, 2011. He discussed the history and operations of the Wannacomet Water Company.



Wannacomet Water Historical Preservation Project

Wannacomet Water Company has an extensive collection of historical documents and photographs tracing the evolution of the Wannacomet Water Company. The Nantucket Water Commission contracted with Bevara and worked with their local representative Jeremy Slavitz to catalog and index the photograph collection, ledgers and meeting minutes of the company with a focus on the years 1880-1930. A complete searchable index is expected to be completed in 2012.



Story of Wannacomet

As Wannacomet Water approaches 135 years of providing water service to Nantucket the Water Commission contracted with Nantucket historian and author, Frances Ruley Karttunen to compile a history of the company. Ms. Karttunen has begun her work and is expected to publish in the summer of 2012.



Wannacomet Bounds When the Wannacomet Water Works was established in 1878 the property bounds were distinctive pentagon (five-sided) shaped concrete posts with "WWCO" stamped into the concrete. There are very few of these bounds remaining and the Water Commission felt it was important to reestablish the bounds, maintain the historical design and increase durability. Therefore, the commission allocated funds to replicate ten new bounds out of granite. Scott McGiver of Nantucket Monuments designed the new bounds and had them sculpted from Vermont granite. The new bounds will be set in 2012.

Nantucket Community Sailing



For the third year Wannacomet Water Company provided sponsorship, water stations and reusable water bottles to Nantucket Community Sailing for the 2011 Nantucket Race Week during the 39th Annual Opera House Cup.



The stations allowed participants and spectators to fill their reusable water bottles with local tap water from Wannacomet Water Company. These stations removed the equivalent of 4,000 one time use plastic bottles from Nantucket's waste stream.

Office Update

Bob Gardner Receives Award

Bob Gardner accepted an award from New England Water Works for 25 years of membership and service.



Meter Upgrade Project

The Flexnet meter replacement program is underway. When completed all water meters will be read from our main office at 1 Milestone Road. The system will have the ability to track the water use patterns of individual accounts for a defined period of time.

Washing Pond Tank Maintenance

Re-coating of the Washing Pond Tank is scheduled for the spring of 2012.

Main Office Rehabilitation & Garage at 43 Polpis Road

The main office rehabilitation and new garage at 43 Polpis Road is underway. Our initial focus is on heating, electrical, ventilation and operations relocation during construction.

Distribution System Continued Expansion to Madaket

Phase II of the Madaket Road Water Main Extension was awarded to Holdgate Partners, Inc. in the amount of \$659,990.52 and was completed in 2011. Phase II included F & I Street, Tennessee Avenue, North Cambridge Street, ending on Little Neck Way. Phase III will begin in 2012.



Leak Survey

A leak survey of the distribution system including water mains, services, valves and fire hydrants was conducted in April and May of 2011. The survey, performed by Sarian, Inc. detected four leaks that were leaking a combined 5,760 gallons per day. The identified leaks were repaired by Wannacommet staff.

Customer Outreach In 2011 Wannacommet continued its partnership with Plum TV to provide information about Nantucket's water supply. Our goal is to build the public's confidence in our drinking water. Plum TV is a valuable partner in communicating Wannacommet's message about the value of Nantucket's tap water and the need to invest in water infrastructure to our customers, seasonal visitors and media.

Siasconset Water Department

The management agreement between Siasconset Water Department and the Wannacommet Water Company continued in 2011. We continue to provide certified operators, technical, and administrative support to the Siasconset Water Department. Further, we worked with the town's attorney Kopelman and Paige on a consolidation and merger of the Wannacommet and Siasconset Water Department.

Backflow Prevention / Cross Connection

A cross-connection occurs whenever a potable (drinkable) water line is directly or indirectly connected to a non-potable piece of equipment or piping. Examples of non-potable equipment may include lawn irrigation systems, fire protection systems and air conditioning or cooling systems. Unprotected cross connections can contaminate drinking water in your home and the water main. Please call our office if you have any questions.

Nantucket Elementary School – Letter of Thanks

"Dear Mr. Gardner – On behalf of the staff and students of the Nantucket Elementary School, I thank you for your kindness in allowing a hydrant to be used for our annual field days. The children got very wet because of some of the water-related activities and enjoyed every minute of it. Your help is greatly appreciated."

— Sincerely, Joseph J. Aguiar, Principal of Nantucket Elementary School.

New Water Fountain There is a new water fountain located at the corner of Bunker Road and Milestone Road Bike Path – enjoy the bike paths.

Siasconset Tank Demolition

The water tank on New Street in Siasconset was removed by Costello Dismantling.



Photos: Rob Benchley

We urge you to visit our website at www.wannacommet.org.

The updated site has many customer service forms and tips for water efficiency. There is also an on-line water use calculator. The calculator is effective in determining our water use patterns. We encourage you to check it out and see how much water you use on a daily basis.

Hazardous Household Waste Disposal

The proper disposal of hazardous household products is important to keep our water supplies and environment contaminant free. Many items may be disposed of for FREE. What hazardous product can you bring? Cleaning products, paint and paint products, automotive products, pesticides and other products. For more information please call the Department of Public Works at 508-228-7244.

Sustainable Nantucket

Wannacommet Water Company supported Sustainable Nantucket's Farm to School program by providing water and tools for the Farm to School Gardening program. This was an excellent educational opportunity for children to learn about the role that water plays in our lives and the responsibility of using it responsibly.



WHAT YOU NEED TO KNOW ABOUT LEAD IN YOUR TAP WATER

The last time lead and copper samples were collected from our system was in September, 2010. Based upon the excellent results of lead and copper sampling from 2008 through 2010 the Wannacomet Water Company was placed by the Massachusetts DEP on a reduced sampling schedule for lead and copper. The next scheduled sampling for lead and copper will take place in 2014. The Wannacomet Water Company is taking steps to further reduce the amount of lead in contact with drinking water by only installing water service materials that have been certified as being "no-lead".

Water Quality Testing Results 2011

	Level Detected	Unit of Measurement	MCLG	MCL	Possible Source of Contamination
Volatile Organic Compounds					
Wannacomet Water Company sampled for 56 VOC contaminants and none were detected in the source water.					
Inorganic Contaminants					
Nitrate	0.42 to 0.70	ppm	10	10	Runoff from fertilizer use, leaching from septic systems & erosion of natural deposits
Nitrite	0	ppm	1	1	
Microbiological Contaminates					
Total Coliform Bacteria	0	presence or absence	0	presence of coliform in 5% of monthly samples	Naturally present in environment Coliform bacteria are used as an indicator to the presence of other potentially harmful bacteria.
Unregulated and Secondary Contaminants with State Standards (ORSGs and/or SMCLs)					
	Range Detected		SMCL	ORSG	Possible Sources
Chloroform (ppb)	0.0 to 1.33	ppm	unregulated for non-chlorinated water	70	Formed during the breakdown of chlorine compounds and is a naturally occurring chemical
Bromoform	0.0 to 0.72	ppm		5	

SMCL = secondary maximum contaminant level. These standards are developed to protect the aesthetic qualities of drinking water and are not health based.

ORSG = Massachusetts Office of Research and Standards guideline. This is the concentration of a chemical in drinking water, at or below which, adverse health effects are unlikely to occur after chronic (lifetime) exposure. If exceeded, it serves as an indicator of the potential need for further action.

Public Notice for Coliform Violation – We routinely monitor for drinking water contaminants. We took 26 samples to test for the presence of coliform bacteria on September 7, 2011. Six (6) of our samples showed the presence of total coliform bacteria. The standard is that no more than one (1) may do so. Follow-up samples were taken at the locations as well as an additional sample upstream and downstream at these locations. The follow-up samples and the upstream and downstream samples indicated no presence of coliform bacteria. All of the six locations were included in routine sampling done on September 19, 2011 and all sample results were coliform absent and this testing showed the problem to be resolved. This notice was published in *The Inquirer and Mirror* on September 29, 2011.

For more information, please contact Robert Gardner or Mark Willett at 508-228-0022.

Important Definitions

Maximum Contaminant Level Goal (MCLG): The “Goal” is the level of a contaminant in drinking water below which there is no known or expected risk to healthy persons. MCLGs allow for a margin of safety.

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 using the best available treatment technology.

CDC = Centers for Disease control and Prevention

ND: Not detected. Laboratory analysis indicated that the constituent is not present.

Variations and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions. The data presented in this report is from the most recent testing done in accordance with regulations.

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

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

Parts Per Million (ppm): one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts Per Billion (ppb): one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

PCI/L - picoCuries per liter (a measure of radiation)

DEP = Department of Environmental Protections

EPA = Environmental Protection Agency

NA: Not applicable.

OUR ANNUAL WATER QUALITY REPORT

Wannacomet Water Company has prepared this annual drinking water Consumer Confidence Report (CCR) to provide you with information regarding your drinking water. This report includes detected contaminants found in your drinking water, compliance issues related to the water quality, operational matters, and general education information regarding the condition of your drinking water.

Share this report: Landlords, businesses, schools, hospitals, and other groups are encouraged to share this important water quality information with water users at their location.

For water or meter problems, leaks, fire hydrants, water billing, and miscellaneous questions – call Wannacomet Water at 508-228-0022. For comments and suggestions, please email us at info@wannacomet.org.



Robert L. Gardner
General Manager



Nelson K. Eldridge
Commissioner



Noreen Slavitz
Commissioner



Allen Reinhard
Commissioner



(PWS) ID #MA4197000

Nantucket Water Commission

Allen Reinhard, Chairman
Nelson K. Eldridge, Commissioner
Noreen “Nonie” Slavitz, Commissioner

General Manager, Robert L. Gardner
Operations Manager, Christopher R. Pykosz
Business Manager, Heidi Holdgate

Photo (from left to right):
Allen Reinhard, Nelson Eldridge, Nonie Slavitz and Bob Gardner

If you need a large print version of this Annual Water Quality report, please contact us at 508-228-0022



**Wannacomet
Water Company**
1 Milestone Road
Nantucket, MA 02554

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First Class Mail
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Return Service Requested



Photo courtesy: Sharon Corkish