PWSID ME0090330

CASTINE WATER DEPARTMENT

2008 Consumer Confidence Report

General Information

Public Water System: Castine Water Department
PWSID #: 90330

Administrative Contact Name: Dale Abernethy
Address: PO Box 204, Castine, Maine 04421
Telephone #: 207 326-4502 **Fax #:** 207 326 9465 **Email:** townoffice@castine.me.us
Date of Distribution: April 15, 2009 **Report Covering Calendar Year:** Jan. 1 – Dec. 31, 2008.
Upcoming Regularly Scheduled Meeting(s): Upon request.

Source Water Information

Description of Water Source: 8 wells + 1 emergency well; surface water (Battle Avenue Ponds)
Location (see map on reverse side):
Water Treatment, Filtration: chlorination, filtration, corrosion control (polyphosphates) and arsenic removal system

Source Water Assessment: The sources of drinking water include rivers, lakes, ponds and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material and can pick up substances resulting from human or animal activity. The Maine Drinking Water Program (DWP) has evaluated all public water supplies as part of the Source Water Assessment Program (SWAP). The assessments included geology, hydrology, land uses, water testing information, and the extent of land ownership or protection by local ordinance to see how likely our drinking water source is to being contaminated by human activities in the future. Assessment results are available at town offices, public water suppliers, and the DWP. For more information about the SWAP, please contact the DWP at telephone 287-2070.

Water Test Results

Contaminant	Date	Results	MCL	MCLG	Source
Microbiological					
TOTAL COLIFORM (1)	2008	**0 pos**	1 pos	0 pos	Naturally present in the environment.
Inorganics					
ARSENIC (2)	1/29/2008	**14 ppb**	10 ppb	0 ppb	Erosion of natural deposits. Runoff from orchards, glass and electronics production wastes.
BARIUM	1/31/2008	**0.082 ppm**	2 ppm	2 ppm	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.
CHROMIUM	1/31/2008	**0.95 ppb**	100 ppb	100 ppb	Discharge from steel and pulp mills. Erosion of natural deposits.
COPPER 90TH % VALUE (4)	7/1-12/31/2008	**0.4 ppm**	AL=1.3 ppm	1.3 ppm	Corrosion of household plumbing systems.
FLUORIDE (3)	5/21/2008	**0.2 ppm**	4 ppm	4 ppm	Erosion of natural deposits. Water additive which promotes strong teeth. Discharge from fertilizer and aluminum factories.
LEAD 90TH % VALUE (4)	7/1-12/31/2008	**6 ppb**	AL=15 ppb	0 ppb	Corrosion of household plumbing systems.
NITRATE NITROGEN (5)	1/31/2008	**1.6 ppm**	10 ppm	10 ppm	Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits.

Radionuclides

GROSS ALPHA SCREEN (6)	12/28/2007	**3.47 pCi/L**	15 pCi/L	0 pCi/L	Erosion of natural deposits.
RADIUM-228	12/10/2008	**1.18 pCi/L**	5 pCi/L	0 pCi/L	Naturally occurs in some drinking water sources.
RADON SCREEN (8)	1/29/2007	**689 pCi/L**	4000 pCi/L	N/A	Erosion of natural deposits.
URANIUM-238 (7)	1/29/2007	**0.95 ppb**	30 ppb	0 ppb	Erosion of natural deposits.

Disinfectants and Disinfection ByProducts

TOTAL TRIHALOMETHANES(TTHM) (9)	RAA (2008)	**9.2 ppb**	80 ppb	0 ppb	By-product of drinking water chlorination.

Turbidity Levels-Surface Water Only

TURBIDITY	2008	**0 ntu**	5 ntu	5 ntu	Turbidity Units are the measurement of cloudiness in the water

Definitions:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water.
Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health.

Running Annual Average (RAA): The Average of all monthly or quarterly samples for the last year at all sample locations.
Action Level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Units:

ppm = parts per million or milligrams per liter (mg/L).
ppb = parts per billion or micrograms per liter (µg/L).
pCi/L = picocuries per liter (a measure of radioactivity).
pos = positve samples.
ntu = nephelometric turbidity units.

Notes:

1) Total Coliform Bacteria: Reported as the highest monthly number of positive samples, for water systems that take < 40 samples per month.
2) Arsenic: The U.S. EPA adopted the new MCL standard in October 2001. Water systems must meet this new standard by January 2006.
3) Fluoride: Fluoride levels must be maintained between 1-2 ppm, for those water systems that fluoridate the water.
4) Lead/Copper: Action levels (AL) are measured at consumer's tap. 90% of the tests must be equal to or below the action level.
5) Nitrate:Nitrate in drinking water at levels above 10 ppm 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 advice from your health provider.
6) Gross Alpha: Action level over 5 pCi/L requires testing for Radium. Action level over 15 pCi/L requires testing for Radon and Uranium.
7) Uranium: The U.S. EPA adopted the new MCL standard of 30 ug/L(ppb), in December 2000. Water systems must meet this new standard after December 2003.
8) Radon: The State of Maine adopted a Maximum Exposure Guideline (MEG) for Radon in drinking water at 4000 pCi/L, effective 1/1/07. If Radon exceeds the MEG in water, treatment is recommended. It is also advisable to test indoor air for Radon. The U.S.EPA is proposing setting federal standards for Radon in public drinking water.
9)TTHM/HAA5: Total Trihalomethanes and Haloacetic Acids (TTHM and HAA5) are formed as a by-product of drinking water chlorination. This chemical reaction occurs when chlorine combines with naturally occurring organic matter in water.

All other regulated drinking water contaminants were below detection levels.

Secondary Contaminants

Sodium	19 ppm	1/31/08
Chloride	110 ppm	1/31/08
Iron	0.93 ppm	1/31/08
Magnesium	10 ppm	1/31/08
Manganese	0.06 ppm	1/31/08
Nickel	0.001 ppm	9/8/08
Sulfate	25 ppm	9/8/08
Zinc	0.008 ppm	1/31/08

Health Information

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 water poses a health risk. 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.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

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 runoff, and septic systems.

Some people may be more vulnerable to contaminants 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 about drinking water from their health care providers. EPA/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 (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Castine Water Department is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Violations

1/1/2008 – 3/31/2008	02 Violation	MCL, AVERAGE (ARSENIC)
4/1/2008 – 6/30/2008	02 Violation	MCL, AVERAGE (ARSENIC)
1/1/2008 – 6/30/2008	52 Violation	FOLLOW-UP OR ROUTINE TAP M/R (LCR)

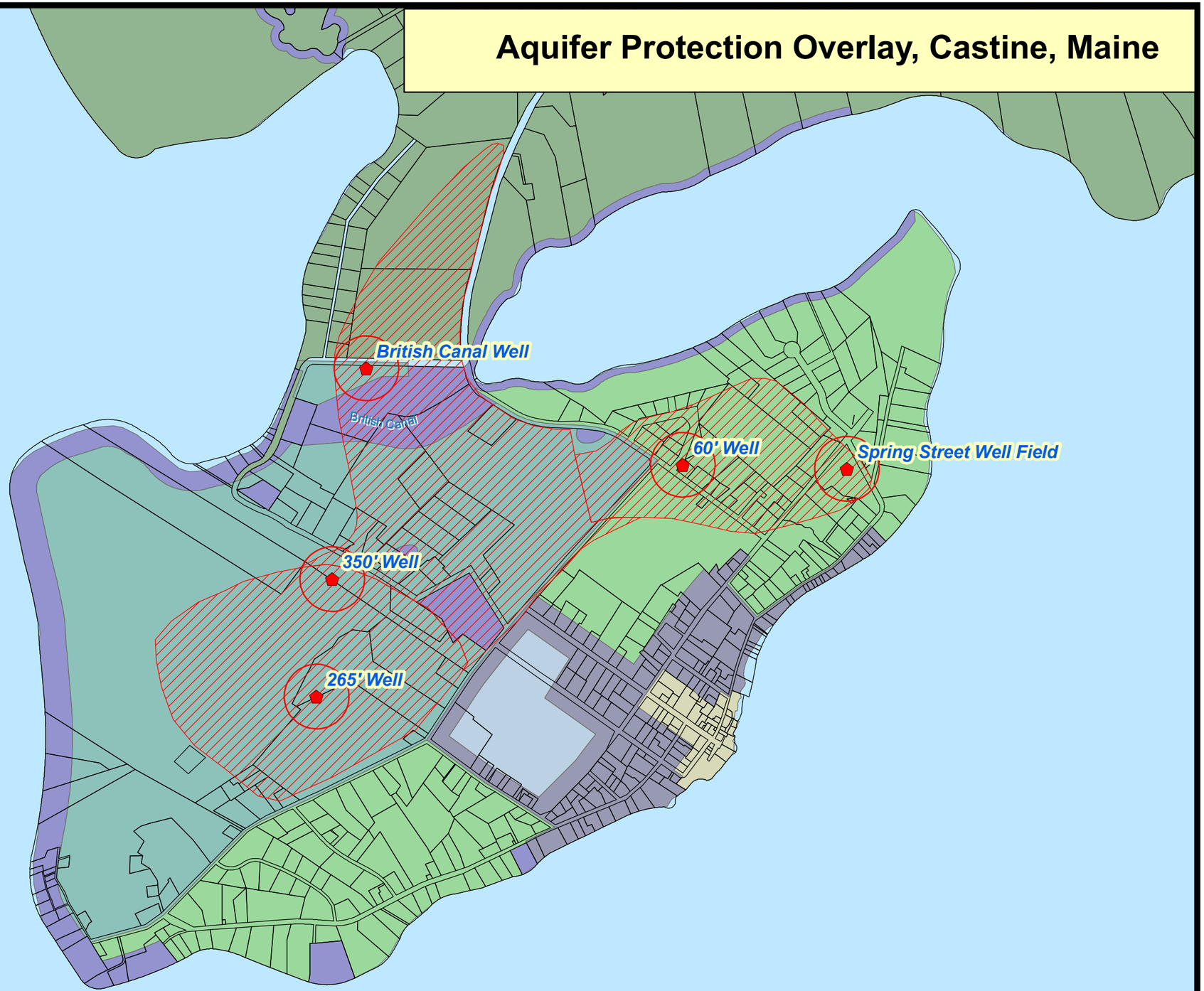
Lead and Copper Monitor/Reporting Violation: Our water system failed to test and report Lead/Copper results for the 1/1/2008 – 6/30/2008 compliance period to the state Drinking Water Program. Testing was conducted in December 2008 and results are available in this report.

Arsenic MCL Exceedance: In 2008, our water system exceeded the post-October 2001 arsenic standard of 10 ppb. Our water system has been placed on quarterly sampling for Arsenic. In March 2008 our water system installed a treatment system to remove Arsenic from the water. Since the installation, each of the quarterly test for arsenic have produced results of <.5. Public notification was posted or distributed to all concerned residents. Results of subsequent Arsenic testing will be made available. Some people who drink water containing Arsenic well in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

Waiver Information

Current Waiver info: 1/1/2005-12/31/2007 Full waiver for Synthetic Organic Compounds No waiver in effect presently.

Aquifer Protection Overlay, Castine, Maine



Legend

- Existing Production Well
- Aquifer Protection Zone 1
- Aquifer Protection Zone 2
- Tax Map Parcels (051007)

Zoning 112007

ZONING TYPE

- Village District I
- Village District II
- Village District III
- Commercial
- Institutional Dev. Dist.
- Rural
- Resource Protection
- Transportation

N

Scale is 1:12,000

1 inch equals 1,000 feet

0 0.25 0.5 1 Kilometers

0 0.125 0.25 0.5 Miles

Map prepared by Emery & Garrett Groundwater, Inc.