

**Boothbay Region Water District
P.O. Box 520, Boothbay, Maine 04537
2008 Consumer Confidence Report**

INTRODUCTION

This is the annual water quality report of the Boothbay Region Water District serving Boothbay, Boothbay Harbor and Southport. This annual report is intended to provide you with important information about your drinking water. We know that you count on us for a safe and reliable supply of water every day and we are dedicated to providing the highest quality of service to you. Herein is an analytical report. Since all water for the district originates from the Adams Pond Treatment Plant the results are applicable to all of the customers served.

THE CONTENTS OF THIS REPORT

The Safe Drinking Water Act mandates the State of Maine, along with the Environmental Protection Agency (EPA), establish and enforce minimum drinking water standards. All substances tested met both Primary and Secondary Standards within the levels established by the EPA and the State of Maine.

GENERAL INFORMATION

Public Water System: Boothbay Region Water District
PWSID #: ME-090200

Administrative Contact Name: Jonathan E. Ziegler

Address: 184 Adams Pond Road, PO Box 520

City, State, Zip Code: Boothbay, ME 04537

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Report Covering Calendar Year: 1 Jan. – 31 Dec., 2008

Upcoming Regularly Scheduled Meeting : Trustees Meetings are held the second and fourth Tuesday of each month at 7:00 pm. at the district administrative offices located at 184 Adams Pond Road, Boothbay. The meetings are open to the public and the public are encouraged to attend.

SOURCE WATER INFORMATION

Water Sources:

- (1) Adams Pond, Boothbay, ME 43° 53' 24" N, 69° 37' 57" W
- (2) Knickerbocker Lake, Boothbay, ME 43° 52' 51" N, 69° 38' 50" W

WATER QUALITY

We ensure that your water is safe through regular monitoring and testing of water quality. Maine State Health and Environmental Testing Laboratory conduct these tests. This

report shows a comprehensive summary of the laboratory test results for the constituents we regularly monitor in your water supply. Responsibility for maintaining water quality resides with our staff of certified water treatment plant operators, licensed by the State of Maine Department of Human Services.

In 2008, our system was reapplied for a "Synthetic Organics Waiver". This is a three-year exemption from the testing/monitoring requirements for pesticides, herbicides, fungicides and other industrial chemicals.

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, leaking septic systems, agricultural livestock operations, domestic animals 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).

Source Water Assessment: Sources of drinking water include rivers, lakes, ponds, and wells. As water flows either on the surface or through the ground, it dissolves naturally occurring minerals and radioactive material and can also accumulate substances resulting from human and animal activity. The Maine Drinking Water Program (DWP) has evaluated all public water supplies as part of the Source Water Protection 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 public water suppliers, Town offices and the DWP. For more information the SWAP, you may contact the DWP at telephone (207) 287-2070.

OPERATIONS

Adams Pond served as the primary water resource for the towns of Boothbay, Boothbay Harbor and Southport in 2008. Knickerbocker Lake was activated in 2008 as a supplementary water source and used regularly.

Chlorine levels are continuously monitored and controlled to insure adequate disinfection has occurred prior to delivery to you. Surface water in Maine are naturally acidic requiring the addition of sodium hydroxide, to raise the pH, and sodium bicarbonate which is added to aid to the stability of the water. This practice helps protect the distribution system and your home plumbing system from corrosion. To further protect the piping systems, we add a corrosion inhibitor, sodium silicate, designed to stabilize the metal surfaces of the iron and copper pipelines. This treatment has been very effective. We also add fluoride to promote dental health.

The filtration media used at the Adams Pond Treatment Plant is a mixed media of anthracite and sand of various particle sizes. The particles trap suspended solids, as measured by the amount of turbidity, removing foreign material from the water. Turbidity is a measurement of cloudiness or suspended colloidal matter (silt). Excessive turbidity levels can cause problems with water disinfection. 0.15 was the single highest turbidity measurement in calendar year 2008. The regulatory limit is 0.3 ntu with all water produced remaining well below this threshold. Therefore, our water filtration system renders your finished drinking water clear and safe to drink.

In addition to treating the surface water to a high degree of excellence, the district adds sodium fluoride. This is added in small amounts to introduce fluoride in the water supply for dental reasons.

In 2008 the district sampled homes throughout the distribution network to evaluate new treatment techniques to lower the concentration of lead, which leaches from homes plumbing fixtures, in the drinking water at the tap. By raising the pH of the water the lead concentration were found to be below limits.

Lead in Drinking Water: 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. Boothbay Region Water District 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>.

WATER SYSTEM DATA

Your water supply and distribution system includes over 74 miles of water main. The District served nearly 3,000 service connections in 2008 and provides fire protection service through 232 hydrants. In 2008 we produced and delivered over 194,470,800 gallons of water, 100% being treated surface water. That's an average of 531,300 gallons each day. The system also maintains 1,380,000 gallons in our three storage tanks.

OTHER IMPORTANT INFORMATION

This report is only a summary. If you have any questions about your water quality, the information contained in this report, or your water service in general, please call us at our administrative office at (207) 633-4723 (7:00 AM to 3:30 PM). Again, Board of Trustees meetings open to the public and are held the second and fourth Tuesday of each month at 7 p.m. at the District's Administrative Office, 184 Adams Pond Rd., Boothbay. You may also direct questions to the Maine Department of Human Services Drinking Water Program at (207) 287-2070 or the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

2008 Boothbay Region Water District Results

Parameter	Maximum Contaminant Level Goal	Maximum Contaminant Level	Actual Test Results	Actual Test Results
	<u>MCLG</u>	<u>MCL</u>	(Highest or Average, if appl.)	(Range)
Clarity				
Turbidity (NTU) (12) (TT)	n/a	0.3	0.17	0.06 to 0.13
Microbiological				
Total Coliform Bacteria	0	1	0	0-1 (101 tests)
Organic Chemicals	No Detected Results for all Chemicals Tested			
Inorganic Chemicals				
Antimony (ppb)	0	6	Not Detected	
Arsenic (15) (ppb)	0	10	Not Detected	
Asbestos (1) (MFL)	7	7	Waived by the State	
Barium (ppm)	2	2	0.008	
Beryllium (ppb)	4	4	Not Detected	
Cadmium (ppb)	5	5	Not Detected	
Chromium (Total) (ppb)	100	100	0.5	
Copper (7) (ppm) 90th % Value	1.3	1.3	0.1	0 sites failed out of 40 sampled.
Cyanide(ppb)	200	200	Waived by the State	
Fluoride (6) (ppm)	4	4	1.44	
Lead (7) (ppb) 90th % Value	0	15	2	0 site failed out of 40 sampled.
Mercury (ppb)	2	2	Not Detected	
Nitrate (ppm)	10	10	0.07	
Nitrite (ppm)	1	1	Not Detected	
Selenium (ppb)	50	50	Not Detected	
Thallium (ppb)	0.5	2	Not Detected	
Radionuclides				
Gross Alpha Activity (11) (pCi/l)	0	15	0.297	
Radium 226/228 (Combined) (pCi/l)	0	5	Not Detected	
Uranium (13) (ug/l)	0	30	Not Detected	
Radon (12) (pCi/l)	n/a	4,000	Not Detected	
Other				
Cryptosporidium/Giardia (14)	0	0	Waived by the State	
Disinfection and Disinfection ByProducts				
Trihalomethanes (Total)(ppb) (10)	0	80	39.9	Range (31.6 to 49 ppb)
Haloacetic Acid (Total) (ppb) (10)	0	60	27.75	Range (17-35 ppb)

Secondary Drinking Water Standards

Chemical Parameters (ppm)				
Chloride	250	250	24	
Sodium	100	100	21	
Iron	0.3	0.3	Not Detected	
Manganese	0.05	0.05	0.11	
Silver	0.1	0.1	Not Detected	
Sulfate	250	250	13	
Total Dissolved Solids	500	500	15.9	
Zinc	5.0	5.0	0.004	
Physical Parameters				
Color (units)	15.0	15.0	Not Detected	
pH	6.5-8.5	6.5-8.5	8.4	8.0 to 8.4

Definitions:

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

pos; positive samples

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water

Variance of Waiver: State or U.S. EPA permission not to meet MCL or treatment technique under certain conditions (e.g. waiver to filtration).

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

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

Running Annual Average (RAA): The average all monthly or quarterly samples for the last year at a sample locations.

Concentrations: In this report, most of the quantities are expressed as ppm, ppb, ppt and pCi/l.

These are measure of organics, inorganics or radiation activity per a fixed amount of water.

Parts per Million (ppm): parts per million or milligrams per liter (mg/l).

Parts per Billion (ppb): parts per billion or micrograms per liter (µg/l).

Picocuries per Liter (pCi/l): picocuries per liter (a measure of radioactivity).

Nephelometric Turbidity Units (ntu): turbidity units are the measurement of cloudiness in the water.

Maximum Residual Disinfectant Level (MRDL) - the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary to control microbial growth.

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of drinking water disinfectant below which there is no known or expected risk to health.

MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

Notes:

(1) Arsenic - The U.S. EPA adopted the new MCL standard in October 2001. Water systems must meet the new standard by January

(2) Asbestos - State wide waiver to testing in Maine. Only those systems with asbestos pipe need test

(3) Dibromochloropropane - State wide waiver granted to Maine

(4) Dioxin/Glyphosate - State wide waiver granted to Maine

(5) Diquat/Endothall - Testing only required if potato growing occurs in watershed.

(6) Ethylene Dibromide - Testing only required for ground water systems. State wide waiver for surface water systems in Maine

(7) Fluoride - Fluoride levels must be maintained between 1 - 2 ppm for those systems that fluoridate the water

(8) Copper/Lead action levels are measured at consumer's tap. 90% of tests must be equal to or below action level

(9) Total Coliform Bacteria - Reported as the highest monthly number of positive samples, for water systems that take <40 samples per month.

(10) 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

(11) Gross Alpha - Action level over 5pCi/l requires testing for Radium. Action level over 15pCi/l requires testing for Uranium and Radon

(12) Radon - The State of Maine currently recommends follow-up action (treatment) for radon levels in drinking water above 4,000pCi/L.

EPA is considering setting a standard for radon in drinking water.

(13) Uranium: The U.S. EPA adopted the new MCL standard of 30ug/L (ppb) in December 2000. Water systems must meet this new standard after December 2003.

(14) Cryptosporidium, Giardia, Legionella - Surface Waters Only, Ground waters required to test or exempt before 1999.

(15) Turbidity - Surface waters only; 1.49 NTU for Slow Sand or AFT

0.549 NTU for Conventional or Direct Filtration; 3.0 ntu for unfiltered surface water systems.

(16) MTBE - State only MCL promulgated on 2/98.

All other regulated drinking water contaminants were below detection levels.