



ANNUAL
WATER
QUALITY
REPORT

Water testing performed in 2006

Proudly Presented By:

BIDDEFORD AND SACO
WATER COMPANY

PWS ID#: 0090170

Continuing Our Commitment

Once again we proudly present our annual water quality report. This edition covers all testing completed from January 1 through December 31, 2006. We are pleased to tell you that our compliance with all state and federal drinking water laws remains exemplary. As in the past, we are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

For more information about this report, or for any questions relating to your drinking water, please call either Chris Mansfield, Deputy Manager, at (207) 282-9141 or Jerry Mansfield, President of our Company, at (207) 282-1543. Public speakers for community meetings may be arranged by calling (207) 282-9141.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.



SLIGHT INCREASE IN THE FORECAST

The Biddeford and Saco Water Company is proud of the fact that it has held rates steady since 2003. The company has engineered this accomplishment while supporting a large number of significant road and construction projects in the service area, and making substantial company investments in compliance, monitoring and water quality measures. While we've enjoyed a good run, it looks like some slight adjustments may finally be necessary, due primarily to skyrocketing fuel costs. The company expects to file a rate proposal with the Public Utilities Commission (PUC), but the increase will be just enough to maintain quality standards. Nobody likes to pay more for life's necessities, but as somewhat of a consolation, the company expects that the rate increase on a percentage basis will be less than the increase in the consumer price index during the same period.

Naturally Occurring Bacteria

The simple fact is, bacteria and other microorganisms inhabit our world. They can be found all around us: in our food; on our skin; in our bodies; and, in the air, soil, and water. Some are harmful to us and some are not. Coliform bacteria are common in the environment and are generally not harmful themselves. We monitor for coliform bacteria because the presence of such bacteria in drinking water indicates that the water may contain other organisms that can cause disease. Federal regulations now require that public water that tests positive for coliform bacteria must be further analyzed for fecal coliform bacteria. Because these bacteria can cause illness, it is unacceptable for fecal coliforms to be present in drinking water at any concentration. Our tests have never found fecal coliform to be present in our water.

Your Source of Water

The Saco River is our sole source of water. It begins as a small stream high in the White Mountains of New Hampshire and flows through about 124 miles of New Hampshire and Maine forest and farmland before reaching our treatment plant. The Saco River watershed actually covers an area of roughly 1,700 square miles in central New Hampshire and southwestern Maine. We are fortunate that the Saco River is one of the cleanest major rivers in Maine and New England, due in part to the lack of any substantial industrial development along its shoreline. In fact, the majority of the Saco River in Maine has been given the cleanest rating possible for water. Demand is great for high quality drinking water. We provide an average of more than 5 million gallons of water every day to a population of between 45,000 and 200,000 people (depending on the time of year). To learn more about our watershed on the Internet, go to the U.S. EPA's Surf Your Watershed at http://cfpub.epa.gov/surf/huc.cfm?huc_code=01060002. Additional information on the Saco River watershed and land use regulations in place for the watershed can also be obtained through the Saco River Corridor Commission's Internet site at www.srcc-maine.org, or by visiting our office.

A national source water assessment program was mandated by the 1996 amendments to the Safe Drinking Water Act. Once complete, the assessment program will provide an overview of all public water supply sources nationwide. In the State of Maine, the Drinking Water Program (DWP) coordinated the assessment program, which was completed in May 2003. The program identified future areas in source protection areas as the dominant risk factor threatening public water supplies. For more information, please visit the DWP's Web site at www.maine.gov/dhhs/eng/water/.

How Your Water Is Treated and Purified

The treatment process consists of a series of steps. First, raw water is drawn from the Saco River and pumped directly to a mixing tank at our treatment facility, where alum, lime and polymer are added. The addition of these chemicals causes small particles to adhere to one another, making them heavy enough to settle into a basin from which sediment is removed. After settling, chlorine and polymer are added for disinfection and turbidity removal, respectively (turbidity is a common measure of the clarity of water). The water is then filtered through layers of fine coal and silicate sand. As smaller, suspended particles are removed, turbidity disappears and clear water emerges. Chlorine is added again at this point as a precaution against any bacteria that may still be present. We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water without compromising taste. Finally, lime (used to adjust the final pH of the water), fluoride (used to prevent tooth decay), a corrosion inhibitor (used to protect distribution system pipes) and ammonia (used to reduce the formation of THMs, a common by-product of disinfection) are added before the water is pumped to sanitized reservoirs and water towers, and into your home or business.

New Saco River Crossing

We are installing a new 30-inch transmission main across the Saco River in the area just upstream from our Saco River treatment plant. The new transmission main will provide both enhanced capacity and redundancy for one of our more important mains. We are using directional drilling techniques to install the new main both to minimize impact on the environment and to provide a more secure installation by placing the new main far below the river bottom. We expect to have the new main complete and in service sometime this summer.

Substances That Might Be in Drinking Water

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, possibly including radioactive material, and can pick up substances resulting from human or animal activity.

Under the Safe Drinking Water Act (SDWA), the U.S. Environmental Protection Agency (U.S. EPA) protects the public health by setting national limits for hundreds of these substances in public drinking water supplies. Similarly, U.S. Food and Drug Administration (FDA) regulations establish limits for these same substances in bottled water in order to provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some substances. The presence of these substances does not necessarily indicate that the water poses a health risk. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 which may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

We Now Offer Direct Payment

We are pleased to offer a new service: the Direct Payment Plan. Now you can have your payment made automatically from your checking or savings account. There is no extra charge to become part of the program. You will still receive a bill showing the amount that you owe, and when it will be withdrawn from your account, which will be at least three weeks after the billing date. If you have a question or concern with your bill, simply call us when you receive the bill to discuss it. If you would like to take advantage of this free new service, either send us an email at info@biddefordsacowater.com or give us a call at (207) 282-1543 and ask us to send you a blank authorization form.

What Causes the Pink Stain on Bathroom Fixtures and Pet Bowls?

The reddish-pink color frequently noted in bathrooms on shower stalls, tubs, tile, toilets, sinks, and toothbrush holders, or on a pet's water bowl is caused by the growth of the bacterium *Serratia marcescens*. *Serratia* will not survive in chlorinated drinking water. Instead, *Serratia* is commonly isolated from soil, water, plants, insects, and vertebrates (including man). The bacteria can be introduced into the house through any of these sources, and the bathroom, or a pet's water bowl provides a perfect moist and warm environment for such bacteria to thrive.

The best solution to this problem is to regularly clean and dry the involved surfaces. Be careful with abrasive cleaners because they may scratch fixtures and make them even more susceptible to bacterial growth. Chlorine-based compounds actually work best.

What's in My Water?

We are pleased to report that during the past year, the water delivered to your home or business complied with all state and federal drinking water requirements. Each year we analyze more than 70,000 water samples for bacteria, turbidity, inorganic contaminants, lead and copper, nitrate, volatile organic contaminants, total trihalomethanes, and synthetic organic contaminants. For your information, we have compiled the table below to show which substances were detected in our drinking water during 2006. Although all of the substances listed below are under the Maximum Contaminant Level (MCL) set by U.S. EPA, we feel it is important that you know exactly what was detected and how much of the substance was present in the water. None of the 120 other substances regulated by the U.S. EPA were detected in our water.

The state allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2006	15	0	0.10	NA	No	Erosion of natural deposits
Arsenic (ppb)	2006	10	0	0.64	NA	No	Erosion of natural deposits; Runoff from orchards
Barium (ppm)	2006	2	2	0.0038	NA	No	Erosion of natural deposits
Chloramines (ppm)	2006	[4]	[4]	1.2	0.02–2.00	No	Water additive used to control microbes
Fluoride (ppm)	2006	4	4	1.15	1.01–1.30	No	Erosion of natural deposits; Water additive which promotes strong teeth
Haloacetic Acids [HAA] (ppb)	2006	60	NA	32.8	12.0–44.3	No	By-product of drinking water disinfection
Selenium (ppb)	2006	50	50	1.6	NA	No	Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2006	80	NA	34.9	21.5–47.3	No	By-product of drinking water chlorination
Total Coliform Bacteria (% positive samples)	2006	5% of monthly samples are positive	0	4.3	NA	No	Naturally present in the environment
Total Organic Carbon (% removal)	2006	>1.0	TT	1.43	1.30–1.59	No	Naturally present in the environment
Turbidity¹ (NTU)	2006	TT=5.0	NA	0.07	0.01–0.15	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2006	TT> 95	NA	100	NA	No	Soil runoff

Tap water samples were collected from 30 sample sites throughout the service area

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	ACTION LEVEL	MCLG	AMOUNT DETECTED (90TH% TILE)	SITES ABOVE ACTION LEVEL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2005	1.3	1.3	0.07	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2005	15	0	7	1	No	Corrosion of household plumbing systems; Erosion of natural deposits

¹Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

Table Definitions

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

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

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