

Your New Water Treatment Plant

▶ During the school year when the University is in session, an average of 1.3 million gallons of water a day is treated and pumped through the new Orono-Veazie treatment plant. In the summer months, usage drops to about 1 million gallons a day. All year long, 24 hours a day, our new plant responds automatically to the amount of water being demanded by our customers. Here's a look at how the system works and what happens to the raw well water as it's treated and delivered to your home.

Computer Control & Monitoring

The plant is operated and monitored through a sophisticated computer terminal. Everything from setting pump house temperature to opening and closing valves throughout the system can be done electronically using the specialized software and engineering systems in the plant.

pH Adjustment

When it comes out of the ground, our water is slightly acidic, with a pH of about 6.7. That level of acidity would be corrosive to plumbing—and it would give the water a metallic taste. A buffer solution is added to increase the pH level to approximately 8.0. It is important that we maintain this balance to avoid mineral leaching from the pipes which can affect the taste and color of your water.

Manganese Filtration

Manganese is a common mineral in groundwater in this part of Maine. It isn't harmful to drink in the concentrations at which it occurs in our water, but it discolors tap water and stains tubs and sinks, and can stain clothing when it reacts with bleach in the laundry.

To filter the manganese out, we use a naturally occurring inert substance called green sand. The green sand collects the free-floating manganese in the main filtering tanks until the sand grains are completely coated. When the sand cannot collect any more manganese, the filtering tanks are run through a regeneration process to remove the manganese. The cleaned sand stays in the tanks and is then ready to collect manganese again. Approximately 99% of the manganese is removed from the water using this method.



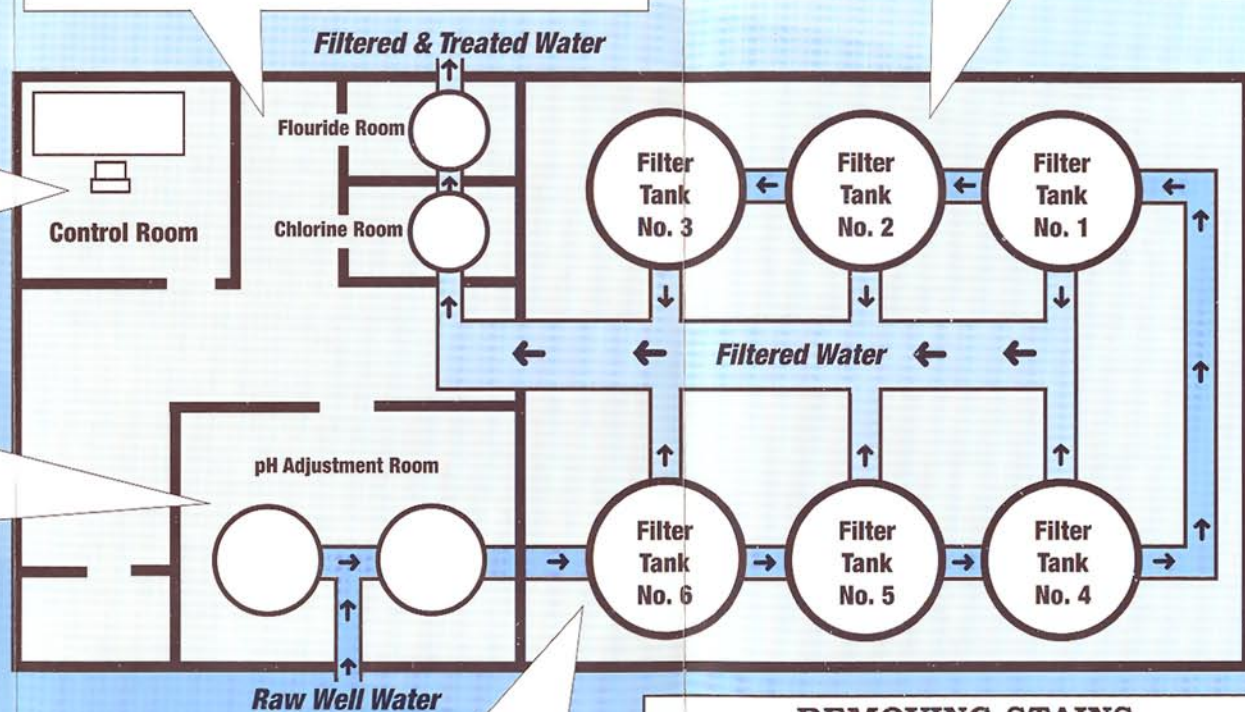
Flouridation and Chlorination

Small amounts of flouride and chlorine are added to the water. The flouride is added as a dental preventive, and the chlorine is added to kill bacteria. Though extensive testing has shown the Bennoch Road wellfield water to be extremely low in bacteria count, the addition of small amounts of chlorine is a simple way to assure proper disinfection.



Main Filtering Tanks

The new plant has six filtering tanks, which between them have a total capacity to treat 1,900 gallons a minute. The well water coming into the plant from the pump houses goes through these filtering tanks before it goes out to your home, school, or business.



REMOVING STAINS ON FIXTURES AND CLOTHING



With our new treatment facility, you probably won't have any of the problems you may have had in the past with



brownish water coming out of the tap. If you have stained bathroom or kitchen fixtures or discolored clothing from past instances of brown water, we recommend a rust remover called Rover. It removes stains from white porcelain, and whitens white clothes that have turned brown in the wash. Rover is available in Orono at L&A Market and Park's Hardware, and in Veazie at the Veazie Variety and Lancaster's Market.