## Drinking Water

ooking out across the river you can see the drinking water treatment plant for the Town of Raymond. Here water from the three wells in Raymond is treated before it is distributed to the public.

Drinking water is a valuable resource that we often do not think about, but the process for obtaining drinking water and purifying it for consumption is directly tied to the Lamprey River. The Town of Raymond gets its drinking water from multiple sources including three town wells, which are located near the Lamprey River and the town safety complex. These three wells are capable of providing 500 gallons of water per minute. It is important that these three wells are free from contaminants to ensure clean drinking water for the community.

What is a contaminant? When we hear the word contaminant we often think of something dangerous, but in fact a contaminant is simply any substance other than water molecules in our water supply. This means that not all contaminants pose a risk to human health.

Protecting the areas surrounding drinking water supplies helps prevent contamination by substances we do not want in our water. As water flows through the landscape it can pick up particulate and dissolved materials, inorganic and organic contaminants, pesticides and more before being taken up into the water supply. In order to prevent contamination the town has established a Wellhead Protection Area (WHPA), which is a zone of protection around the town wells to limit human activities that might contribute to potential contaminants entering the drinking water supply. The size of the buffer zone—or area of undisturbed land around the town wells—is determined by the soil composition and, as a result, it is different for every well. Soil composition refers to how much of the soil is made of sand, silt, or clay particles. Sandy soils allow for more filtration into the groundwater than a soil made of mostly clay. As the water enters the ground the soil acts like a sponge, cleaning the water before it enters the well. Once the water reaches and is pumped from the well, iron and manganese are removed before it is distributed



to the public. In addition, the town water is tested to be sure the water does not exceed levels for a list of potential contaminants that are regulated by the U.S. Environmental Protection Agency (EPA). Hence, the amount of any given contaminant found in the town water must fall below a threshold specified by the EPA.



View of the drinking water treatment plant across the Lamprey River. Credit: Abigail Gronberg

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