

# **Open Air Drinking Water Source Regulation**

Providing clean, safe drinking water is important for federal, state, and local governments. The federal Safe Drinking Water Act (1996) sets drinking water quality standards, but state governments are generally responsible for enforcement and oversight. States have differing restrictions in regards to the use of drinking water sources for recreation, and while some allow localities to set these regulations, drinking water sources are regulated by the State in Vermont. This report considers the potential concerns of recreational use of drinking water sources, regulations in neighboring New England states, and the current state of regulation in Vermont.

## **Issues Associated with Water Treatment**

If a water supply is not protected at the original source, such as the lake or river, then the drinking water system becomes completely dependent on methods of filtration and disinfection to maintain public health. The more polluted the water is then the more disinfectants need to be employed.

Disinfectants are particularly problematic because they can form byproducts, which may cause illness Bypm83(y)1aCjcUV, are not effective edisiafe barnisal with hardly any reported byproduct problems, but it is energy intensive and expensive to run making it ipractical.

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<sup>&</sup>lt;sup>1</sup> Peter O'Reilly, "Water Treatment Manual: Disinfection Environmental Protection Agenc(2011), accessed April 6, 2015, <a href="http://www.epa.ie/pubs/advice/drinkingwater/disinfectio">http://www.epa.ie/pubs/advice/drinkingwater/disinfectio</a> n2 web.pdf

Despite concerns associated with byproducts there are refinitive conclusions on disinfectants causing harm<sup>2</sup> Even the Environmental Protection Agency (EPA) concluded that despite evidence to the contrary, there is not enough evidence at this time to determine a causal link between disinfectants and disease.

A potentially dangerous concern is the parasite Cryptosporidium, which originates from human and animal waste. Typically, humans infected with this parasite distribute it to other human

pollution must be inventoried.<sup>10</sup> The susceptibility of water to contamination can then be calculated, with the requirement that these results are made public. There are no federal regulations that limit the use of surface water sources for recreation.

The EPA, or Environmental Protection Agency, controls the regulations on what proper water standards will be, but most direct oversight is left to the states? All states, excluding Wyoming and the District of Colombia, have applied for primacy, which allows the states to exert regulatory control as long as they can prove it will be at least as stringent as EPA standards. Water quality standards are controlled by the Agency of Natural Resources in the state of Vermont.

# **Vermont Regulations on Open Air Drinking Water Rights**

In 2012, a court case decided that State of Vermont controls the access to open air drinking water sources, rather han the communities that may use the drinking water? The case stemmed from Montpelier's attempt to control recreational use of the source of their drinking water, Berlin Pond. It was determined that under the public trust doctrine the state of Vermont has the exclusive right to regulate Vermont ponds and lakes in an attempt to change the legislation and hand over regulatory control of public operair water sources to municipalities who use the water, H.33 was introduced to the Vermont House of Representatives in 2015.

Currently, there are little protections on Vermont openair water sources. The state has not banned shoreline fishing, ice fishing, swimming, boating or ice shanties. The state does hold a ban on internal combustion motors! There is not any water source intake area defined on open-air water sources, or a clearly marked area around where the water is taken from the open source into the water delivery system, which is a useful to prevent hazardous materials entering through the water intake. There are over 12 brooks, lakes, and ponds that are open air drinking water sources at risk in Vermont, that have varying protection by

<sup>&</sup>lt;sup>10</sup> EPA, "Protecting Drinking Water Sact <r avf-2(A)-1(, )-1(")ces at ri1(P)ies matermj EMCØA, "Protecting Drinking Water Sact <r avf-2(A)-1(, )-1(")ces at ri1(P)i matermj EMCope 94 1275.88 Tm (e)-3(n)] -0.001 Tc 0.002 Tw 0.252.42ere is. a tat ri27 0 T426.96 0.54T0 1 Tf 0.002 c35b4(a t)-5, rnTc 7 258.5n1(pe)n 0pN(, )-1-t, C83 t, C823(Tc 7 Bttom 1/uT(..504 25d2(ro).001 Tc 0.002 498.96 229002 r</p>

local charters and ordinances. Only municipalities that regulate water sources through their local charter, which made regulations on the water when the municipality was founded, hold protections on their sources, leaving many unregulated.

# **Vermont Open Air Water Sources**<sup>19</sup>

Water Sources	Municipality Served	Local Control
Berlin Pond	Montpelier	No

# **New England State Regulations**

Other New England states have various restrictions on recreational use of drinking water sources and some delegate regulatory authority of these sources towns and municipalities. Information in this section is largely drawn from a memorandum written by Cameron Wood, Legislative Council, to Rep. Warren Kitzmiller.

## Connecticut

In Connecticut, the Department of Public Health has jurisdiction over the regulation of drinking water sources.<sup>20</sup> While there is no provision that specifically delegates regulatory authority to municipalities,<sup>21</sup> Connecticut statute allows the legislative body of any Connecticut city or boough to "regulate or prevent fishing, trespassing, or any nuisance" on reservoirs.<sup>22</sup> Swimming is not permitted in reservoirs or in any water source to the reservoirs. Passive recreation, suchs fishing, is allowed through a permitting process? Connecticut statute provides for the commission of police officers to patrol reservoirs and enforce these regulations?<sup>4</sup>

#### **Rhode Island**

Drinking water is regulated under the Rhode Island Department of �alth.<sup>25</sup> Statute prohibits swimming, bathing, or discharge of other "polluting matter" in drinking water sources. Further, the Department of Health is permitted to regulate or prohibit any activities "deem[ed] to render the water supply injurious to health or to pose a potential significant risk to public health."<sup>26</sup> No provision of Rhode Island law specifically delegates regulatory authority to municipalities.<sup>27</sup>

#### Massachusetts

The Department of Environmental Protection regulates all inland waters: According to Massachusetts Code Regulations swimming and bathing in drinking water sources is prohibited. Fishing, boating, walking on or cutting the ice, or bringing animals onto or into the water are all prohibited unless one is given a written penit by the Board of Water

Commissioners<sup>29</sup> While municipalities do not have express regulatory authority, they can "impact recreational use through local land use controls and also have input into their local management plans.<sup>30</sup>

## **New Hampshire**

Drinking water sources are regulated on the municipal level in New Hampshire. If local regulation is not sufficient, local authorities or citizens may petition the New Hampshire Department of Environmental Services to regulate drinking water sources. Therefore, regulations vary by municipality. According to Wood, "Most seem to prohibit all general recreational use (swimming, boating, fishing).<sup>32</sup>

## Maine

In Maine, municipalities are authorized to regulate drinking water source§? However, 22 § 2647-A holds that a utility or municipality and the Department of Health have authority to regulate pollutants in the drinking water supply in accordance with § 2642.4 Wood says this is somewhat contradictory, "because the State has granted authority to some water districts to govern certain water supplies." Similarly to New Hampshire, recreational prohibitions depend on local regulations?

## Conclusion

Recreational use of drinking water sources can present potential health risks. Whileth federal government regulates drinking water through the Safe Water Drinking Act, the EPA typically delegates regulatory authority to the states. In most New England states, recreational use of drinking water sources is restricted In Maine and New Hampsine, drinking water source use is regulated on the local level. In Vermont, use is regulated at the state level. Compared to other New England states, Vermont permits more recreational activity on drinking water sources.

This report was completed on April 30, 2015 by Megan Noonan, Allie Van Sickle, and Jack Vest under the supervision of Professors Jack Gierzynski, Robert Bartlett and Eileen Burgin.

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