ENVIRONMENTAL

Fact Sheet



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Use of Lakes or Streams For Domestic Water Supply

A Word of Caution

The Department of Environmental Services strongly cautions against the use of surface water for drinking purposes. Surface waters include lakes, ponds, streams and some springs. Among the diseases commonly transmitted by contaminated surface water are giardiasis, cryptosporidiosis, and other diarrheal diseases

Some residents and visitors think of New Hampshire as a relatively rural and pristine state and believe it is safe to use surface waters directly for drinking. These people often are renting lakeside cottages or are using rural areas for camping, hunting or hiking. Regardless of the ease and convenience of this practice, using drinking water from ponds and streams is not safe and DES strongly cautions against this practice.

Even where past bacterial tests for a particular pond or stream may have shown good quality, rain run-off, coupled with feces from animals and poor sanitary practices of bathers, can quickly contaminate any surface water source. It is the uncontrollable conditions that exist in and around surface waters that make the untreated water unsafe for human consumption.

While it is true that some municipalities use water from lakes or rivers as drinking water supplies, sophisticated filtration and/or chlorination systems are always required. Most lake waters used as sources of municipal water supply have restrictions on fishing, swimming, and boating activities, to minimize the risk potential contamination. In addition, such sources are sampled daily for purity.

Privately Operated Treatment Is Not Sufficient

Although equipment is available that enables an individual to treat a surface water supply to lower its bacterial risk, DES does not recommend this approach for the following reasons:

- 1. There are usually no restrictions on activities in the vicinity of the intake pipe.
- 2. Testing by individuals is usually sporadic, and it is doubtful whether the water would be tested frequently enough determine its quality.
- 3. Mixing time after additional of the chlorine to the water is seldom sufficient to ensure adequate bacteria and virus kill. Additionally, some organisms such as *Giardia lambia* or *Cryptosporidium* are highly resistant to chlorine disinfection.
- 4. Most people are not skilled in the proper operation or repair of treatment equipment.

Alternate Water Sources

Instead of surface water, DES recommends the use of dug, point or bedrock wells. Fact sheets showing these types of water supply wells are available by visiting the Drinking Water and Groundwater Bureau fact sheet website at

www.des.nh.gov/organization/commissioner/pip/factsheets/dwgb/index.htm. Other alternative drinking water supplies include the purchase of bottled water.

For Additional Information

Please contact the Drinking Water and Groundwater Bureau and the New Hampshire Water Well Board at (603) 271-2513 or dwgbinfo@des.nh.gov or visit our website at www.des.nh.gov/organization/divisions/water/dwgb/index.htm. All of the bureau's fact sheets are on-line at www.des.nh.gov/organization/commissioner/pip/factsheets/dwgb/index.htm.

Please contact the Laboratory Services Unit at (603) 271-3445 or (603) 271-3446 or visit its website at www.des.nh.gov/organization/commissioner/lsu/index.htm.

Note: This fact sheet is accurate as of July 2010. Statutory or regulatory changes or the availability of additional information after this date may render this information inaccurate or incomplete.