

## Canaan Source Water Protection Committee

Minutes of April 19, 2006 meeting:

7:00 PM Meeting opened at the Fire Station.

Staff member present: Heidi Brannon, GSRWA

Members present: David Shinnlinger, Chair; John Bergeron, Secretary; Bob Reagan; Jim Linn; and Bill Wilson.

Members absent: Jay Waldner, Vice Chair; Wally Medeiros, Tim Jennings, and Joe Damour.

7 PM Meeting opened and minutes of April 5, 2006 were approved as amended. This was followed by a discussion of committee membership and project status. It was agreed that the primary emphasis would be Canaan Street Lake watershed protection, but other Canaan water sources would be considered as time and resources allow. Heidi provided a map showing two potential gravel well sites, one near the transfer station, and one near the river west of Canaan village. However the installation cost, flow rate, and water quality of these sites is largely unknown. NH Granit Data Mapper maps showing the Canaan Street Lake watershed in 1998 and 2003 were also provided.

7:30 PM The field trip of April 5 was reviewed and this led to a discussion of ways to protect the Canaan Street Lake watershed. Items were explored and discussed but no conclusions were reached at this time. Should year round buoys or markers protect the reservoir area? There is concern that a snow machine could break through thin ice near the reservoir intake pipe. Should all jet skis be banned, not just those that meet the legal definition? Should there be a horsepower limit? Jet skis and high performance watercrafts disturb lake bottom organic material, which creates hazardous byproducts during water treatment (chlorinating). Should two cycle engines be banned? These engines introduce large quantities of oil and gas into the water. Should realtors and landowners be educated about watershed sensitivity and existing watershed and shoreland regulations? Should the existing state watershed regulations be revised to address current threats? These regulations are decades old. Should the town purchase watershed properties and conserve them? Should the town require a minimum lot size in the watershed, similar to the existing two acre Historic District requirement on the west side. Should watershed area septic systems have required periodic inspection and pumping? Failing septic systems is a major cause of water supply degradation. Should seaplanes be banned? While infrequently used, and not a major contamination source during normal operation, a catastrophic seaplane crash would have major repercussions, including system shutdown and long term pollution. Should swales and ditches be added to Fernwood Farms Road near Sucker Brook to catch road sediment before it enters the brook and the lake?

7:55 PM Canaan Street Lake Trophic Status & Water Quality Data were discussed. This included annual water test results going back several years. While the lake is generally in good condition, the challenge will be to retain that status as Canaan's population continues to grow. One area of concern is conductivity, which has been getting worse every year since 1988, and is now worse than the average NH lake. Conductivity is a measure of human activity and results from road salt and failing septic systems. The Canaan Street beach area could be graded to prevent road salt from entering the

lake. Cars and trucks could be prohibited from parking on or near the ice during the winter, since they carry salt on their undercarriage. Septic systems were discussed above.

8:30 PM Potential contamination sources were discussed. Fish parts and bait left on the ice or placed in the lake adds to the organic lake content, which should be avoided. Human activity at the beach is a potential contamination source and additional education may be appropriate. Fecal activity by very young children is difficult to control. Perhaps the lake host can assist with education. Fuel oil tanks not mounted on an impervious surface can lead to considerable contamination. Older properties may have raw sewerage piped into the lake. MtBE has not been detected yet, but could become a major problem. All known potential point contamination sources are associated with Cardigan Mountain School. But the bigger threat may be residential, lot development, forestry, recreation, and transportation non-point sources.

The meeting was adjourned at 9:15 PM.

Respectfully Submitted:

John H. Bergeron, Secretary

These minutes were approved at the May 3rd meeting.