FARLAIN LAKE AREA - 2016 WELL SURVEY



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In 2016, the Severn Sound Environmental Association (SSEA) conducted a survey of private water wells in the Farlain Lake area, funded by the Township of Tiny. The study area included shoreline properties and most of the second tier properties around Farlain Lake. The project helps address a need identified in the *Lake to Sky Farlain Lake Community Management Plan* (section 2.5: Wellhead and Water Supply Protection), and provides a baseline of information on wells in the area.

Well surveys were conducted by door-to-door canvassing by SSEA staff starting in July. Where possible, the owner was interviewed to obtain information about their well(s). Vacant lands without a cottage/house and properties serviced by municipal water were not visited. Well owners interviewed were asked for permission to photograph and GPS the well location, as well as measure the height of the well casing above ground. Well owners were provided with a package of information and resources. Water quality test kits, supplied by the Simcoe Muskoka District Health Unit, were provided to well owners that were at home during the SSEA's visit.

SSEA staff visited 283 properties during the survey. Nine property owners indicated they do not have a well, but use surface water from Farlain Lake as their water supply; 40 properties were vacant land with no house or cottage. Wells were documented on 116 properties; the majority (82) were drilled wells, followed by sand points (28), dug wells (5), and one unknown well type. The SSEA matched 51 wells to their corresponding well record in the Ministry of Environment and Climate Change well database. For 101 properties, no well was seen during door-to-door canvassing by SSEA staff, no information was matched in the well record database, and the owner did not provide SSEA with well information by telephone or email.

Of the wells seen, 23 were in the 'best' category of well condition, i.e., the well casing was at least 40 cm/ 16" above the surrounding grade, and the well had a vermin-proof cap that prevents insects and other material from entering the well through the cap. Wells with a one-piece cap, or with casings that are low to the ground, buried or in a well pit below grade may allow surface water, debris and bacteria to flow into the well, causing water quality problems; a licensed well contractor can offer advice about properly upgrading these wells.

Several wells were located in gardens or were obscured by shrubs or decorative items. Ideally, a well should always be visible and easily accessible: garden plants can have roots that may damage the seal around the well casing, and decorative items can provide a home for insects and rodents.

Many wells owners provided information about drinking their well water: 51% reported drinking it untreated, and 21% drink the water after it has been treated, and 28% do not drink it. Treatment systems are not widely used in the Farlain Lake area, but include: sediment filters, water softeners, iron filters, reverse osmosis, and ultraviolet light.

The Simcoe Muskoka District Health Unit (SMDHU) recommends that private wells be tested at least three times per year for bacteria, and at least once a year for nitrate. Of respondents providing information on water sampling, only 19% are sampling three or more times per year for bacteria; 21% report testing once per year, and 60% are testing occasionally/infrequently or not at all. Of well owners testing for bacteria, some reported bacterial contamination of their wells, either intermittently or regularly. One well owner reported testing for nitrates every two years, no other respondents reported testing their well water for nitrates.

Recommendations for residents:

- 1. Test your well water regularly as recommended by the SMDHU, to stay informed about the safety of your water and the condition of your well. Test regularly even if your water seems fine, because you can't always taste, smell or see bacteria or other contaminants. Don't rely on your neighbour's test results wells that are only a few steps apart may have different water quality. Early spring and the day after a heavy rainfall are good times to test your well water for bacteria. Bacteria testing is free for private well owners. SMDHU Private Citizen Drinking Water Testing website
- 2. Don't hide your well. Keeping your well visible and accessible reminds you where your drinking water is coming from, can help you ensure that no improper activities are going on near your well, and allows you to inspect the well regularly.
- 3. Always use a licenced well contractor for work done on your well. The Ministry of Environment and Climate Change maintains a <u>list of licenced well contractors</u>. Check with the well contractor in advance to be sure they are appropriately licenced for the type of work that is required.
- Learn more about how to protect your well and common groundwater supplies.
 The <u>Well Aware website</u> and <u>Well Aware booklet</u> are good resources for well owners.