

**GSWA Drinking Water Protection Committee (DWPC)
& Sudbury District Health Unit (SDHU)**

Meeting Notes

Thursday, 1 August 2013, 9:30 to 10:30 am, SDHU Offices

Present: SDHU - Stacey Laforest, Julie Arlt, Burgess Hawkins, Richard Ault
DWPC - Lesley Flowers, Lilly Noble, Richard Witham, John Fraser, David Young, Linda Heron

Regrets: Margaret McLaughlin

1. Purpose of Meeting:

An objective of the DWPC is to explore the best approach to protecting private drinking water intakes on or near lakes and rivers within the District of Sudbury. The purpose of the meeting with SDHU was to seek information and advice, to learn more about the role SDHU plays in the protection of water quality, best practices for septic system maintenance and inspection, and to discuss possible solutions to our water quality concerns.

2. Discussion:

a. Septic Systems:

- SDHU deals with public health hazards
 - Follows up on every complaint and if septic is malfunctioning residents are ordered to repair
 - Permit is required to install or repair septic, and staff follow-up to ensure it passes inspection
 - Cannot use discretion in requesting increased setbacks for proposals deemed inadequate or risky
 - Septic records go back as far as 1974 - electronic records began in 1990 – cannot manipulate data to produce reports and statistics
 - Failing septic systems mean effluent is coming up to surface and would smell – does not mean more nutrients are going into water than a system operating efficiently
- Septic systems must be set back a minimum of 15m (50') from the shore, and distance must increase if located on a slope or a raised bed
 - Setbacks can be increased through the Official Plan (OP)
 - A municipal by-law would reflect the OP

- Lake Wanapitei has a 45m minimum setback
- Fairbanks Lake has a 100' minimum setback
- A perfectly functioning septic system only deals with pathogens – not nutrients such as phosphorus
 - All septic systems are equal when it comes to nutrient removal
 - Traditional bed type system lasts longer, lower maintenance, and works better if space is not an issue
 - Tertiary systems do not last longer than traditional beds
- Municipal Waste Water Treatment Facilities (WWTF) are able to remove a great deal of the phosphorus
 - Effluent discharge must pass MOE guidelines
- SDHU suggested that discretionary inspection would not make a difference in phosphorus levels in lakes and rivers
- b. Declining water quality in our lakes and rivers:**
 - All surface water must be treated before drinking - without exception
 - Untreated surface water – E-coli must not exceed 100 CFU (Colony Forming Units on a petri dish) or it triggers a no swim advisory.
 - Recommend periodic testing of drinking water through the Public health lab
- c. Blue-green algae (BGA)**
 - SDHU should be contacted whenever a bloom is suspected
 - SDHU does not recommend reverse osmosis to remove BGA as there is no proof that the systems remove the toxins
 - City water treatment plants use high amounts of chlorine to remove toxins
 - Could not use chlorine in private/small drinking water systems – would require too much to be safe
 - Activated carbon has been shown to remove toxins but has not been studied in small home systems
 - Bellville has problems with BGA and uses activated carbon to remove the toxins from public drinking water

3. Follow-up:

- Increased setbacks through the Official Plan or by-law
- Buffers both on shore and in water to help filter water
- Research best types of soil that binds phosphorus and helps filter nutrients
- Future meeting with Ministry of Environment
- Check out MNR's recommendations for setbacks on lakes within the Canadian Shield
- Check with Bellville regarding effectiveness of activated carbon treatment

4. Next Steps:

Committee's next meeting is Thursday, 14 August 2013, 11:30 am, at the Living with Lakes Centre.

