Meeting Notes

Private Drinking Water Protection Committee

14 August 2013, 11:30 am

Living with Lakes Centre – Room LL102

Present: David Young, Lilly Noble, Richard Witham, Lesley Flowers, Margaret

McLaughlin, Linda Heron

Regrets: John Fraser

1. Review of Meeting Notes:

- 8 July Committee Notes
 - All but one Action item carried out
 - Lesley has not had a response to her message to Dan Bazinet will try again
- 1 August 2013 Meeting with SDHU
 - Recommend:
 - Increase septic setbacks
 - o Demystifying Septic Systems education is an important component
 - Fairbanks Lake Stewardship is preparing a booklet to educate about best practices for septic system maintenance and development
 - Lesley mentioned GSWA could help with funding
 - Fairbanks Lake is using a LAP grant as partial payment
 - Margaret will speak to her Stewardship

Action: Richard to research private small scale septic phosphorus removal systems.

Action: Lilly to research Belleville active carbon phosphorus removal.

2. Existing Models

- Lakeshore Capacity Model MNR & MOE guidelines
 - MNR recommends generally a 30 meter (100') natural buffer to be maintained adjacent to fish habitat
 - Handbook does not consider a retention rate for buffers
 - Need more studies to quantify effectiveness and longevity of buffers for phosphorus removal
 - Septic systems are designed to mitigate pathogens that are harmful to humans from entering water bodies (this confirms SDHU comment)
 - Use a siphon or pump to reduce phosphorus loading by providing even distribution of septic tank effluents to the tile bed

- Acidic sites on non-calcareous sands (soils with low % of calcium carbonate) may provide better phosphorus retention than sites on calcareous sands
- Ontario Building Code sets a province-wide uniform standard requiring a 15 meter setback from any lakes, pond, spring, river, stream, or wells
- Setbacks recommended for Precambrian shield are 30 meters
- Municipalities can enact zoning bylaws through Planning Act to increase setbacks
- Lakes at capacity
 - Lakes can be modeled to determine carrying capacity with respect to phosphorus loading from shoreline development
 - Lakes on Precambrian Shield allows a 50 percent increase in phosphorus concentration from baseline water quality in absence of human influence
 - Recommend tile field setbacks of 300 meters
 - Septic pumps to uniformly distribute effluent over tile bed

Action: Richard will research phosphorus abatement/removal technologies to filter nutrients from septic systems.

- Municipal Models Richard
 - Huron County Clean Water Project
 - o A great program and pamphlet
 - Incentives to repair septic systems
 - o GSWA could apply for a grant to run a similar program incentives to
 - Disconnect down spouts
 - Create buffers
 - Septic pump outs, upgrades, inspections
 - Agricultural best farming practices to protect lakes & rivers
 - Fence with natural buffers around water bodies to filter nutrients
 - Tiny Township
 - Lake Simcoe septic re-inspection

Action: Lesley will follow up on the Huron County model.

Action: All Committee members are to study the Huron County and Tiny Township models to get ideas and see if/how they could be adapted to our situation.

3. SMART Network – an MNR led initiative

- What is SMART
- A Collaborative Adaptive Approach to Watershed Management
- Prospectus Ontario Stream Monitoring network
- Advantages of Participating in a Stream Monitoring Research Team (SMART)
- Developed by Les Stanfield MNR Senior Research Biologist with MNR

- Engaging society to develop healthier watersheds
- A sustainability report card
- Building sustainable communities in developed landscapes
 - An adaptive management approach
- Formalized collaborative
 - Bring together partners such as Conservation Sudbury, MNR, MOE, SDHU, City, GSWA, CLS, etc.
 - Two Conservation Authorities that have already established SMART Network
 - Toronto and Region Conservation Authority SOSMART
 - Rideau Valley Conservation Authority <u>SMARTER</u>
- A good opportunity but a big project to take on
- Conservation Sudbury has been provided with this information
- Recommend inviting Les to make a presentation at next Science North event either LAP event in October, or GSWA in April 2014.

Action: Lesley will talk to Dan Bazinet to see what is planned for the fall Science North event.

4. Ecojustice – Great Lakes Sewage Report Card

- Only Municipal Wastewater Treatment Facilities (WWTF) were reported
- Provincial WWTF (450 water and WWTF representing 200 municipalities) not reported
- Sudbury had 5th worst report for total volume bypassed for those municipalities that reported – up one from the 2009 Ecojustice Report
- May not be truly represented because report didn't reflect the bio solids plant or the Walden upgrade to tertiary treatment
- Large volume of primary bypasses still a big problem that needs to be addressed some bypasses are partially treated
- Need a mandatory septic inspection on resale or transfer of property Property Disclosure
 - Lin Gibson has apparently done some work on this in the past
- Recommend a Wastewater Forum similar to what Simon Lake Community Stewardship did in 2010

5. Possible Future Collaborations

Ministry of Environment

Action: Linda will contact MOE to get recommendation of who we should meet with, and set up a meeting.

6. Goals and Objectives

- Protecting private drinking water intakes
 - Protecting water quality is protecting our intakes
- Gathering information to make recommendations to Board

Committee feels we are on track

7. Next Steps

Action: Richard to research private small scale septic phosphorus removal systems.

Action: Lilly to research Belleville active carbon phosphorus removal.

Action: Richard will research phosphorus abatement/removal technologies to filter

nutrients from septic systems.

Action: Lesley will follow up on the Huron County model.

Action: All Committee members are to study the Huron County and Tiny Township

models to get ideas and see if/how they could be adapted to our situation.

Action: Lesley will talk to Dan Bazinet to see what is planned for the fall Science North

event.

Action: Linda will contact MOE to get recommendation of who we should meet with, and

set up a meeting.

Action: Linda will enquire about deadline for final submissions to the Official Plan.