

ROAD SALT DISCUSSION - SUMMARY REPORT:



The Greater Sudbury Watershed Alliance (GSWA) held a Road Salt Discussion event on 5 February 2018, at the Vale Living with Lakes Center. The purpose of the event was to raise an awareness, and to explore possible solutions to increasing sodium and chloride levels in Ramsey Lake, a primary source of drinking water for over 50,000 residents in the City of Sudbury. The Lake's sodium levels are approaching three times the level at which the Medical Officer of Health must be notified so patients on sodium-restricted diets can be alerted; and chloride levels are rapidly approaching a level that can harm aquatic life.

GSWA has formally expressed concern to the City with regard to the additional winter road salt required to service the Second Avenue Industrial Improvements, the proposed Casino parking lot, and the numerous other road projects proposed in the recent Transportation Study Report. These developments, as well as the proposed Arena parking lot, would result in an increase in hard-surface road and parking areas within the Ramsey Lake Watershed, and would mean a significant increase in sodium and chloride concentrations, elements of road salt, in Ramsey Lake.

GSWA is also concerned with a Ramsey Lake Sub-Watershed Study poster board at the 3rd Public Information Center, hosted by the City, that described the rising sodium and chloride concentrations as "have increased but are within accepted limits".

Richard Denton, Chair of the GSWA, facilitated and opened up the Road Salt Discussion with a welcome to panelists and attendees, and made an introductory presentation to provide an overview of GSWA's concerns and questions.

Dr. John Gunn, Canada Research Chair, Stressed Aquatic Systems and Director of Vale Living with Lakes Centre, suggested that the City should focus on long-term vision and planning when it comes to protecting our lakes, and approving development. He expressed concern that the Ramsey Lake Sub-Watershed Study fails to reflect a made in Sudbury solution, and said there is a need for the same kind of investment in our lakes as we are putting into large local developments. Dr. Gunn also pointed out that salt is simply a signature and synthesis of all the other insults we do on the land, and the failures we have had in Ramsey Lake are expressed in tangible ways that people care about, in what you can see, smell, and taste. Property values and thus the tax base will be heavily impacted as water quality degrades and the quality of life in Sudbury's City of Lakes no longer draws high-tech industry nor entices our children back to this area.

Dr. Charles Ramcharan, Associate Professor, School of the Environment, Laurentian University, warned that even at the lower end of elevated salt levels we are seeing some effects on diatoms and eventually some effects on green algae, and that reducing the competitiveness of these species favours blue-green algae. He also emphasized the need for the City to have a hydrology budget to tell us how much salt is coming from the landscape, and what the different sources are.

Anoop Naik, Water Resources Specialist, Conservation Sudbury, informed us that the Source Water Protection Authority has authored an Assessment Report, under the Clean Water Act, to characterize the watershed, and under water quality threats and issues, road salt, sodium and chloride, are now identified as water quality issues.

Those attending also offered many potential solutions, such as using less road salt, using alternative de-icers, and/or using only sand within the Ramsey Lake Watershed. A great deal of concern was also expressed with regard to the additional road salt that will be required to de-ice a 27-acre Casino parking lot, and there was a suggestion of diverting its run-off into the adjacent watershed. Prevention was also emphasized, in that many other jurisdictions don't allow any development in and around a public drinking water source.

The Road Salt Discussion was deemed by many to be a huge success. It attracted approximately 65 participants, including members of City Council, Conservation Sudbury and its Source Water Protection Committee. The event also generated several articles and interviews that can be found linked on the GSWA Blog.

Next steps for GSWA is to review and provide comments on the Ramsey Lake Sub-Watershed Study when it is released sometime this spring; and to partner with the City of Sudbury on a Road Salt Pamphlet to help educate and inform the public on what they can do to help reduce sodium and chloride levels in local water bodies.

GSWA recommends reading the full Road Salt Discussion – Summary Report on our GSWA Blog for a more fulsome accounting.