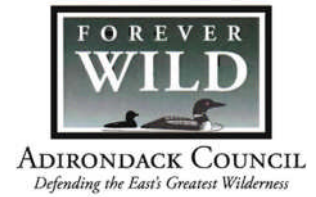




## Notes from the Paul Smith's Conference on Winter Road Maintenance and Reducing the Impact of Salt on the Environment



An inter-organizational meeting was held on May 17<sup>th</sup>, 2010 at 10 am at Paul Smith's College to discuss ways to combat the growing levels of salt pollution in the Adirondacks, most of which is the direct result of salt used for winter road maintenance. The goal of the meeting was stated to be the formation of a task force to address these issues, with the conference attendees seeking agreement on the task force's makeup, charter, goals, and legal and organizational structure. Attendees included senior representatives of the NYSDOT, NYSDEC, Adirondack Park Agency, numerous towns and lake associations, as well as Adirondack advocacy groups including the Adirondack Association of Towns and Villages, Protect the Adirondacks, and the conference co-sponsors, the Adirondack Council and AdkAction.org.

Conference coordinator Lee Keet, representing AdkAction.org, introduced the meeting agenda and participants, followed by a presentation by Daniel Kelting ; Executive Director, Adirondack Watershed Institute and Associate Professor, School of Forestry and Natural Resources, at Paul Smith's College, summarizing the findings in their recent report on winter road maintenance. Robert Selover, Director of Maintenance and Robert Winans, Maintenance Program Manager for NYSDOT then gave a general snow and ice operations overview followed by Elisabeth Kolb, Special Assistant (Environment), Office of Operations who followed with a short discussion on environmental topics.

The meeting then brain-stormed alternative methods, procedures, and practices that could lessen the use of sodium chloride, followed by break-out sessions that refined these ideas into recommendations to be reviewed by the whole group.

The group reached consensus on many of the issues the task force should address, i.e.,

- Coordination among the parties:
  - Ways to improve coordination and avoid overlap of town, county and state winter road maintenance procedures and to share facilities and techniques wherever possible
  - Accelerate cooperation with other states and municipalities to more rapidly adopt information systems, new equipment, and alternative chemical treatments
  - Investigation of the legal liabilities associated with using less aggressive winter maintenance techniques and means of shielding state agencies and municipalities from liability claims resulting for the use of approved but less aggressive techniques
- Infrastructure issues:
  - Special procedures and techniques that could be used around critical infrastructures, e.g., bridges and culverts, to minimize salt degradations
  - Considering current and planned vehicle improvements when revising road condition criteria for treatment
  - Quantifying the costs of infrastructure and vehicle deterioration as the result of the use of salt and freeze-thaw cycles
  - Mapping of environmentally sensitive areas (which must be clearly defined) using GIS and other techniques leading to the development of special techniques for use in each

- Further research required:
  - Determination of maximum acceptable levels of sodium chloride in ground and surface water, taking into account human health guidelines as well as impacts on aquatic plants and animals
  - Study of plants and bacteria that could mitigate the impact of salt runoff from roads and stabilize soils
  - Investigation of improved means to create pre-mixed chemicals and brines for use in anti-icing, with possible sharing of these facilities and techniques across jurisdictions
  - Intensified analysis of alternatives and supplements to road salt, with test areas to determine better procedures and chemical mixes
  - Investigate variable traffic volume-based techniques, noting that most volume studies take place in the summer and may not reflect winter loading
  - Study accident data to determine if clear roads policies promote or reduce safety
  - Investigate the use of new road surfacing techniques to reduce the need for bond-breaking chemicals in winter storms
- Public policy and outreach:
  - Creation of centralized “environmental justice” reporting and citizen complaint databases and response systems for contaminated wells, drinking water, etc.
  - Revisiting of New York’s “clear roads” policies to determine if select roads may be better left untreated by chemicals, with new signage and driver education
  - Assessing the possibility of aquifer surcharges
  - Investigate and document legislative actions that may be required to implement changed practices
- Financial issues:
  - Adding environmental costs to the equation – ecosystem services that are either lost or diminished by salt-related impacts. The cost of chemicals, manpower, and equipment alone is insufficient for public policy determinations
  - Consider infrastructure and vehicle impacts, animal collisions, replacement wells, legal expense, and other remedial costs, as well as manpower and material cost in determining best practices

General agreement was reached that the task force, to be effective, would need representation from all of the key state agencies (DOT, DEC, APA, DOH), the scientific community, local towns and villages, advocacy groups, and landowner and lake associations. The Common Ground Alliance meeting on July 14<sup>th</sup> in Long Lake will be the opportunity for these conclusions to be re-presented to a larger audience and for the key participants to join together in asking for the creation of the special task force to act on the above issues. A goal of that meeting will be to get all of the organizations and agencies to simultaneously petition the governor for a special task force to study and make recommendations for changed or improved procedures that can reduce the use of salt in winter road maintenance.

It was, most participants agreed, a convivial and productive meeting. All of the participants expressed a strong interest in being represented on the eventual task force. The meeting adjourned at 2pm.