

# CHLORIDE REDUCTION IN THE I-93 WATERSHEDS

## Municipal Program

### Introduction

Elevated chloride levels in a number of streams were identified during the Salem-Manchester I-93 environmental study. As a result, the NH Department of Environmental Services (DES) included Policy Brook (NHRIV700061102-18), an unnamed Tributary to the Western Embayment of Canobie Lake (NHRIV700061102-23), Dinsmore Brook (NHRIV700061204-01) and Beaver Brook (NHRIV700061203-16) on the 2004 Clean Water Act 303(d) list as impaired, which required a Total Maximum Daily Load (TMDL) study. The TMDL identified the total amount of chloride that the impaired waterbodies can assimilate while maintaining the State Water Quality Standards. To meet standards, significant reductions from current chloride loading are required.

Earmark funds were appropriated through the Federal Highway Administration (FHWA) to develop and implement the TMDL. Approximately \$2.5 million is available to aid the communities within the TMDL watersheds (Salem, Windham, Derry, Londonderry and Chester) to reduce road salt use and therefore assist in compliance with the TMDL implementation.

### Goal and Objective

The goal of this program is to assist the communities with implementation of the TMDLs in the affected watersheds with the objective of more effective or reduced road salt use.

### Municipal Planning

The Salt Reduction Workgroup was formed to collaboratively develop appropriate and workable guidelines to implement salt reduction and to share knowledge on salt reduction practices.

Federal Earmark Funds will be distributed in two steps: 1) planning, and 2) implementation. The outcome of the planning phase is a Salt Reduction Plan that includes specific actions designed to achieve salt reduction on municipal and private roads and facilities. Plan development is intended to be a collaborative process among all the members of the Salt Reduction Workgroup. Once the municipal Salt Reduction Plan is developed, a Steering Committee made up of representatives of the NH Department of Transportation (DOT), Environmental Protection Agency (EPA), DES, and FHWA will evaluate the plan against the following criteria, developed with input from the Salt Reduction Workgroup:

- All funded activities shall be for salt reduction within the above-mentioned TMDL watersheds. The activity does not need to be exclusive to the TMDL watersheds.
- A Municipal Resolution (attached) demonstrating commitment to reduce salt loading in impaired watersheds has been adopted.

- The plans shall include methods for the municipality to track the amount of salt applied to all maintained surfaces within the TMDL watersheds by the town or private property owners (a salt accounting system).
- Planned activities shall be delineated for salt reduction on privately owned and municipally owned surfaces. If the activity is a combination of both, a ratio of private vs. municipal shall be provided.
- The plan shall include an explanation of how the 20 percent match with hard funds or a soft match conforms to 49 CFR 18.24 and 49 CFR 19.23 (see FHWA Guidance).
- A budget for all activities and purchases shall be provided within the plan.
- An estimate of the total tonnage of salt reduction expected by each activity shall be provided.
- A commitment by the town to provide a written report and oral presentation of the effectiveness of the activities in September 2011 at the Salt Reduction Workgroup meeting, and some interim updates may also be required.
- All activities must meet FHWA funding requirements (Please review the following web page <http://www.nh.gov/dot/business/municipalities.htm> or contact DOT)
- At least 20 percent of the implementation funds must address salt loading on private parking lots. This could include municipal administration of a salt accounting system.

The Salt Reduction Plan will be the basis (Scope of Services) for Step 2 Implementation

### **Municipal Implementation**

Municipalities with approved Salt Reduction Plans will then be eligible for implementation funds.

While the TMDL studies were underway the Steering Committee hired Jeffery H. Taylor and Associates (JHT) to investigate a number of issues surrounding salt use within the affected watersheds. JHT produced two reports designed to be resources for developing municipal salt reduction plans. Both reports are available on-line at the DOT's I-93 website:

(<http://www.rebuildingi93.com/content/environmental/waterquality/documents/>).

Each community is unique and may approach compliance with the Clean Water Act's TMDL process in its own fashion. The Earmark is intended to aid the communities in achieving the common goal of compliance with the recently published Chloride TMDLs. The Steering Committee, with input from the Salt Reduction Workgroup, has set aside \$700,000 for regional activities including: a Public Relations campaign, winter maintenance training for public and

private winter maintainers, and development of software or methods to track public and private salt use. Communities may develop other collaborative projects; such proposals are encouraged.

### **Available Funding Requirements**

The funding assistance to communities will be available in two steps through two separate Municipal Agreements: one for the salt reduction plan and the other for implementation of the plan. Approximately **8 percent** of the total funding will be available for plan development. The remaining **92 percent** will be available for implementation after the Steering Committee approves the plan. The Steering Committee may adjust the funding allocation for each community based on the quality and content of the scopes of services and plans.

Funding will be administered through Municipal Agreements with DOT, subject to Governor and Council approval. The DOT will manage the Municipal Agreements that will formalize the reimbursement program. The towns shall provide all necessary evidence that the match meets Federal requirements. All activities shall be completed within 4 years of the execution of the Municipal Agreement. Any undistributed funding will be utilized for additional regional efforts or other municipal initiatives at the discretion of the Steering Committee.

### **Apply Now!**

To receive funding, submit a Scope of Services for your salt reduction planning along with the municipal resolution to the DOT at the address below. The Steering Committee will then review and the Scope of Services. Upon approval, the DOT will then enter into a Municipal Agreement to develop a Salt Reduction Plan that works well with your community.

For more information on this Municipal Program, please contact either of the Steering Committee Members below:

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