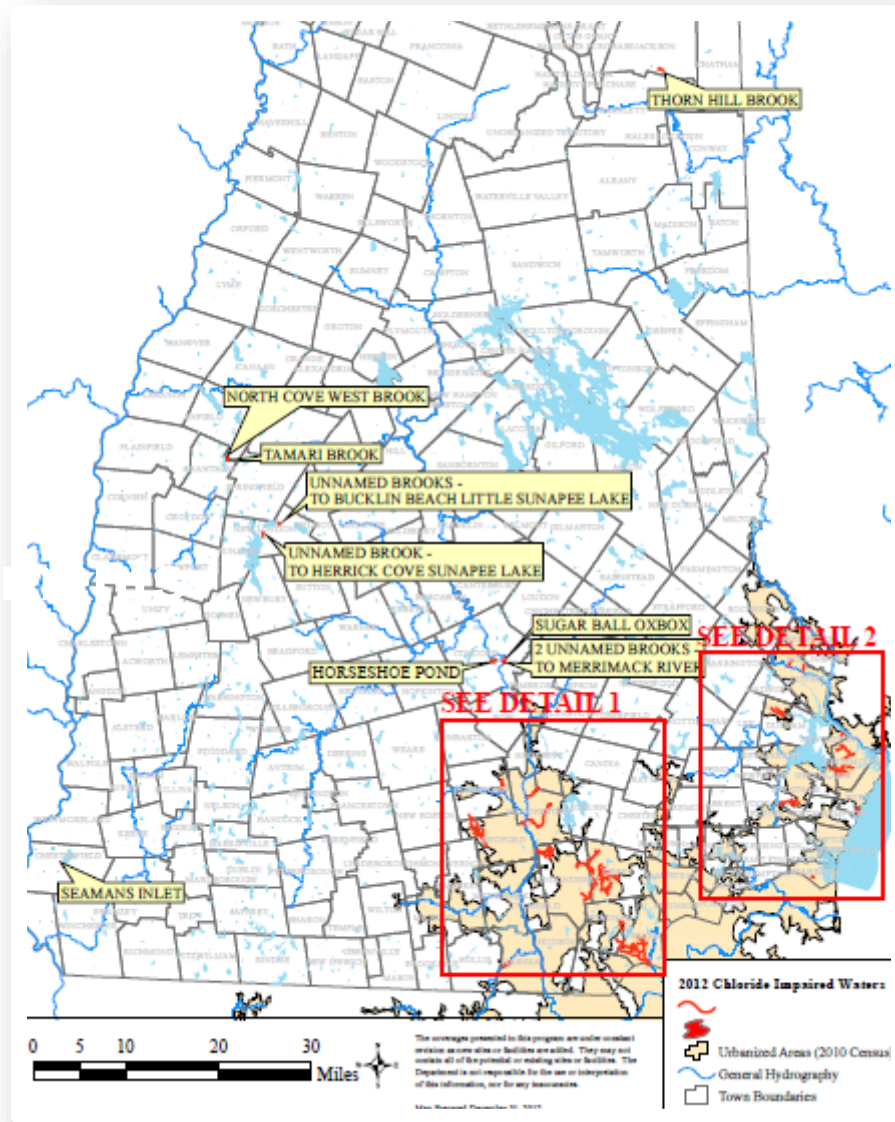




Kate Politano  
NHDES Salt Reduction Coordinator

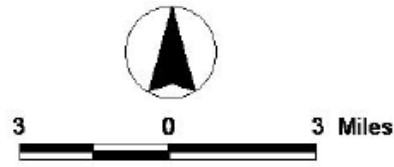
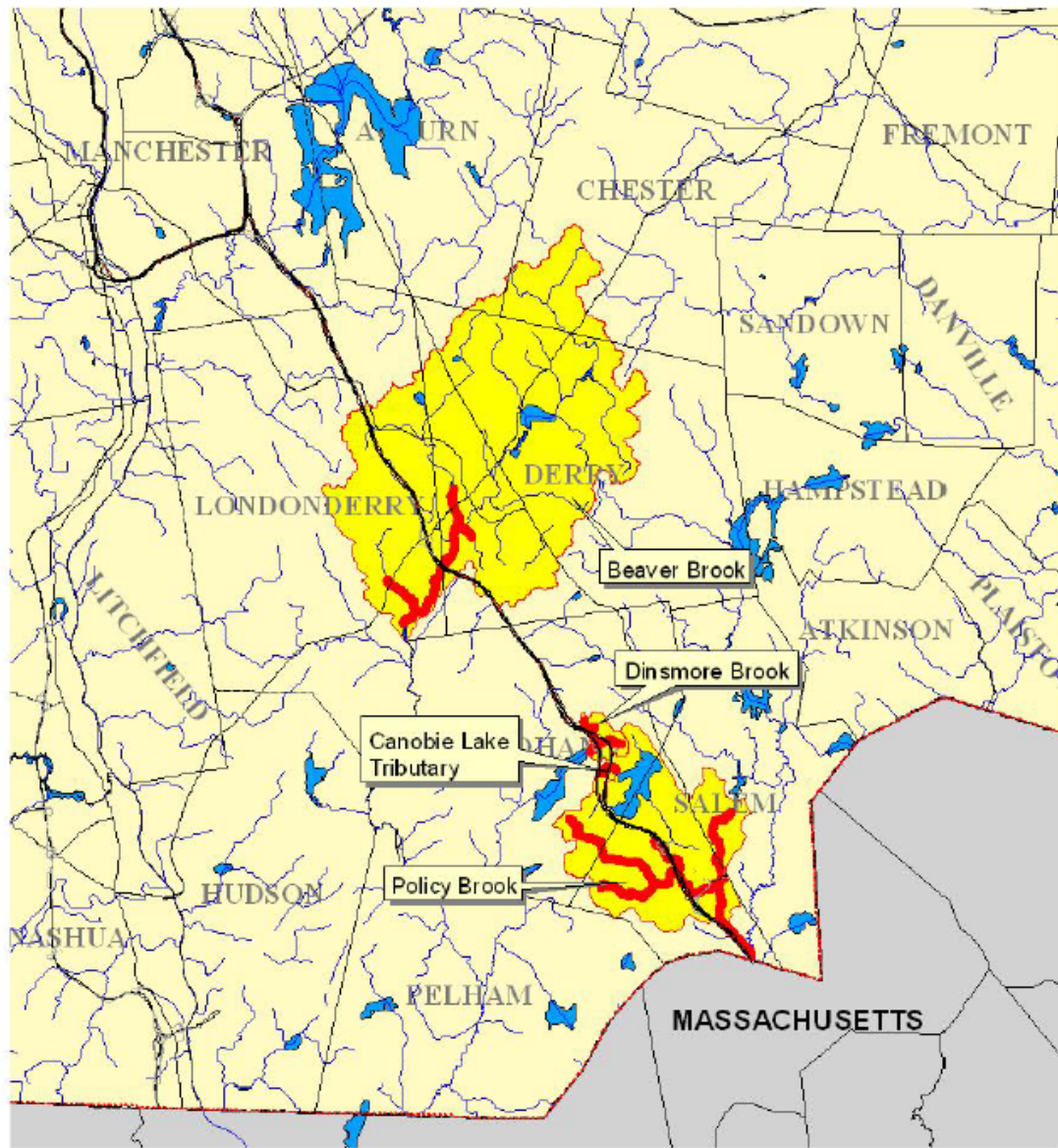
# Chloride Impairment is a Statewide Issue



2012 Chloride Impaired Assessment Units – Whole State

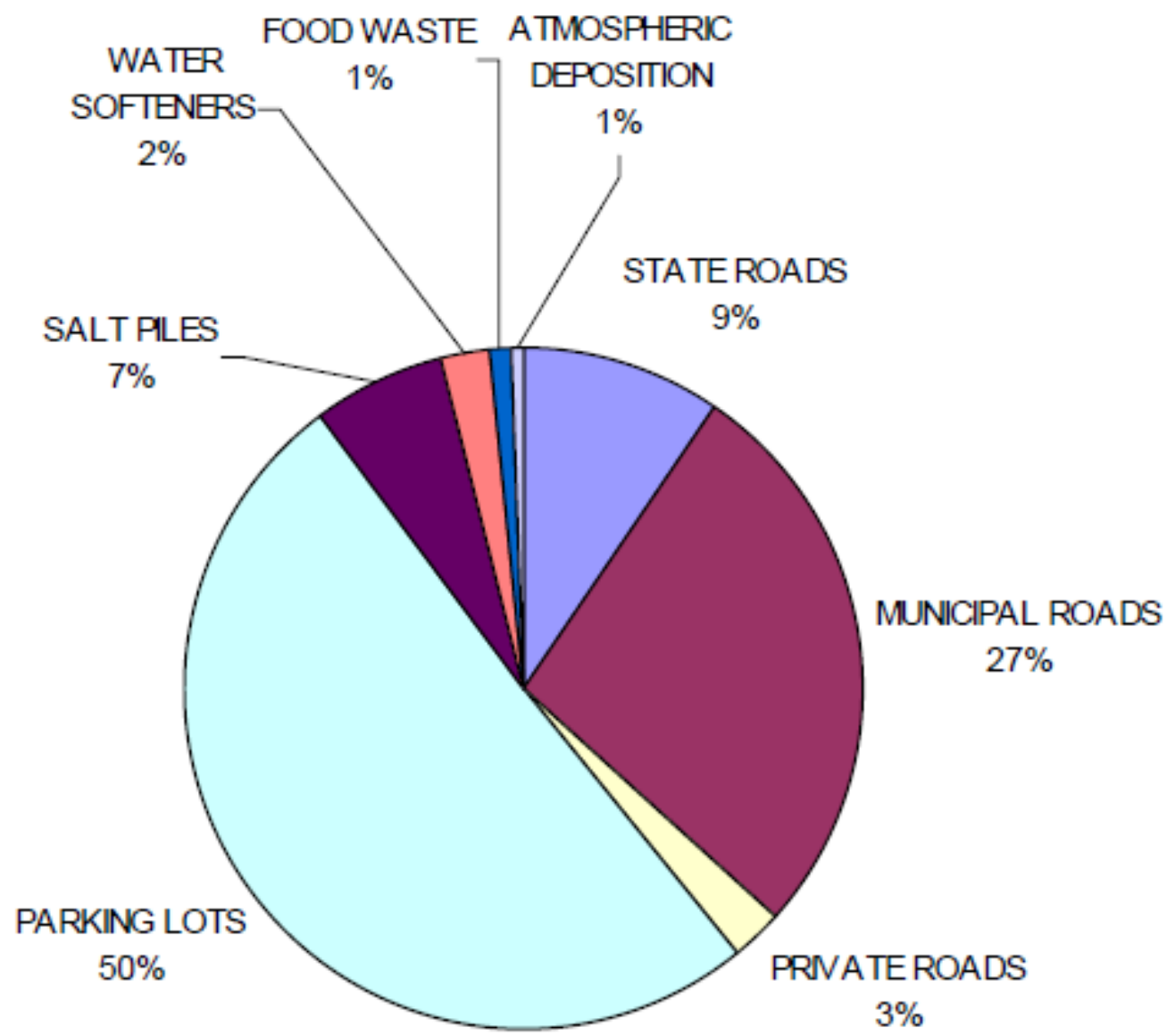


# I-93 TMDL Watersheds



- Political Boundaries
  - State boundary
  - County boundary
  - Town boundary
- Roads (NHDOT)
  - Interstate
  - State
  - Local
- Impaired waterbodies
  - Rivers and streams
  - Lakes and ponds
  - TMDL Watersheds

**Figure 4: Relative Contribution of Each Source to the Total Salt Imports to the Watershed**





# A Snowball's Chance...

2010 – Mandatory Certification w/ fee  
HB 1676

Referred to  
Interim Study

2011 – Mandatory Certification w/ fee  
HB 202

Inexpedient to  
Legislate (killed)

2012 – Optional Certification w/ fee  
SB 392

Passed Senate  
Killed in the  
House

2013 – Optional Certification w/ fee  
HB 523

Retained in  
committee

**Passed as part of the budget bill (without the  
fee)**





# The Plan





# Requirements for Chloride Impaired Waters

- Develop Salt Reduction Plan
- Implement Plan
- Update Plan



# Tracking Salt









# BMPs



**Pre-wetting or treating salt**



**Anti-icing**



**Pavement Sensor**



# Equipment Calibration





# Training





# Application Rates

**Training Materials for Best Management  
Practices**

**for**

**Winter Road, Parking Lot, and Sidewalk  
Maintenance**



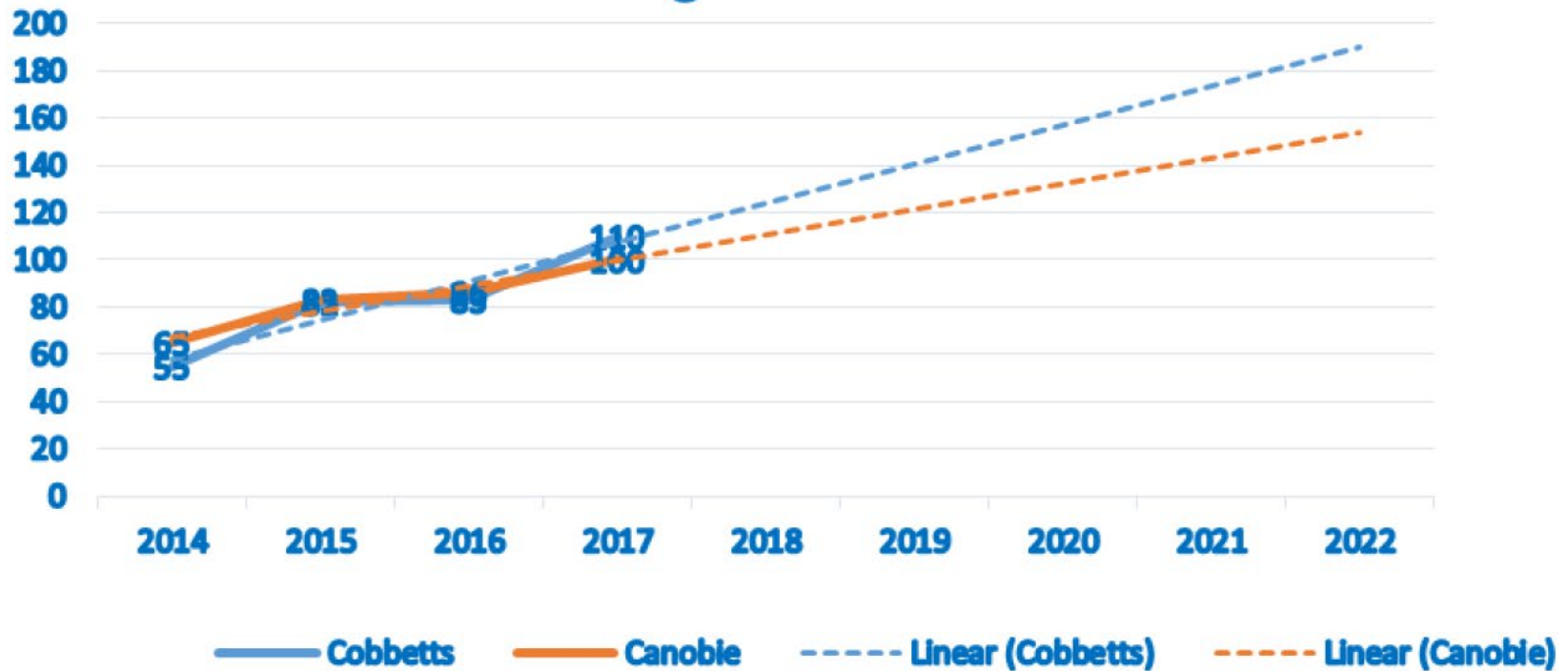
Date of Publication: January 31, 2014



# No Salt Zones



## Cobbetts Pond and Canobie Lake Chloride Level Trending toward Chronic Levels





Doug Heath, USEPA, Boston, MA





# Driver Expectations & Behavior



- Social Science and Driver Behavior
  - Drive safely due to conditions
  - Plan ahead – stay home when possible
  - Use snow tires
  - Stay behind snow plows



Belknap Landscap

Gerry Dufresne

2014 Annual New Hampshire Salt Symposium  
Gerry Dufresne  
Belknap Landscapers & Nurseries  
SMA  
PLANNING COMMITTEE  
Green SnowPro Certified  
NH Salt Symposium Prior Attendee



## NH Voluntary Salt Applicator Certification



Maintain safe parking lot, sidewalk,  
and driveway surfaces while  
reducing environmental impacts  
from salt *and* limit your liability.





# Business Flyer

***Hiring a NH Certified Green SnowPro as your snow removal contractor will help protect you and your company from slip and fall claims arising from snow and ice conditions.***

# Figure 26. Improper Site Management





# Reductions Estimates





**Table 9. Recommended Chloride BMPs**

Chloride Reduction BMPs	Definition	Potential % Chloride Reduction
Pre-Wetting	Application of salt brine or proprietary chemical to dry salt as it is being applied to the roadway	20% - 30%
Pre-Treating	Application of salt brine or proprietary chemical to dry salt either before, during, or after it has been loaded into the truck.	10% - 30%
Anti-Icing	Application of salt brine or proprietary chemical up to 48 hours in advance of onset of storm.	10% - 30%
Zero-Velocity Spreaders	Spreader ejects salt particles at the same velocity of the forward motion of the truck's traveling speed; allowing salt to drop as if the spreading vehicle was standing still.	10% - 50%



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