

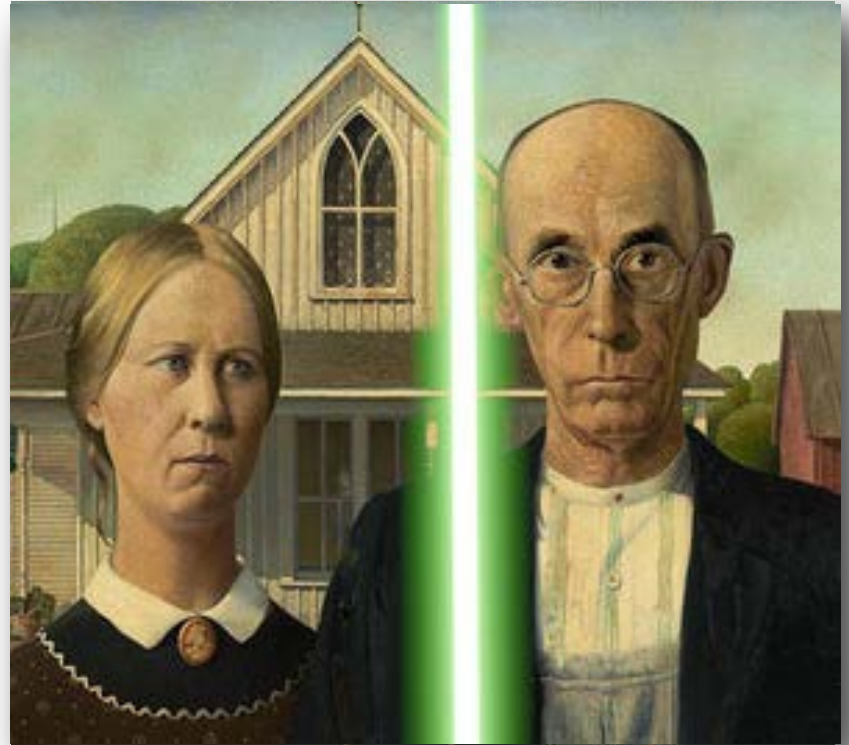
Salt of the Earth

Transforming the art of snow removal
in New Hampshire



Salt of the Earth

- A decent, dependable, unpretentious person.
- Salary = salt money



Salt of the Earth



It's all about the people ...



Salt is an issue in NH

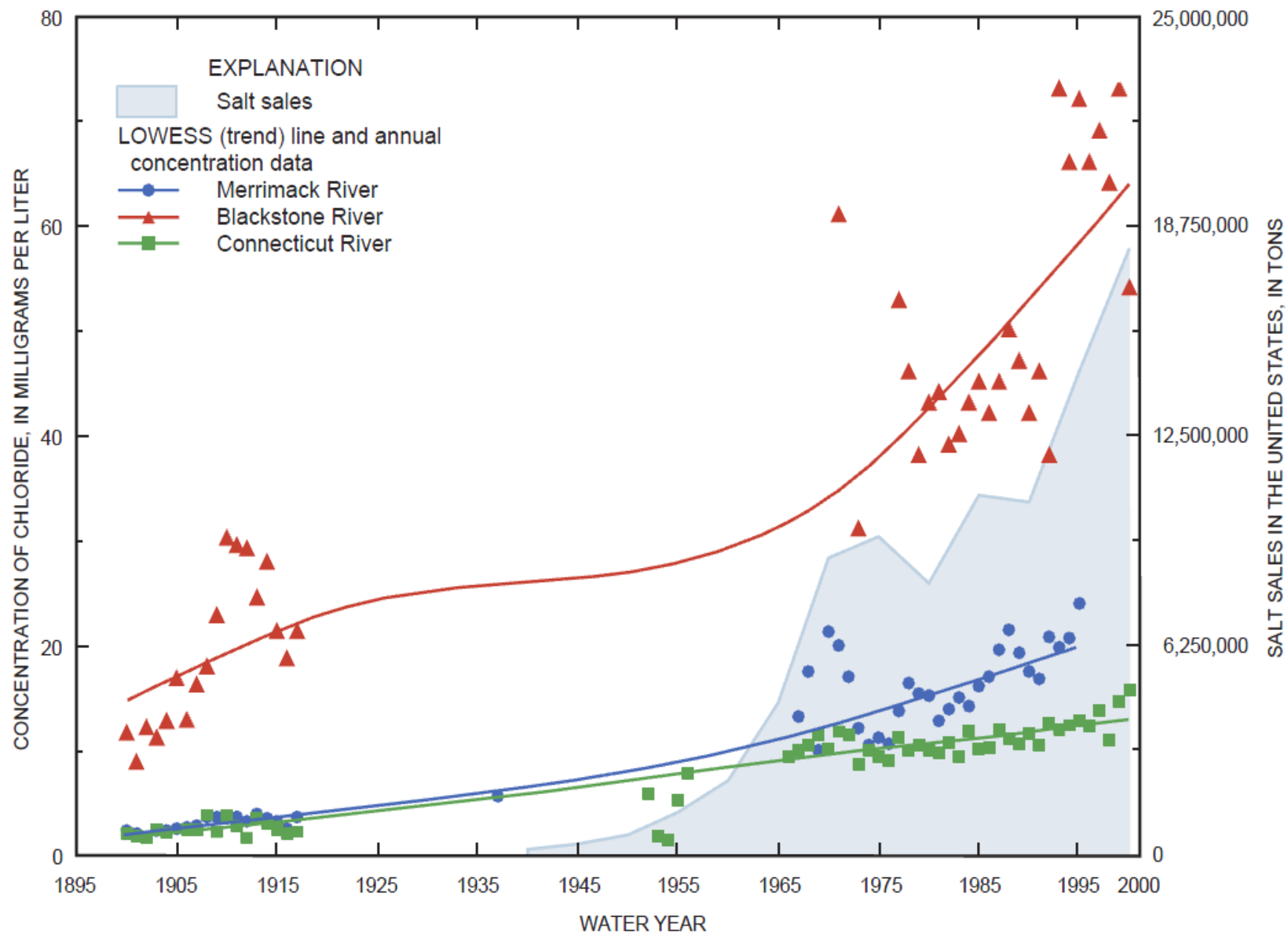


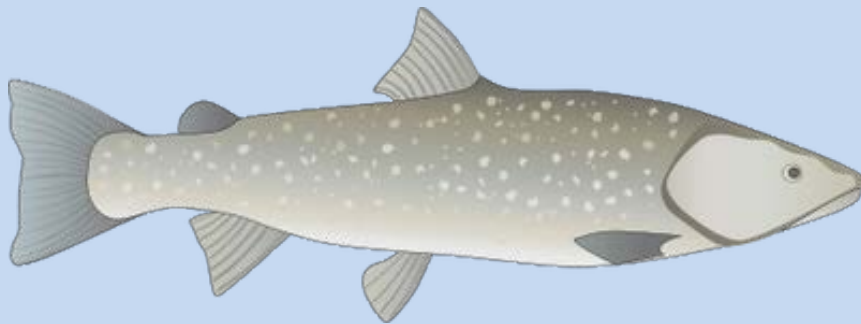
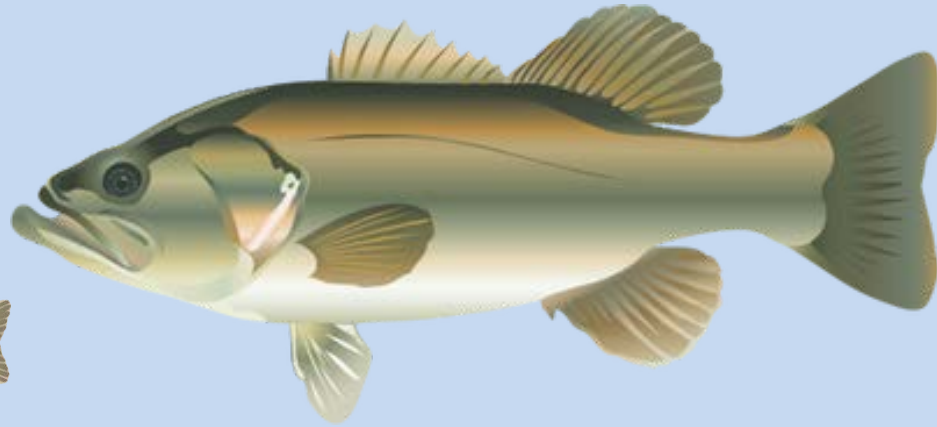
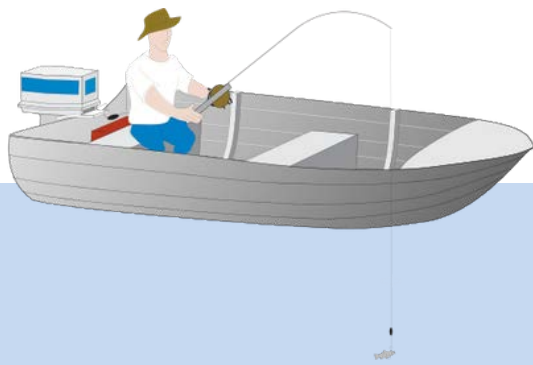
Reductions needed and possible



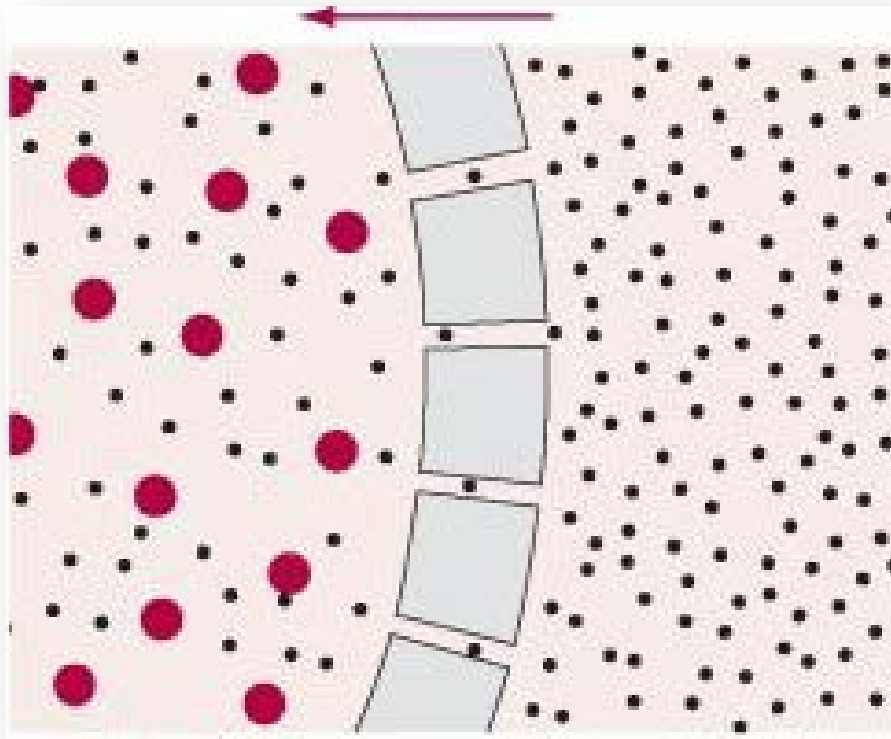
Challenges







Source: Kim Kraeer, Lucy Van Essen-Fishman, Integration and Application Network, University of Maryland Center for Environmental Science (ian.umces.edu/imagelibrary/).

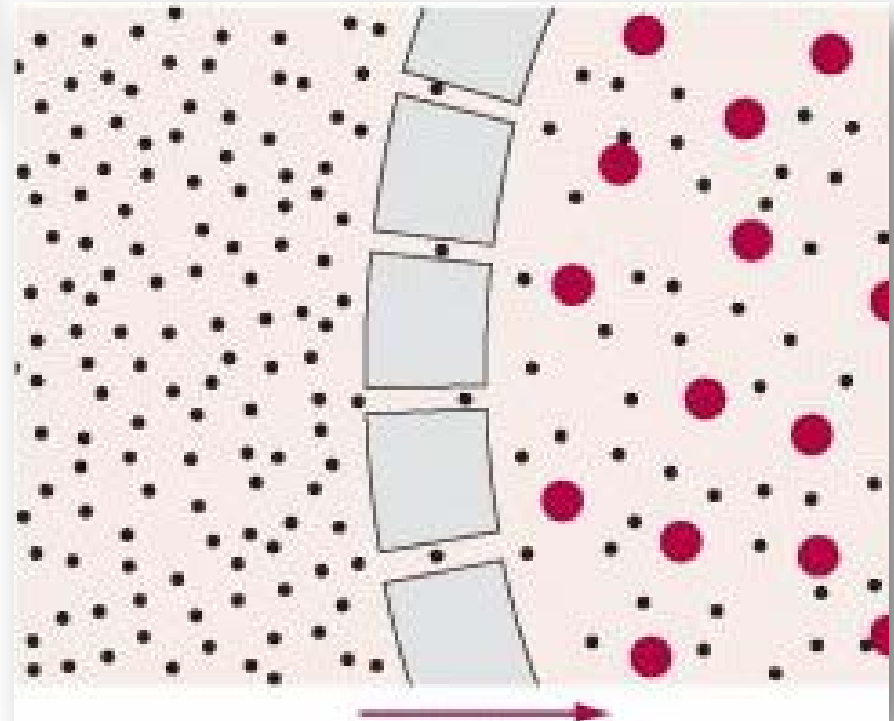


Saltwater fish

Salt is toxic!

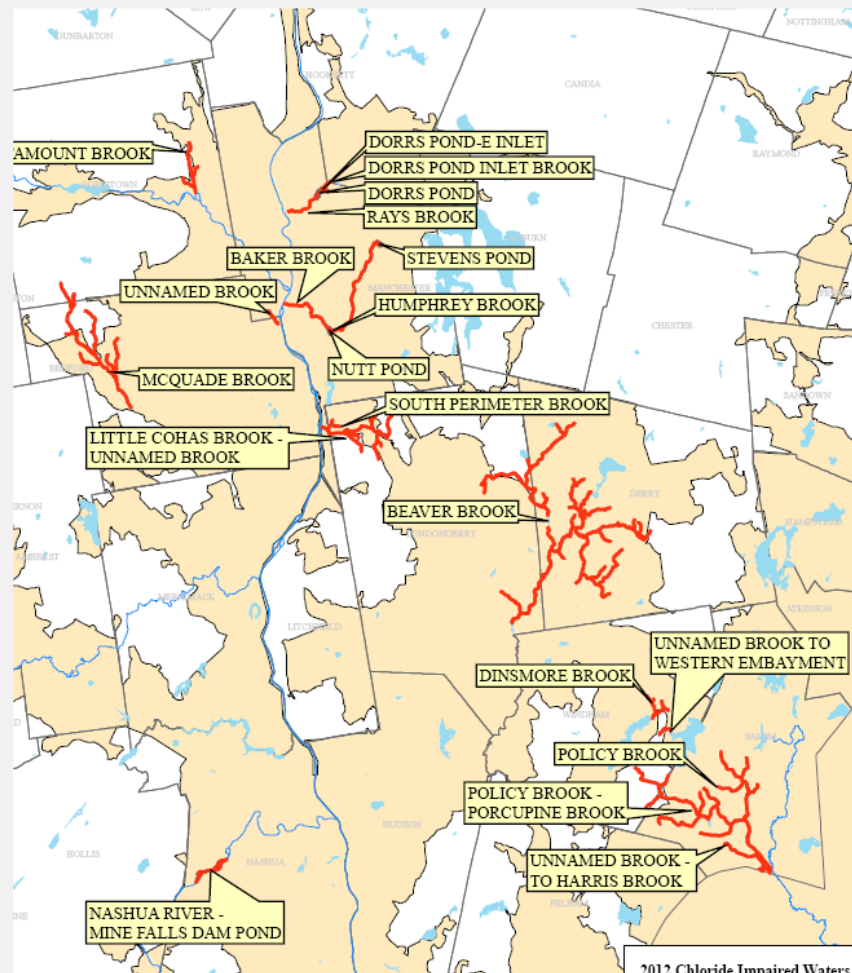
Osmosis happens!

Freshwater fish

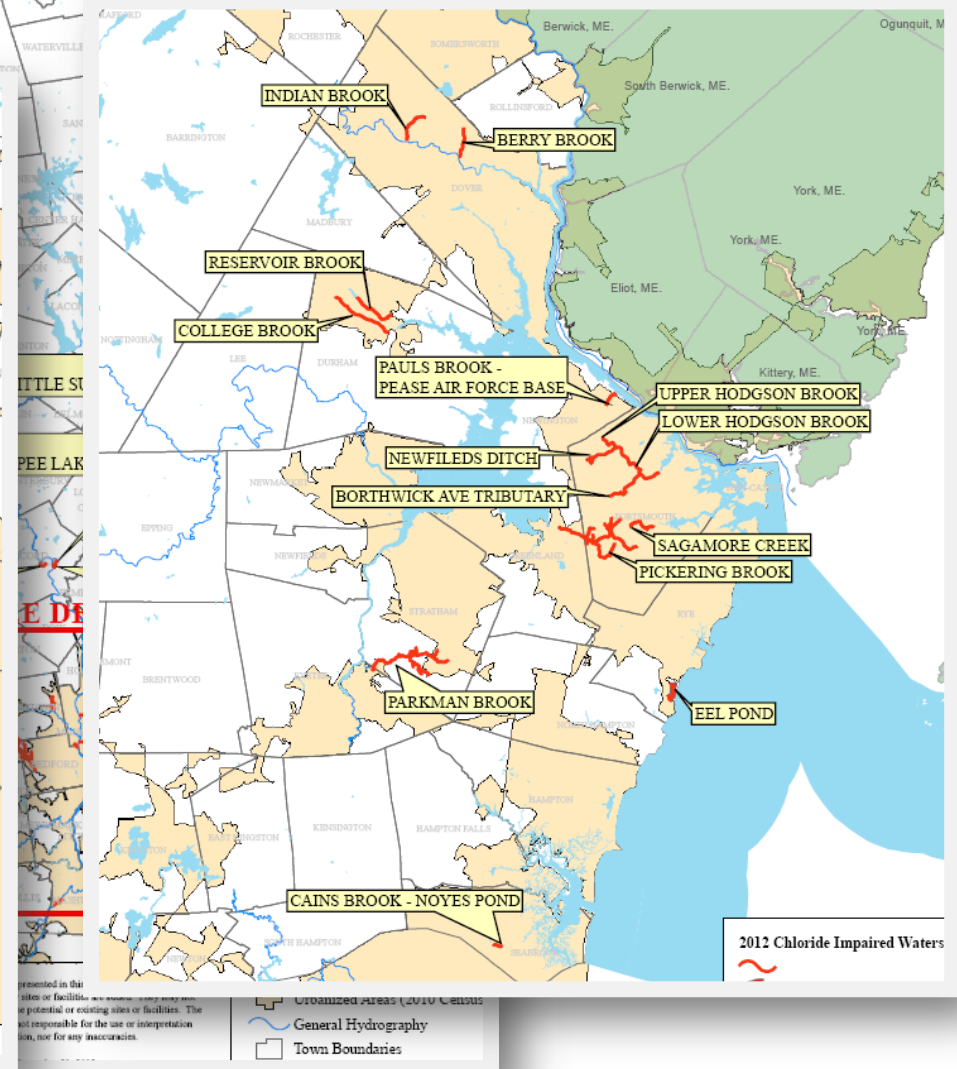


2012 Chloride Impaired Waters

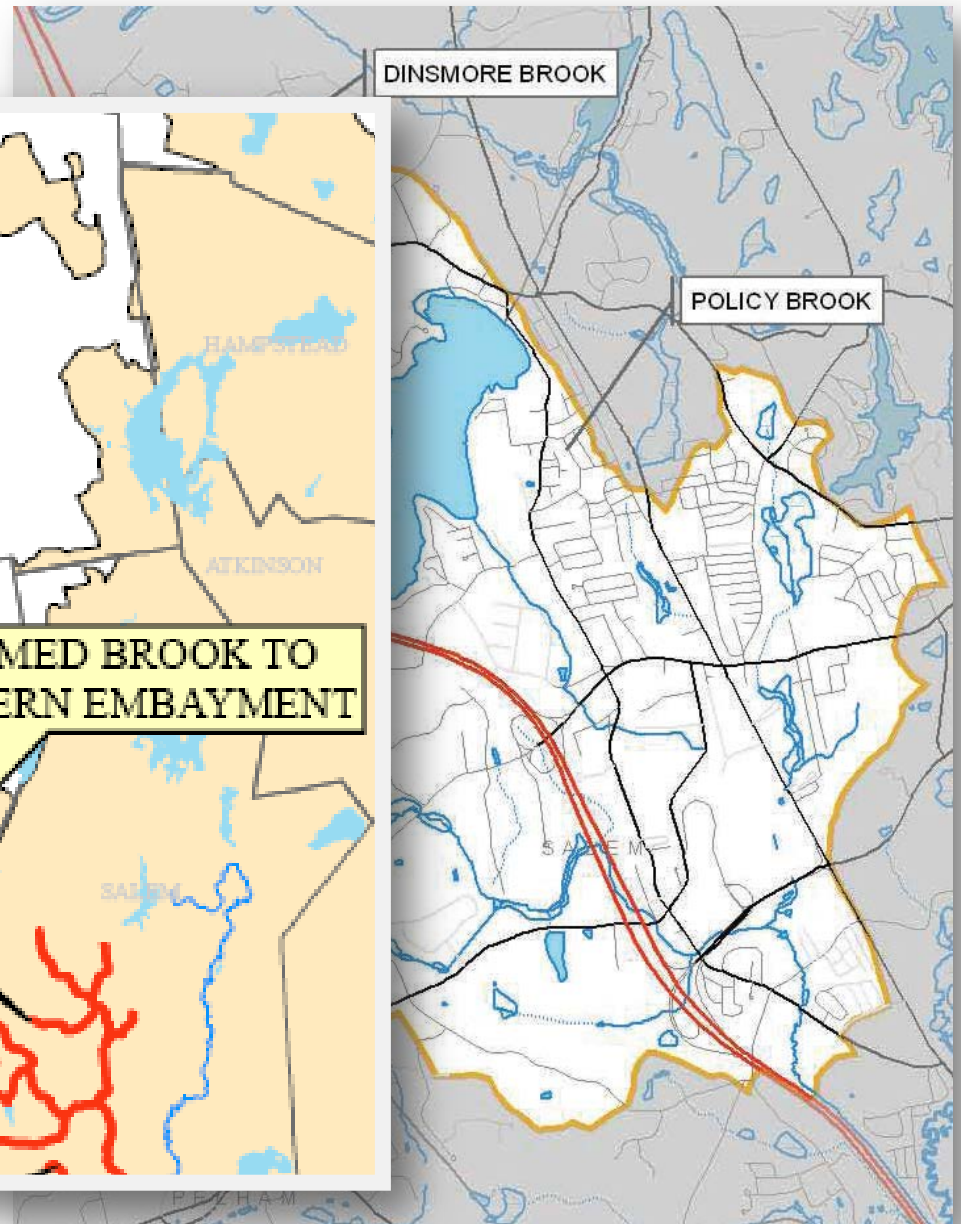
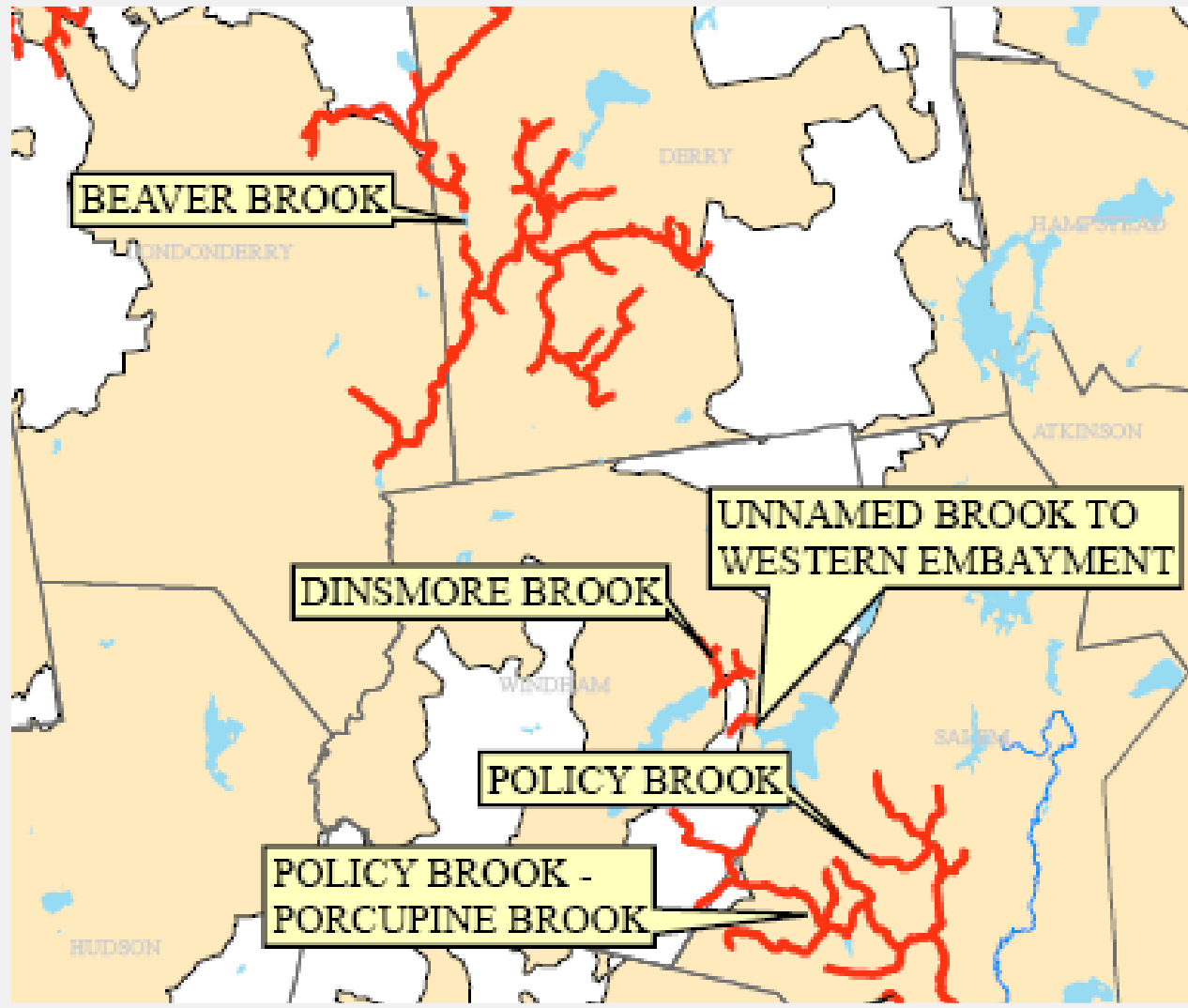
Detail 1



Detail 2



I-93 expansion



Policy Brook Data

KEY FACTS

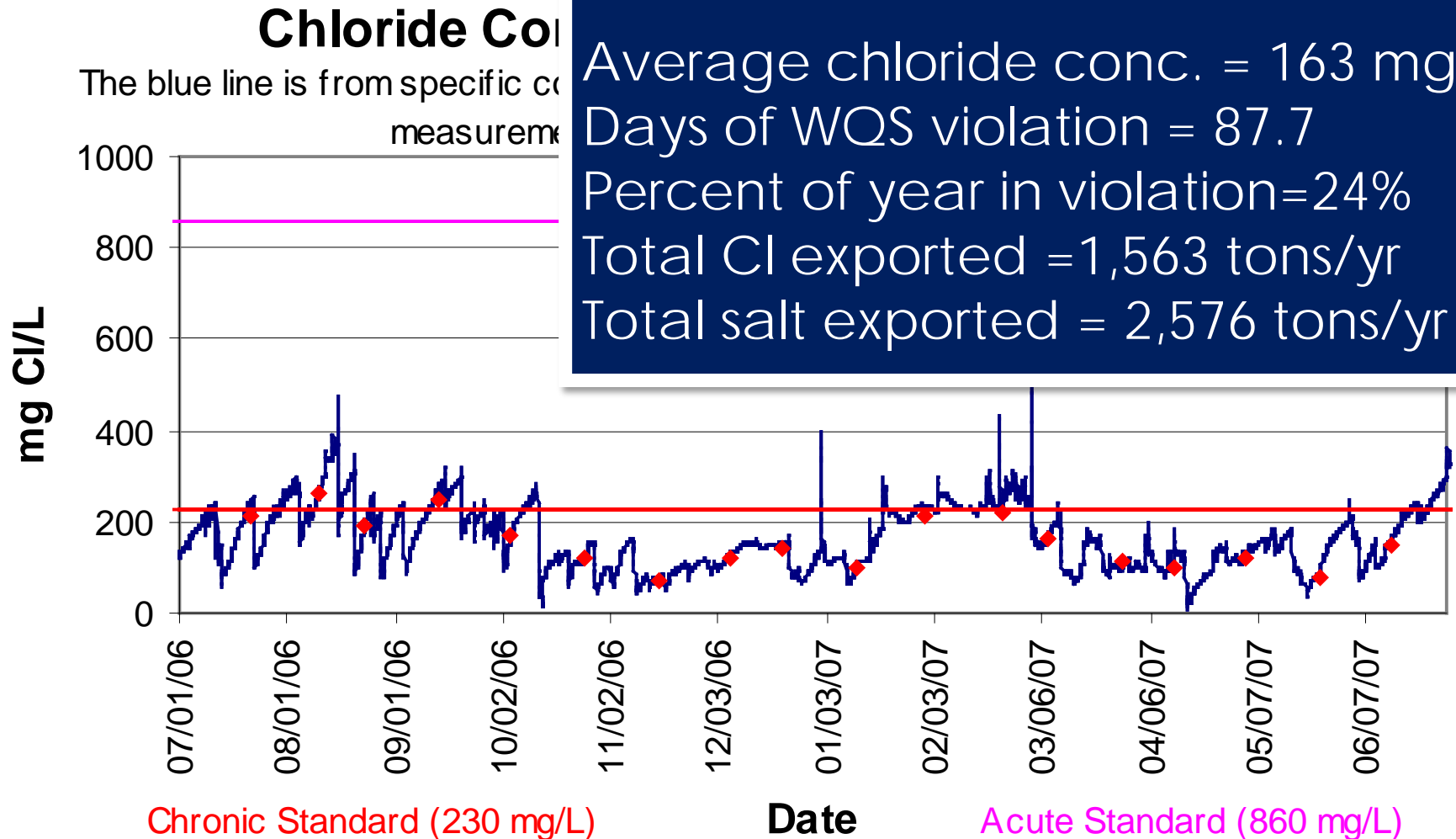
Average chloride conc. = 163 mg/L

Days of WQS violation = 87.7

Percent of year in violation = 24%

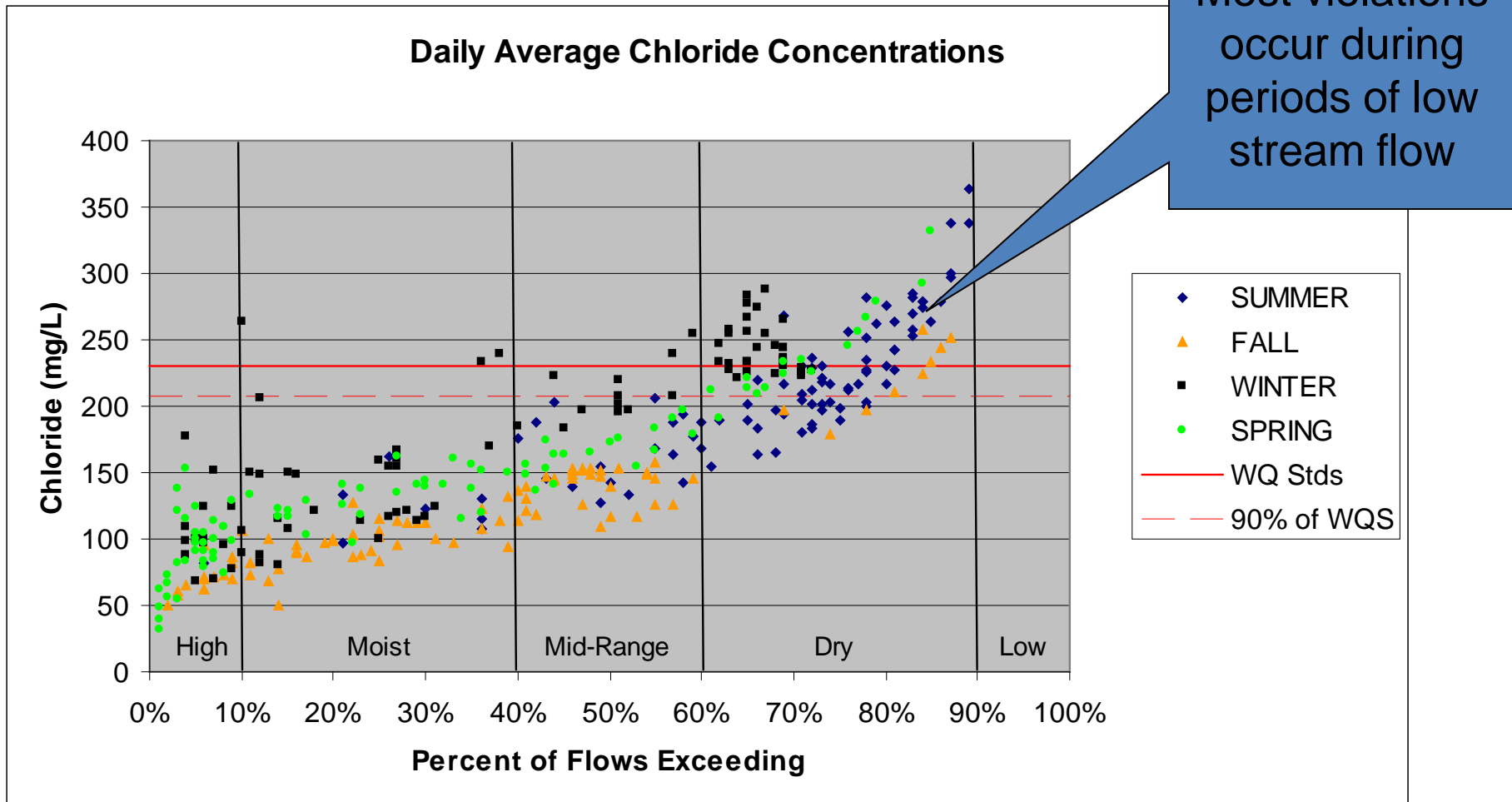
Total Cl exported = 1,563 tons/yr

Total salt exported = 2,576 tons/yr

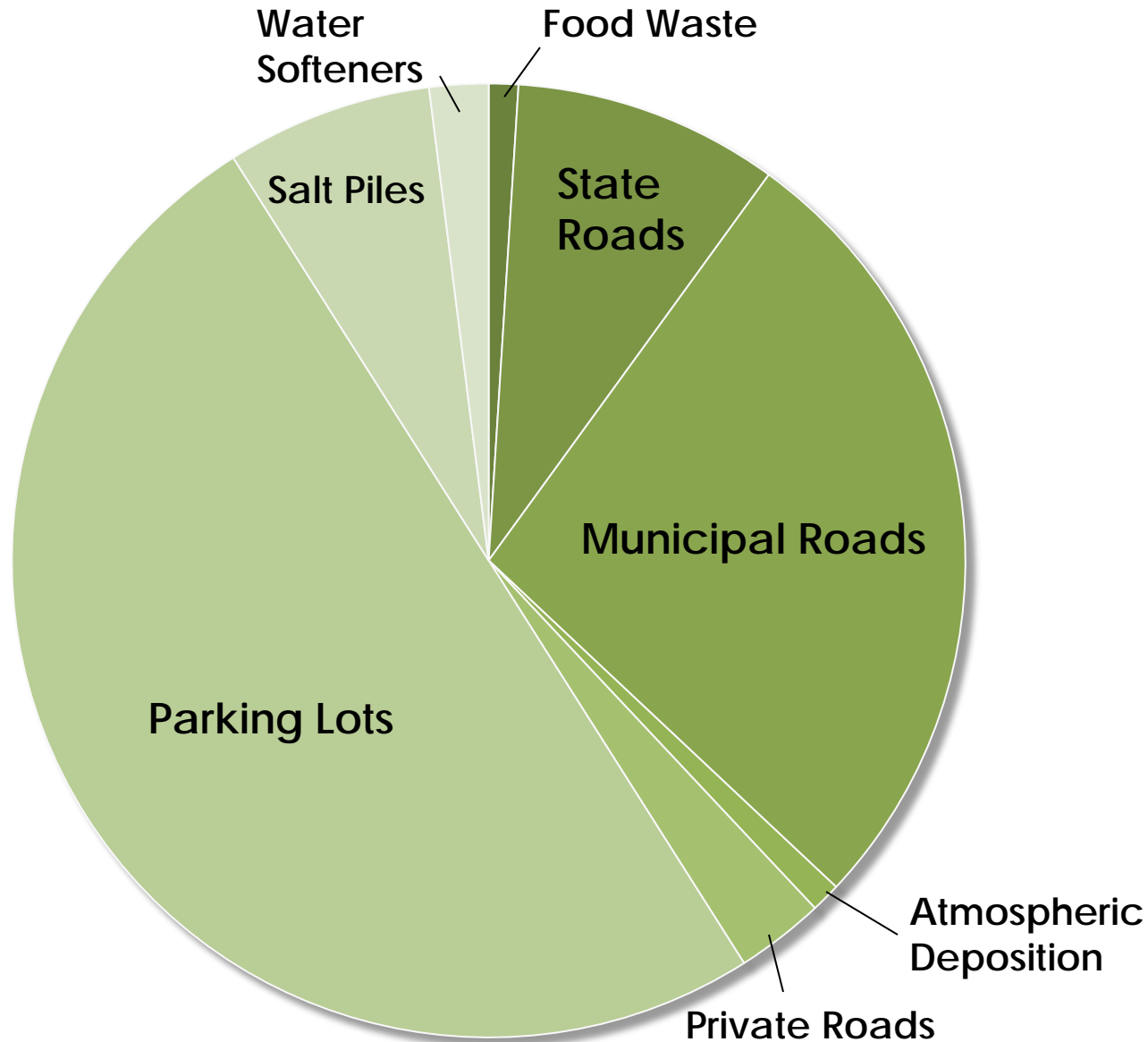


TMDL

Based on flow duration curve



Where Does the Salt Come From?



So

- Toxic situation for fish
- Residential well replacements
- Dead trees and plants
- 41 Impairments in NH
- 4 TMDLs
- Expansion of I-93 limited
- Other potential limits to developments
- Requirements in MS4 permits







Overcoming the Challenges

- Practice of snow and ice removal
- Liability
- Culture



Salt Applicator Certification Program

- Improve efficiency
- Reduce costs
- Maintain public safety
- Track usage/documentation
- Improve environmental quality



UNIVERSITY of NEW HAMPSHIRE
Technology Transfer Center



Green Snow Pro Certification Course

A University of New Hampshire
Technology Transfer Center
Training Course

Presenter:
Patrick Santoso



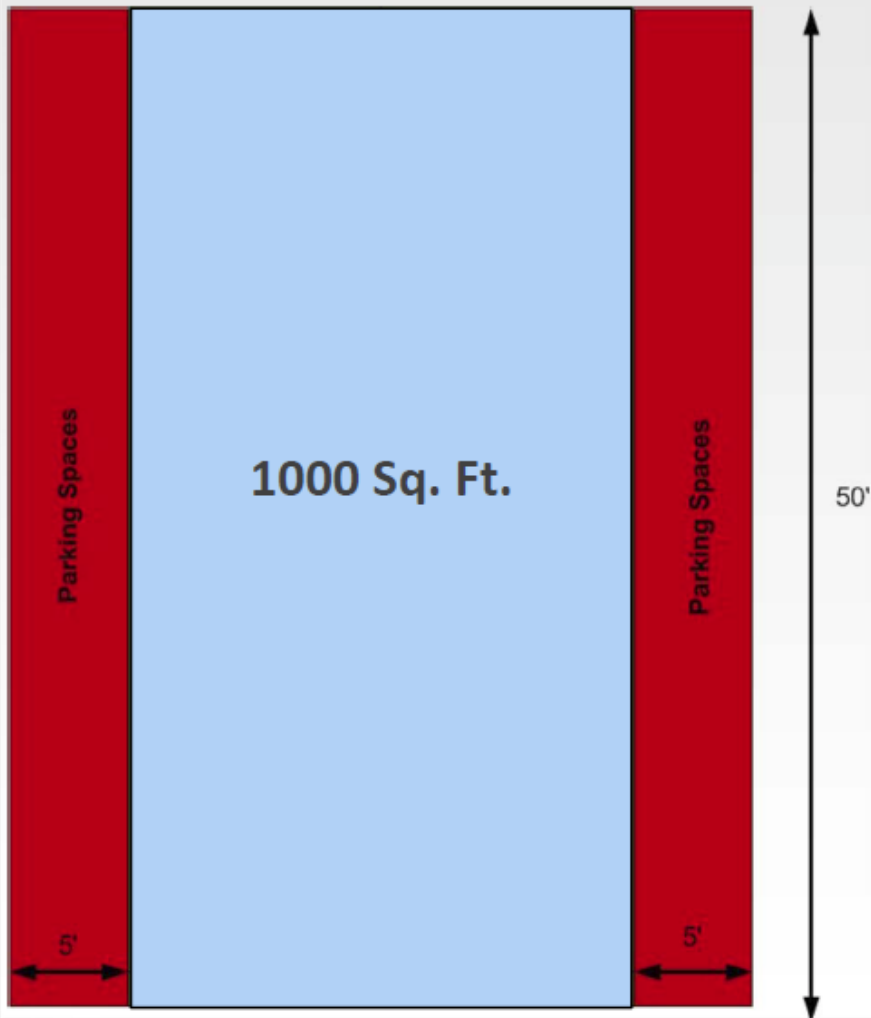
Program Overview

- Environmental & Infrastructure Concerns (20 Minutes)
- Pre-Season Preparation, Site Inspection & Expectations (20 Minutes)
- Calibration Demo (45 Minutes)
- Pre-Treatment: Before the Storm (35 Minutes)
- During The Storm Activities (45 Minutes)
- Record Keeping & Salt Accounting System (10 Minutes)
- Exam Review (10 Minutes)
- Exam (EASY EXAM!!) (30 Minutes)





Calibration

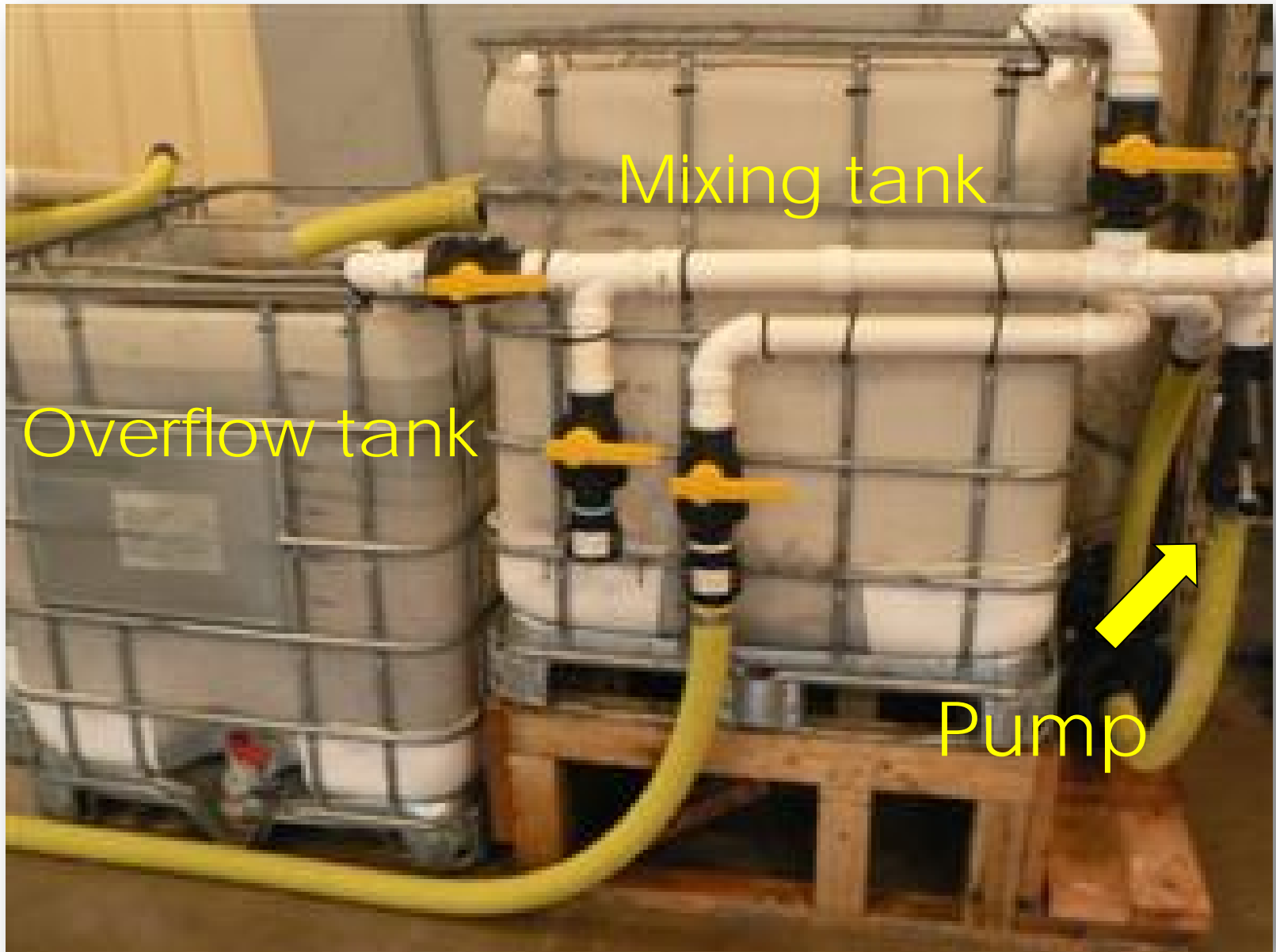


- Measure & Mark Test Grid
- Drive over the test grid at a typical application speed
- Sweep up material and weigh to determine application rate
- Settings to keep track of:
 - Gate Height
 - Auger/Belt Speed
 - Pony Motor RPMs

Hands-on



DIY brine





1-800-992-6878

FREE CASE EVALUATION | 24/7



[Home](#)

[Cases We Handle](#)

[Best Settlements](#)

[15 Offices](#)

[About Us](#)

[Contact](#)

[Blog](#)



Slip and Fall Lawyer | Lawsuit

FREE CASE EVALUATION

(with no obligation)

SEND

Submitting this form does not create an Attorney/Client relationship. Some Cases are referred to outside counsel.

[Read Disclaimers and Policy Statement](#)



DON'T WAIT
Clock's Ticking

If you have suffered an injury from a slip and fall accident, you may be able to get a cash settlement for your medical bills, lost income and pain and suffering, among other losses. Our experienced slip and fall lawyers charge no fee unless you receive a settlement or award. Please contact us toll free 24/7 or online for a free (no obligation) case evaluation.



*Have You Been Injured in a Slip and Fall Accident?
Call Us Today for a Free Case Evaluation.*

Do You Have a Slip and Fall Case?

Liability

- GreenSno Pro is a certification
- Leads to liability protection
- Based on ski-area protections



CHAPTER 508
LIMITATION OF ACTIONS
Section 508:22

508:22 Liability Limited for Winter Maintenance. –

I. **No commercial applicator** as defined in RSA 489-C:1, II and certified under RSA 489-C:2, **or owner, occupant, or lessee of land** whose premises is maintained by a commercial applicator certified under RSA 489-C:2, **shall be liable for damages** arising from insufficiencies or hazards on any premises owned, occupied, maintained, or operated by them, even with actual notice thereof, **when such hazards are caused solely by snow or ice**, and the commercial applicator's, owner's, occupant's, or lessee's failure or delay in removing or mitigating such hazards is the result of its implementation, absent gross negligence or reckless disregard of the hazard, of best management practices for winter road, parking lot, and sidewalk maintenance adopted and published by the department of transportation and the department of environmental services.

Nothing changes if nothing changes ...

pro·fes·sion·al prə'feSH(ə)n(ə)l

Noun

1. a person engaged or qualified in a profession.





**KEEP CALM
AND
RELAX
I'M A
PROFESSIONAL**

Driver behavior



Walker behavior?

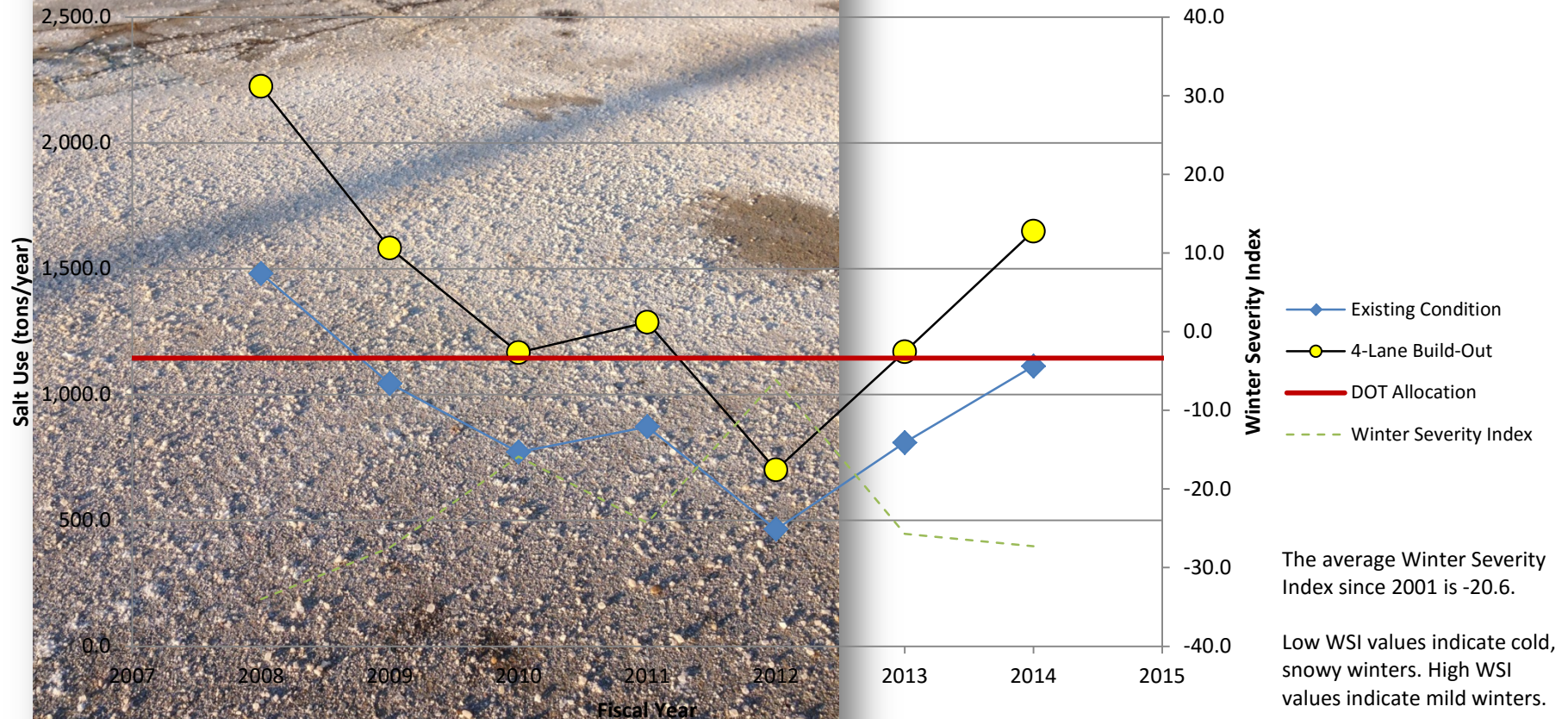


Source: American in Moscow blog
<http://usa-moscow.blogspot.com/2011/01/learning-to-walk.html>

Is it working?

DRAFT

Beaver Brook Watershed Actual and Projected Salt Use on State Roads

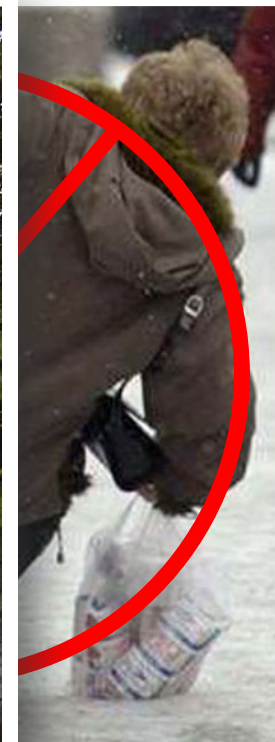


Celebrate success!



Recognize Excellence!

visualphotos.com



Back to the salt mines!



Contact info:
Ted Diers, NHDES
603-271-3289
Ted.diers@des.nh.gov



355-

355- Rotary at Summit of Salmon R. Hill