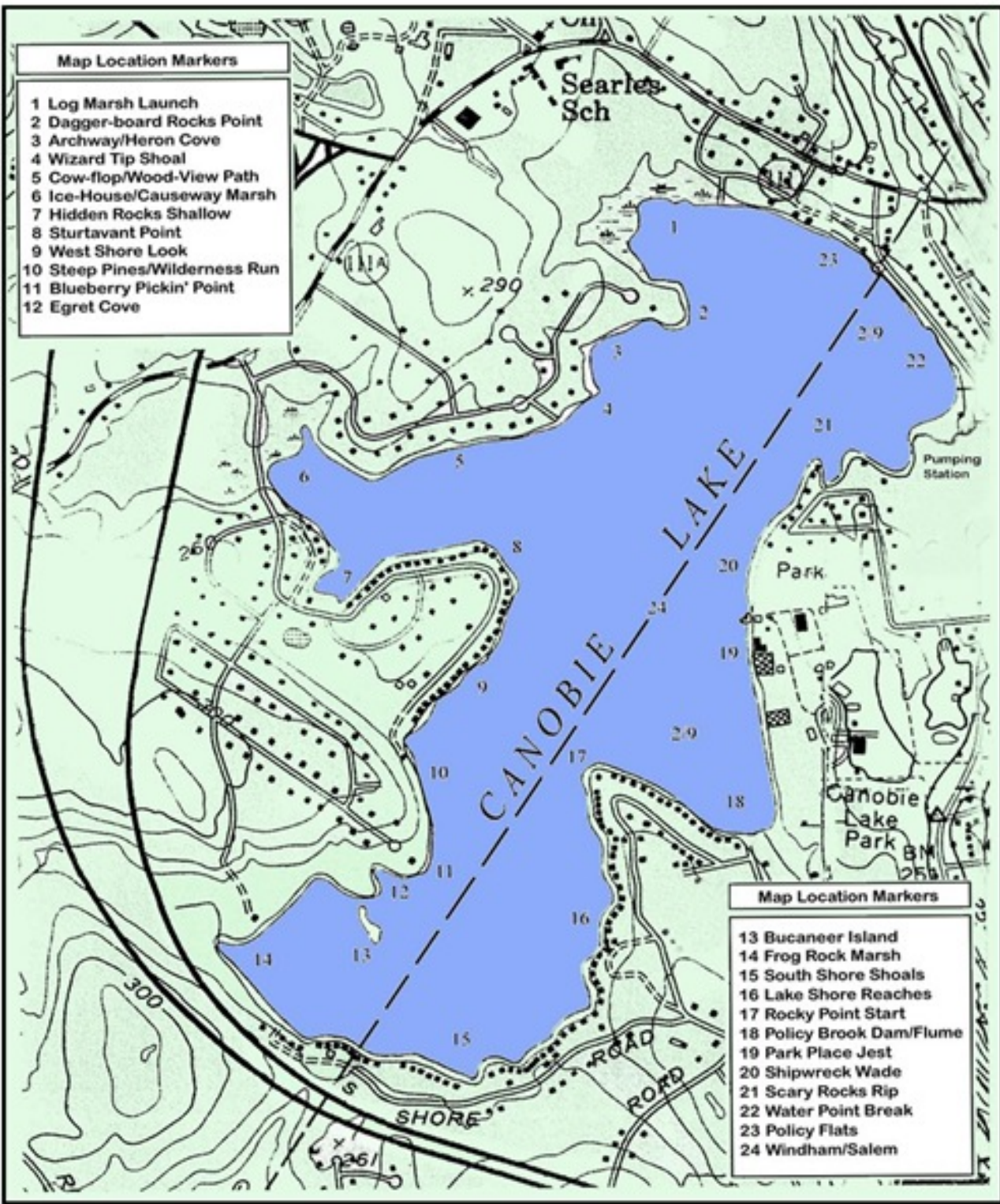


Lessons Learned: Rebuilding I-93 while protecting water quality

- Canobie Lake perspective
- Presenter: Bill Schroeder, president
Canobie Lake Protective Association



- Map Location Markers**
- 1 Log Marsh Launch
 - 2 Dagger-board Rocks Point
 - 3 Archway/Heron Cove
 - 4 Wizard Tip Shoal
 - 5 Cow-flop/Wood-View Path
 - 6 Ice-House/Causeway Marsh
 - 7 Hidden Rocks Shallow
 - 8 Sturtavant Point
 - 9 West Shore Look
 - 10 Steep Pines/Wilderness Run
 - 11 Blueberry Pickin' Point
 - 12 Egret Cove

- Map Location Markers**
- 13 Buccaneer Island
 - 14 Frog Rock Marsh
 - 15 South Shore Shoals
 - 16 Lake Shore Reaches
 - 17 Rocky Point Start
 - 18 Policy Brook Dam/Flume
 - 19 Park Place Jest
 - 20 Shipwreck Wade
 - 21 Scary Rocks Rip
 - 22 Water Point Break
 - 23 Policy Flats
 - 24 Windham/Salem

Canobie Lake Facts

- 373 Acres
- Class A waterbody
- A water supply for Salem
- Small watershed – approx. 700 acres
- No major tributaries

Canobie Lake Protective Association

- Mission: to protect and improve the quality of Canobie Lake and the surrounding watershed
- Approximately 80 members
- Newsletter and info at www.CanobieLake.org
- Work with NHDES, NHDOT, EPA and town officials (Salem and Windham)

I-93 Construction: Erosion Control Meetings

- Meet weekly
- Attendees:
 - NH DOT
 - NH DES
 - General Contractor
 - Erosion Control Contractor
 - Cobbetts (CPIA) rep
 - Canobie (CLPA) rep

What happens at an Erosion Control Meeting?

- Review implementation of the SWPPP (Storm Water Pollution Prevention Plan)
- Look at maps
- Review what's happening now
- Make and review Action Items for erosion control

Is it important to have Lake reps there?

- I think so
- We are not erosion control experts
- But, we ask good questions
- We occasionally have a good suggestion
- Everyone knows that we care
- We inform the local folks what's going on
- We gain appreciation of the work being done

A challenge – Multiple contracts

- The public thinks of I-93 expansion as one project, but it's multiple contracts
- Each contract has it's own General and Environmental contractors
- The challenge is to make sure the things learned on one contract, re: erosion control, get carried on to the next contract
- That burden falls on DOT and DES

The Goal: No WQS Violations

- How are we doing?
- We've had a few violations
- Had two incidents of sediment plumes into Canobie Lake
- A few others into wetlands, which didn't reach Canobie



Sediment Plume August 26, 2010

What did we learn?

- Use pumps and pipes to move water between Detention Basins, not tanker trucks
- Plugged pre-existing pipes Leak!
- Don't detain water above a pre-existing pipe
- Redundancy is good
- Ten-year storms come every year

How are we doing lately?

- We are doing pretty well
- No violations in 2011
(and we had a lot of snow and rain)
- We need to stay vigilant.

A Strategic Lesson

The highway Design needs to include Construction-phase storm water management considerations.

Thank You to: DOT, DES and Contractors

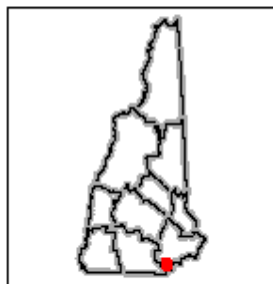
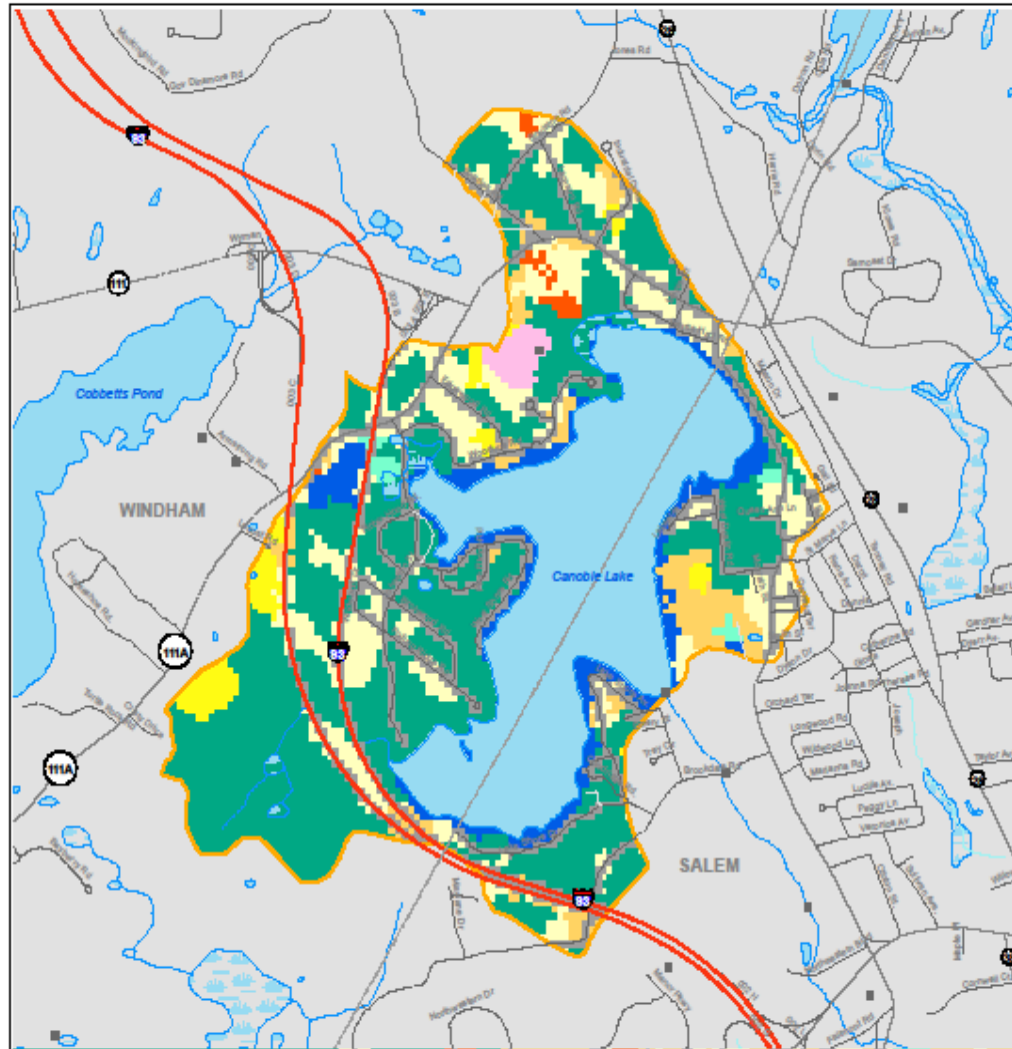
- For educating us (lake representatives)
- For listening to us and our concerns







Canobie Lake Watershed Land Cover



New Hampshire Department of Environmental Services
 Watershed Management Bureau
 20 Hazen Drive
 P.O. Box 95
 Concord, NH 03302-0095

Map produced January 11, 2008
 New Hampshire State Plane Feet Projection
 North American Datum 1983

The coverages presented are under constant revision as new sites or facilities are added. They may not contain all of the potential or existing sites or facilities. NHDES is not responsible for the use or interpretation of this information. Not intended for legal purposes.

0 0.1 0.2 0.3 0.4 Miles



Legend

- | | |
|------------------------|-----------------------------------|
| Canobie Lake Watershed | Town Boundaries |
| Roads (NH/DOT) | Forested |
| Interstate | Cleared/Other Open |
| State | Disturbed |
| Local | Fruit Orchards |
| Private and Class 6 | High/Roadside/Permanent Pasture |
| Hydrography | Non-Forested Wetland |
| River/Stream | Open Water |
| Intermittent Stream | Residential/Commercial/Industrial |
| Lake/Pond | Transportation |
| Marsh/Wetland | |
| Data | |