# The Northeast Regional Mercury TMDL and the 319(g) Mercury Petition

Beth Card and Susy King June 22, 2010





### Who is NEIWPCC?

- New England Interstate Water Pollution Control Commission
- © Compact Member States: New England States and New York
- © Congressionally Authorized Interstate Commission formed in 1947
- Serve and assist our member states on water quality issues
- Coordinate with sister interstate agencies in the Northeast



# Why is mercury a concern in the Northeast?

Risks to human health

Statewide or regional fish consumption advisories in all states

Over 10,000 impaired lakes, ponds, and reservoirs

Over 46,000 impaired river miles



# What have we done to address it?

- **All states implementing stringent mercury reduction programs**
- **Northeast Regional Mercury TMDL** 
  - Submitted to EPA in October 2007, approved by EPA in December 2007
- Northeast States Clean Water Act Section 319(g) Petition for Mercury
  - **Submitted to EPA in October 2008**



# Why a regional TMDL?

- Atmospheric deposition of mercury and fish advisories are problems common to all states in the region
- All states impacted by outof-region sources
- **Less resource-intensive**
- Existing framework for regional collaboration

Northeast Regional Mercury Total Maximum Daily Load

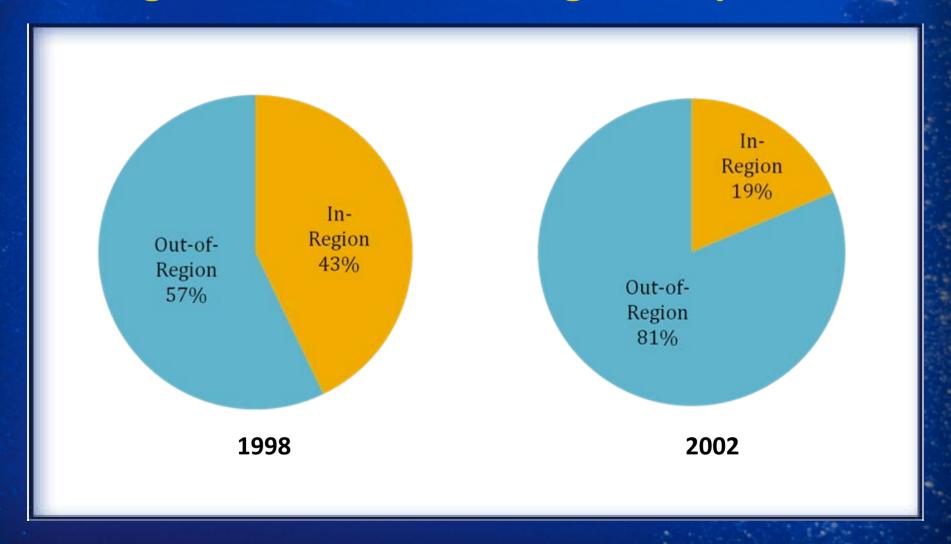


Connecticut Department of Environmental Protection
Maine Department of Environmental Protection
Manachusetts Department of Environmental Protection
New Hampshire Department of Environmental Services
New York State Department of Environmental Conservation
Rhode Island Department of Environmental Management
Vermont Department of Environmental Conservation
New England Interstate Water Pollution Control Commission

October 24, 2007



# Contributions of In-Region and Out-of-Region Sources to In-Region Deposition





# **General Approach**

**Based on MN Statewide Mercury TMDL** 

 Assumes proportional relationship between reductions in mercury emissions, deposition, and fish tissue concentrations

Accounts for deposition due to natural sources



# **TMDL Baseline**

Baseline year 1998

Baseline fish concentration 1.14 ppm for smallmouth bass



Initial target fish concentration 0.3 ppm



# Current Fish Tissue Levels 1.14 ppm

74% reduction

Target Fish Tissue Level 0.3 ppm



In-Region Sources 2,092 kg/yr



Anthropogenic Sources 4,879 kg/yr



Out-of-Region Sources 2,787 kg/yr Deposition of Mercury



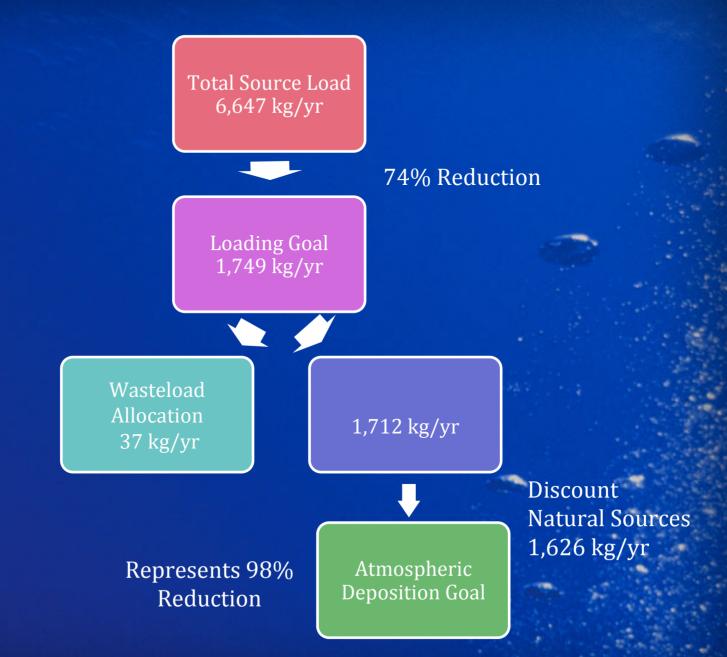
141 kg/yr



6,647 kg/yr

Natural Sources 1,626 kg/yr





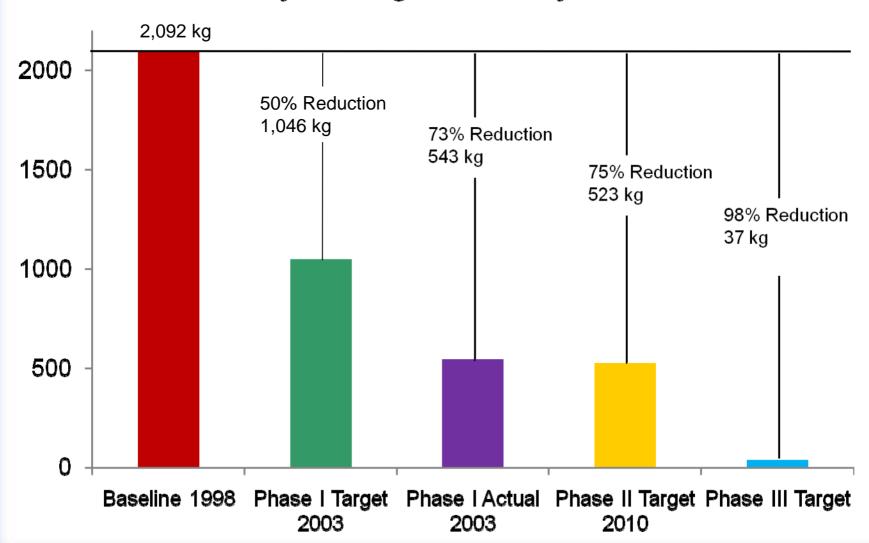


# **Adaptive Implementation**

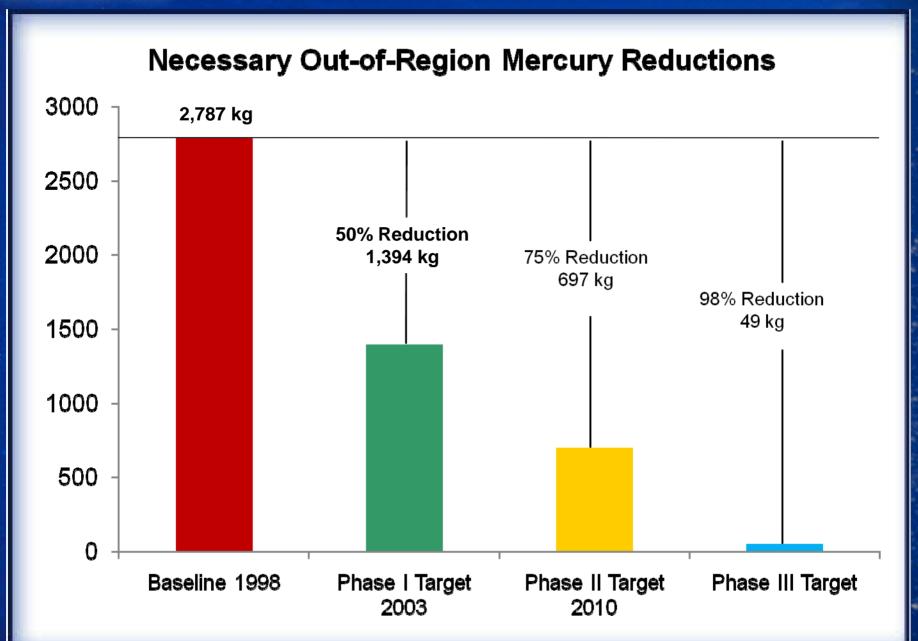
- Three-phase plan: goals and dates match regional mercury action plan
- All Northeast states will continue with mercury reduction initiatives in place
- Re-evaluate fish tissue, emissions, and deposition data after completion of Phase II in 2010
- Reconsider end goal and timeline



#### **Necessary In-Region Mercury Reductions**









### Where are we now?

**States are continuing ongoing mercury reduction activities** 

- Re-evaluation of the TMDL is now underway
  - Updating emissions and deposition data
  - Regional fish tissue monitoring project
- Using the CWA §319(g) Conference to work with the states and EPA on national initiatives



# CWA § 319(g)(1) 33 U.S.C. § 1329(g)(1)

"If any portion of the navigable waters in any State which is implementing a management program approved under this section is not meeting applicable water quality standards or the goals and requirements of this chapter as a result, in whole or in part, of pollution from nonpoint sources in another State, such State may petition the Administrator to convene, and the Administrator shall convene, a management conference of all States which contribute significant pollution resulting from nonpoint sources to such portion."



# 319(g) Process

Step 1 - State or States with approved nonpoint source management plans determine that waters are being impaired in-part due to nonpoint source pollution from another state.

Step 2 – State(s) file a petition with the EPA Administrator.

Step 3 – EPA Administrator shall convene a management conference, the purpose of which is to develop an agreement for reductions to be made by those states contributing pollution.



# NESCAUM Source Apportionment Study

- Based on atmospheric deposition modeling undertaken by EPA HQ Contractor
- Estimated the amount of mercury deposited in Northeast states from each of the lower 48 states
- Allowed us to determine the states that are the most significant contributors to mercury deposition in the Northeast states



# Petition Supports the Need and Purpose for the Conference

State NPS Programs Approved

Reviewed Approved TMDL – Documentation of Impairments

**Identified Contributing States** 



# What Do We Want?

Fish that are safe to eat

**Olymplementation of the TMDL** 

Strong federal leadership on mercury issues



# What Do We want?

State mercury assessments and action plans

Development and implementation of national mercury reduction plan



# **Next Steps**

Come to agreement with EPA and contributing states

Implement mercury reductions

Identify process and timeline for EPA and states to work on next steps



# **Contact Information**

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