

US EPA ARCHIVE DOCUMENT

Using the Clean Water Act to Reduce Mercury in the Northeast:

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

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New England Interstate Water
Pollution Control Commission

Why is mercury a concern in the Northeast?

- 💧 **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?

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 out-of-region sources
- 💧 Less resource-intensive
- 💧 Existing framework for regional collaboration

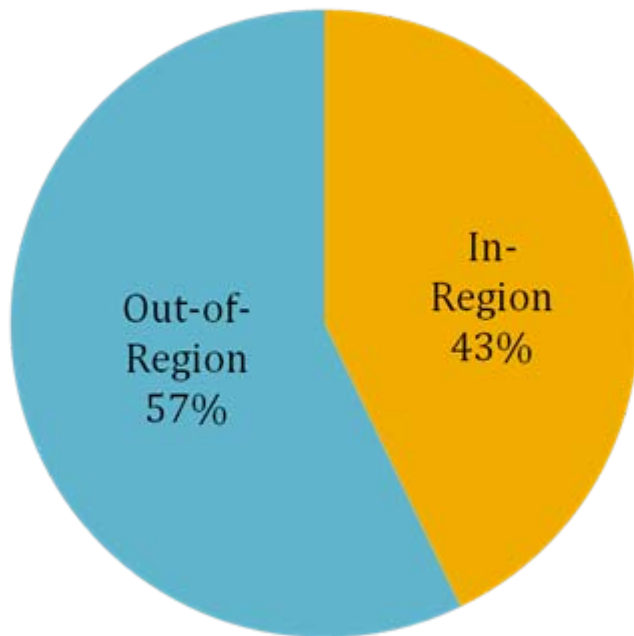
Northeast Regional Mercury Total Maximum Daily Load



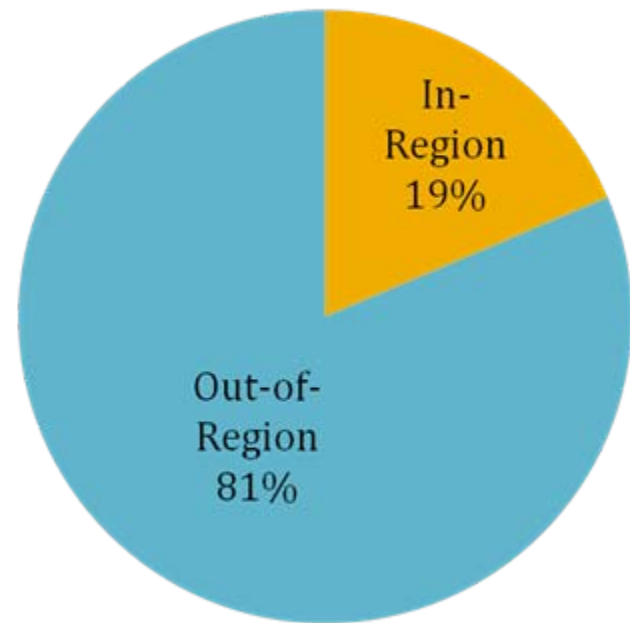
Connecticut Department of Environmental Protection
Maine Department of Environmental Protection
Massachusetts Department of Environmental Protection
New Hampshire Department of Environmental Services
New York State Department of Environmental Conservation
Rhode Island Department of Environmental Management
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



1998



2002

Source: NESCAUM, based on REMSAD modeling

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

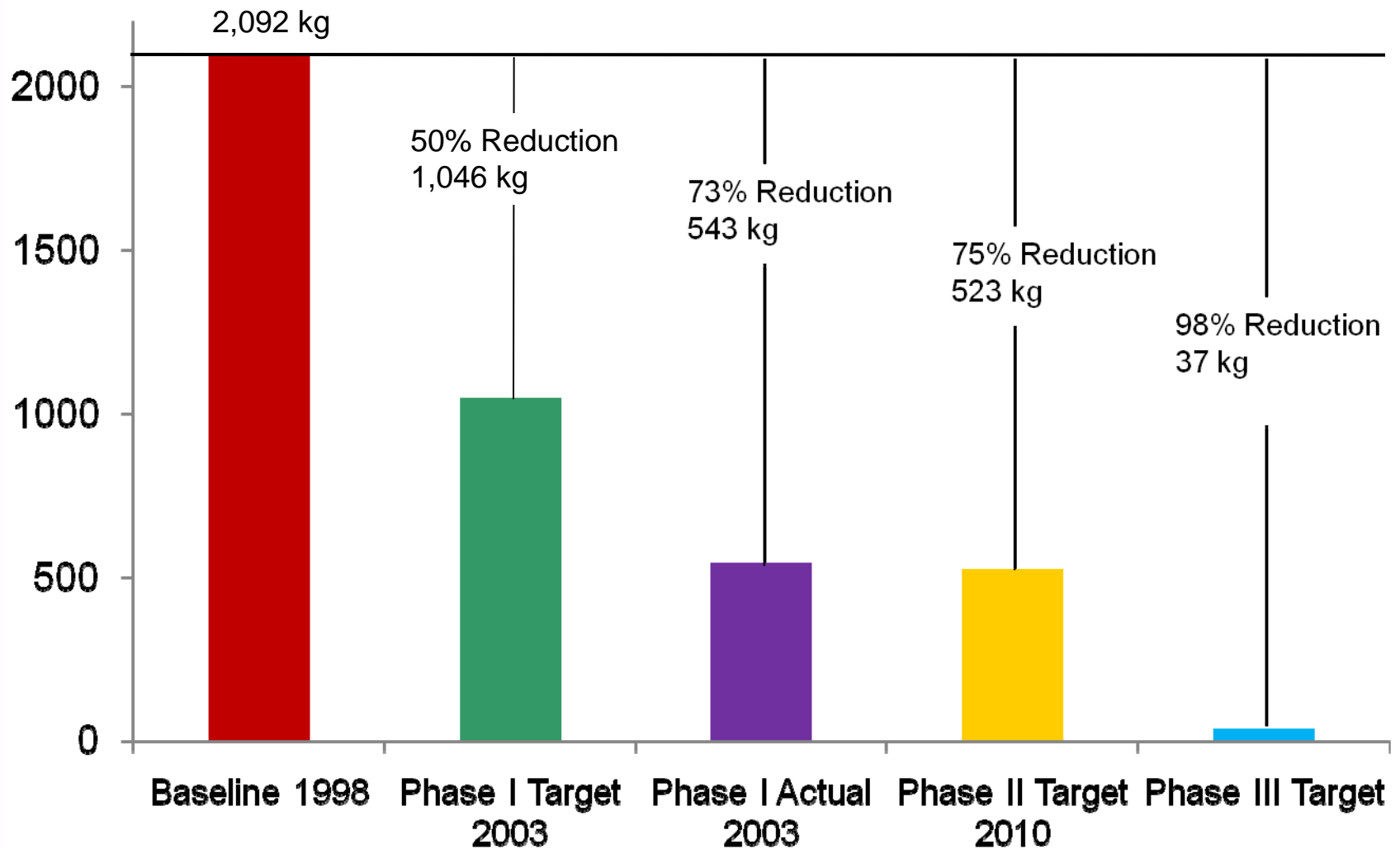
Target Fish Tissue Level
0.3 ppm

**Translates into need for 98% reduction in anthropogenic
mercury emissions from all sources**

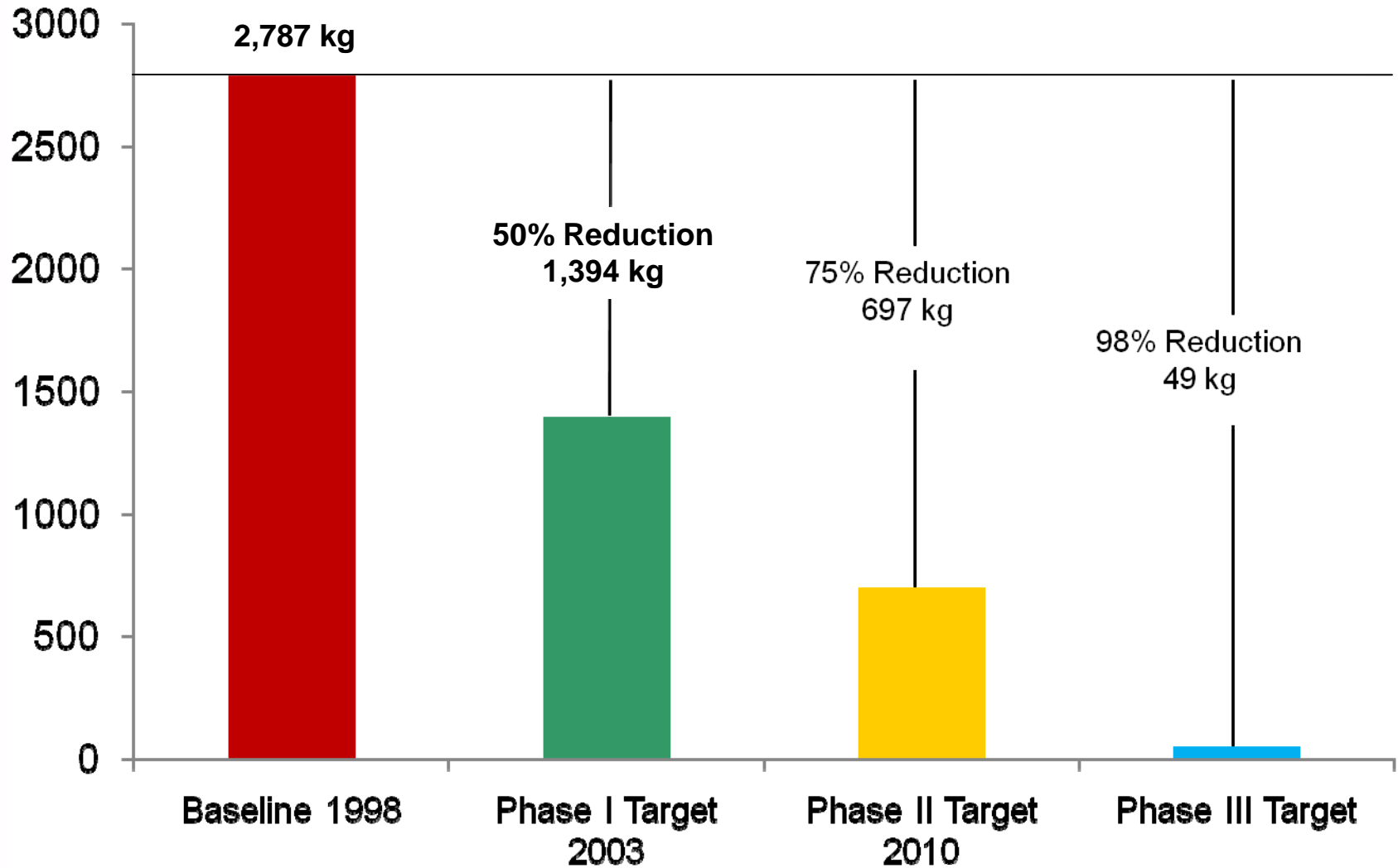
Adaptive Implementation

- 💧 **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



Necessary Out-of-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**
- 💧 **Following through with the 319(g) petition**

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**
- 💧 **Eleven states identified as significant contributors**

Use the Petition to Build a Strong Case

- 💧 **State NPS Programs Approved**
- 💧 **Reviewed Approved TMDL –
Documentation of Impairments**
- 💧 **Identified Contributing States**

What do we want?

- 💧 **Implementation of the TMDL**
- 💧 **Strong federal leadership on mercury issues**
- 💧 **New Mercury Rule for Coal-Fired Power Plants with at least 90% MACT**

What do we want?

- 💧 **Participation of other states**
- 💧 **Comprehensive national mercury reduction strategy**
- 💧 **Fish That Are Safe to Eat**

Next Steps

- 💧 **319(g) Management Conference – June 2010**
- 💧 **Come to agreement with EPA and contributing states**
- 💧 **Implement mercury reductions**

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💧 **EPA Regions 1 and 2**

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