

Natural Resource Damages Restoration Planning Nyanza Superfund Site



Nyanza NRD Trustee Council

U.S. Fish and Wildlife Service

Massachusetts Executive Office of Energy and Environmental
Affairs

National Oceanic and Atmospheric Administration

TOPICS



- **Natural Resource Trustees and Natural Resource Damages (NRD) Assessment and Restoration**
- **Nyanza Federal Superfund Site, Ashland**
 - NRD SETTLEMENT:
\$3.0 Million
 - Restoration Plan



Natural Resource Damages Assessment and Restoration



➤ Trustees

- Appointed to serve as Trustees of natural resources on behalf of the public
 - U.S. Fish and Wildlife Service
 - MA Executive Office of Energy and Environmental Affairs
 - National Oceanic and Atmospheric Administration

➤ NRD Process

- Assess injuries to natural resources resulting from release of hazardous substance or oil
- Seek damages from responsible parties to compensate the public
- Develop & implement plans to restore, replace, or acquire the equivalent of injured natural resources

How is NRD different than cleanup?



A release of oil or hazardous materials...

Cleanup

EPA, MA DEP, U.S. Coast Guard

- Assess extent of contamination
- Control source
- Reduce risk to human health & environment



NRD

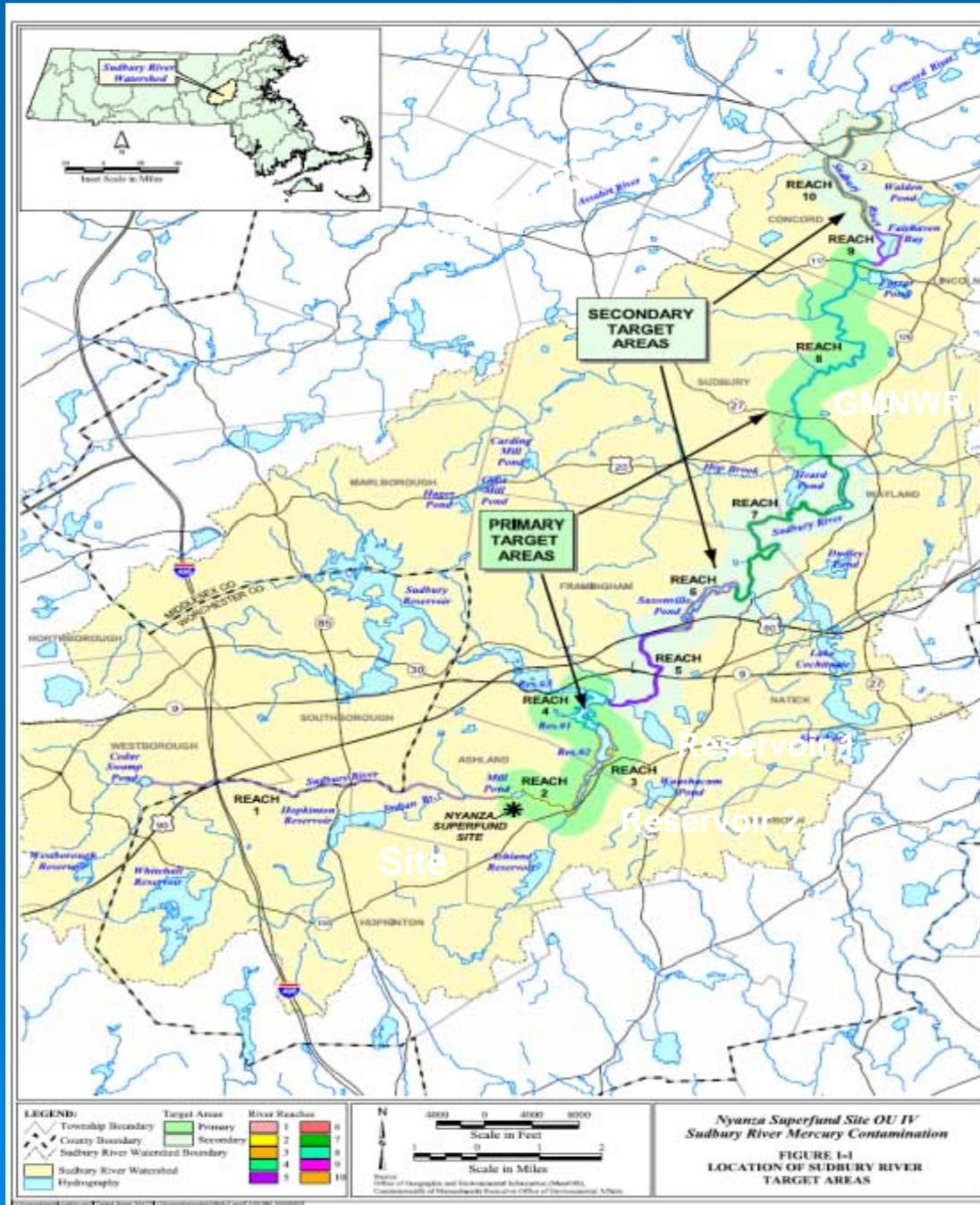
Trustees: EEA, USFWS & NOAA

- Assess extent of injuries
- Restore resource
- Compensate public for loss of resource



Nyanza Site Cleanup: On-going EPA Activities

- Sudbury River assessment is part of EPA's ongoing response to impacts from the Nyanza chemical company
- Nyanza was the source of significant quantities of mercury deposited in the River between 1917 and 1978.
- Sudbury River Study Area includes 26 downstream miles divided into 10 "reaches"



Nyanza Site: EPA - Next Steps

- Finalize Ecological Risk Assessment
- EPA to prepare a Feasibility Study (“FS”)
 - FS evaluates remediation alternatives (depending on level of risk)
- Typical remedial alternatives evaluated at other sediment sites include:
 - Dredging, Capping, and Monitored Natural Restoration
 - Combinations of the above
- EPA will issue a Proposed Plan describing preferred remedy
 - This will be available for Public Comment
 - There will be a Public Hearing (tentatively to be held in 2009)



Nyanza NRD

\$3 million Settlement

Scope of Contamination

Injured natural resources

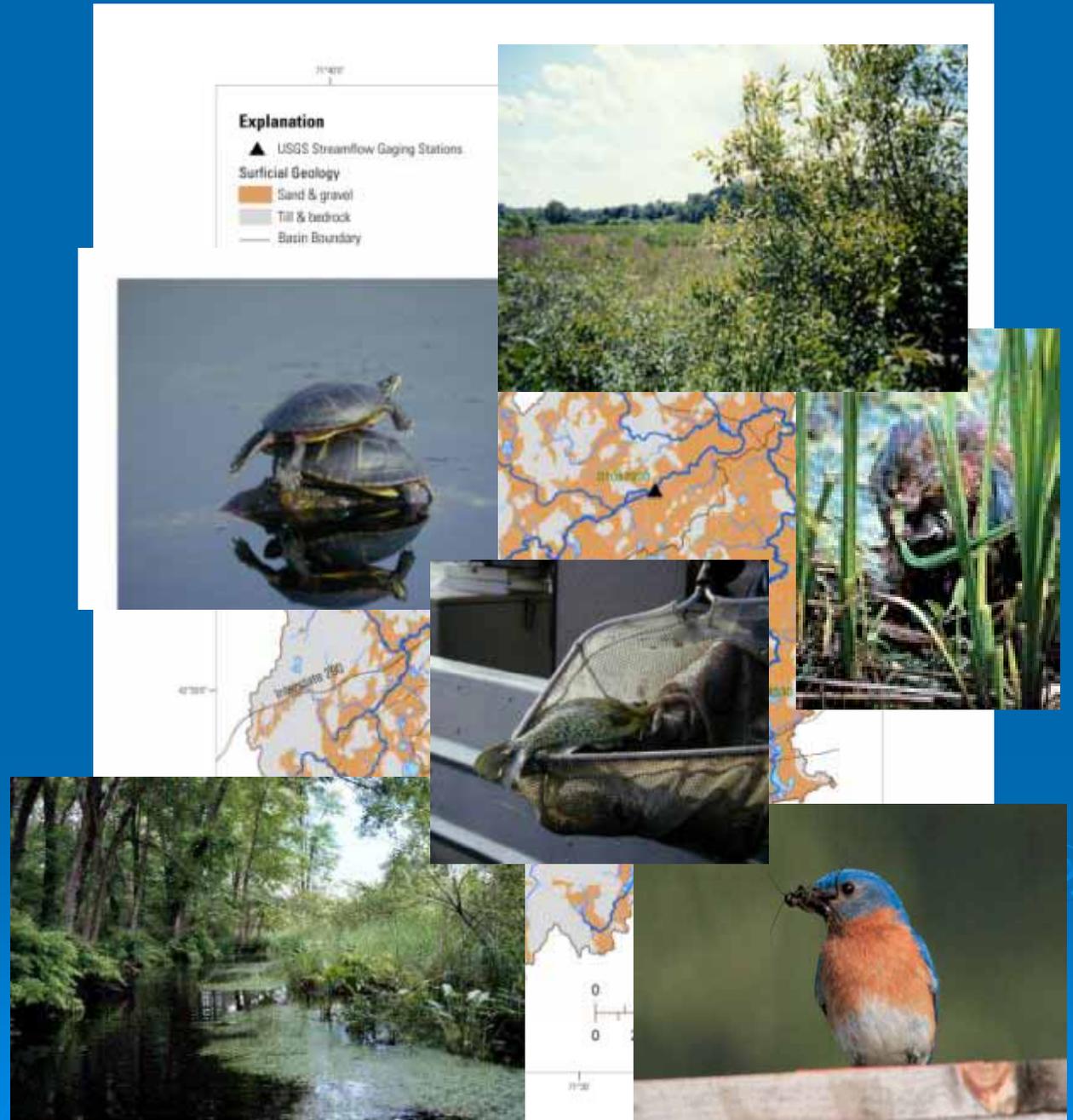


Figure 3. Surficial geology in the Sudbury and Assabet River Basins

Nyanza NRD Restoration Plan



Injured Resources

- Aquatic habitat
 - Sudbury River, floodplain, wetlands
- Biological Resources
 - Fish, amphibians, reptiles, benthic aquatic organisms, birds and mammals
- Recreational fishing
- Groundwater

Restoration Goals

- Restore or enhance habitat
- Improve health of biota
- Enhance public access
- Protect groundwater quantity and quality

Nyanza NRD Restoration Plan



NRD Trust Funds available:

- \$3.9 million
 - to be expended jointly by State & Federal Trustees

- \$237,000
 - to be expended by EEA for injuries to groundwater



Trustee Restoration Planning Process:

- Interagency consultation
- Informal public solicitation
- Evaluate & select restoration projects
- Prepare Draft Restoration Plan/Environmental Assessment (RP/EA)
- Solicit Public Comment
- Prepare Final RP/EA
- Implement Restoration Plan

Nyanza NRD Restoration Plan



Target Schedule

- June 11, 2008
 - Trustees invite public to submit restoration project ideas over 90-day period

- September 9, 2008: Restoration project ideas due to Trustees

- July - September 2008: Trustees screen potential restoration ideas and gather additional information

- March 2009
 - Draft Restoration Plan released for public comment
 - Trustees hold Public Meeting

- September 2009:
 - Final Restoration Plan released to public

- 2009 – 2010: Restoration Projects underway

Nyanza NRD Restoration Plan



- To submit restoration project ideas:
 - Use NRD Assessment Restoration Project Information Sheet
 - Organization
 - Restoration Activity
 - Project Status
 - Restoration Description and Benefits
 - Project Partnerships

 - Consider carefully Trustee Project Selection Criteria (see handout)

Nyanza NRD Restoration Plan



- **Project Selection Criteria (see handout)**
- **Eligibility** – Projects must meet Eligibility Criteria in order to be further considered and evaluated by the Trustees
- **Evaluation** – Eligible restoration projects will be prioritized by the Trustees through a qualitative assessment of their value and feasibility

Nyanza NRD Restoration Plan



➤ Eligibility Criteria

- Restore, replace, and/or acquire the equivalent of natural resources or natural resource services injured by the release of mercury or other hazardous substances from the Nyanza Superfund Site
- In terms of cost, not limit ability of Trustees to expend funds that 1) accomplish Trustee restoration goals and 2) achieve restoration benefits over a wide geographic area
- Be consistent w/ federal, state or local law, regulation or policy
- Not be an action required under other federal, state, or local law
- Not be inconsistent with any ongoing or anticipated remedial actions (i.e., primary restoration) in the Sudbury River

Nyanza NRD Restoration Plan



➤ Evaluation Criteria

- **Proximity**

- Located within geographic location of impacted environment or benefit resources within that environment
 - within or adjacent to Sudbury River mainstem
 - within Sudbury River watershed
 - outside Sudbury River watershed but positively impact the injured natural resources and/or their services that are located within, utilize, or historically utilized the Sudbury River watershed

Nyanza NRD Restoration Plan



➤ Evaluation Criteria

- **Nexus**

- Projects that restore, replace, enhance, or acquire the equivalent of the **same or similar resources or services injured** are preferred to projects that benefit other comparable resources or services

Nyanza NRD Restoration Plan



➤ Evaluation Criteria

- **Ecological**
- **Socio-economic**
- **Feasibility**
- **Effectiveness**

Examples of NRD Restoration @ Other MA Sites



New Bedford Harbor

Fish Passage



Tern Restoration



Land Acquisition & Protection

NRD Restoration Examples



Wetland Restoration



Mill Creek, Chelsea



Lonsdale Drive-In, RI

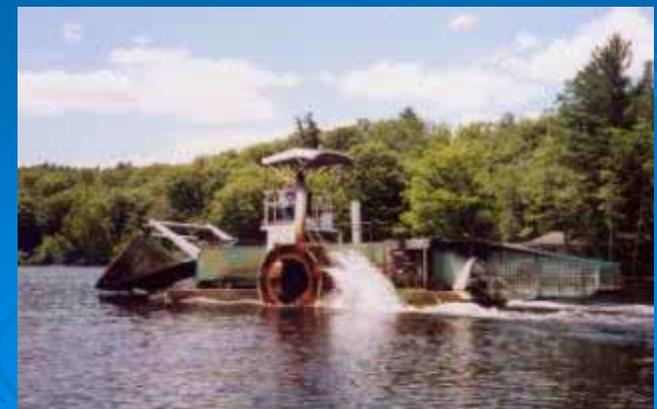
Wetland Enhancement



Quadrats 1-3, June 2002



Quadrats 1-3, June 2004



NRD Restoration Examples



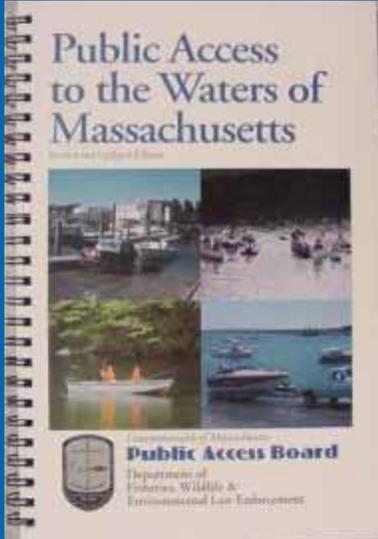
Aquifer Protection



Bird Boxes



Water-based Recreation



Environmental Education and Stewardship



Nyanza NRD Trustees

Agencies & Points of Contact

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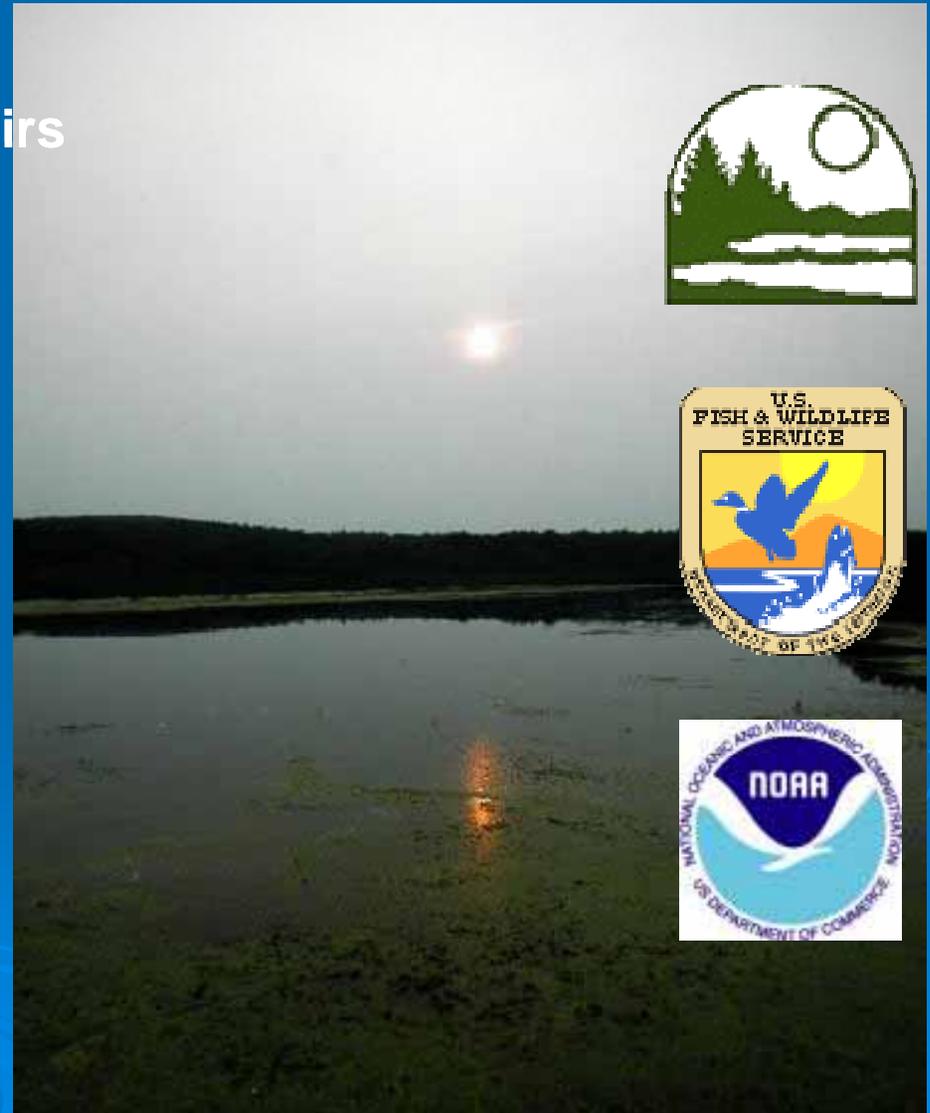


Photo and Map Credits

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- Massachusetts Wetlands Restoration Program
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- U.S. Geological Survey
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- U.S. Environmental Protection Agency
- University of New Hampshire