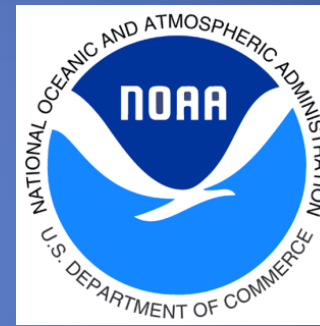
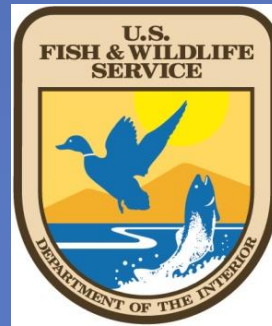


# Nyanza Natural Resource Damages Draft Restoration Plan/ Environmental Assessment



Massachusetts Executive Office of Energy and Environmental Affairs

Department of the Interior – U.S. Fish and Wildlife Service

Department of Commerce – National Oceanic and Atmospheric Administration

December 14, 2011 Public Meeting

# Goal of Tonight's Meeting

- Introduce the Draft Restoration Plan (RP) and Environmental Assessment (EA)
  - Orientation to the document
  - Overview of the RP/EA process
- Public Review and Comment Period
  - Comments received tonight
  - Written Comments due January 23, 2012
    - How can I obtain the document?
      - Ashland Public Library: 66 Front Street

<http://www.mass.gov/dep/cleanup/sites/nrd/nydrpea.pdf>

# Presentation Topics

- Who are the Natural Resource Trustees
- Natural Resource Damages (NRD) Assessment and Restoration Process
- Restoration Plan (RP) and Environmental Assessment (EA)
  - Statutory and Consent Decree Requirements
  - Trustee Restoration Planning Process
  - General Restoration Project Evaluation Criteria
- Preferred and Non-Preferred Restoration Projects
  - Aquatic Biological Resources
  - Riparian and Floodplain Resources
  - Recreation and Public Access
- Next Steps
- Trustee Contact Information

# Who Are the Natural Resource Trustees

Agency staff appointed to serve as Trustees on behalf of the public

- Commonwealth of Massachusetts
  - Secretary of Energy and Environmental Affairs (EEA)
    - Represented by Massachusetts Department of Environmental Protection (MassDEP)
- Department of the Interior
  - U.S. Fish and Wildlife Service (USFWS)
- Department of Commerce
  - National Oceanic and Atmospheric Administration (NOAA)

# Natural Resource Damages (NRD) Assessment and Restoration Process

When there is a release of oil or other hazardous substances or materials, in accordance with the federal Oil Pollution Act ('OPA') and the Superfund Act ('CERCLA'); MA General Law Chapter 21E, Section 5, Trustees:

- Assess injuries to natural resources resulting from the release
- Determine damages by Responsible Party(ies) and seek compensation for injuries
- Develop, prepare and implement plans to *restore, replace, or acquire the equivalent* of injured natural resources

# Nyanza NRD Restoration Plan

Trustees are required to:

- Develop and implement plans to *restore, replace, or acquire the equivalent of injured natural resources*

1998 Consent Decree:

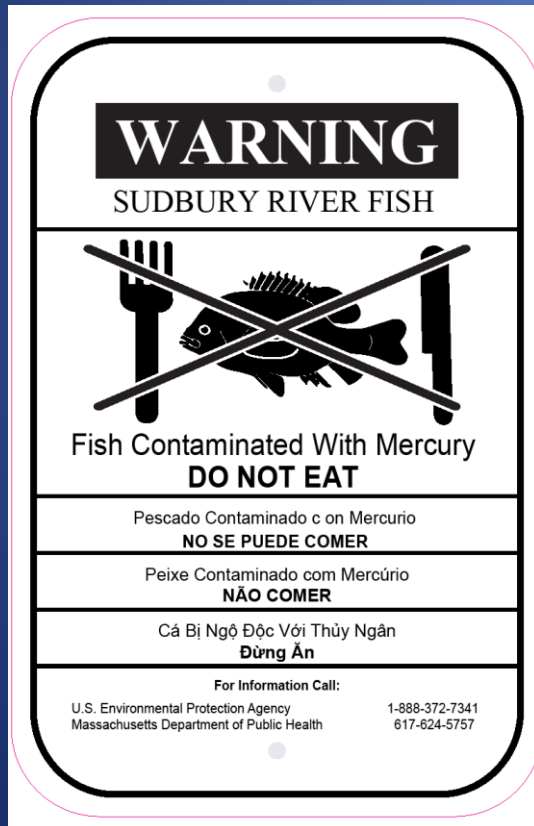
- \$2.8 million for injuries to ecological resources under joint Trusteeship and \$230,769 for injuries to groundwater under Commonwealth Trusteeship

1998 Trustee Memorandum of Agreement:

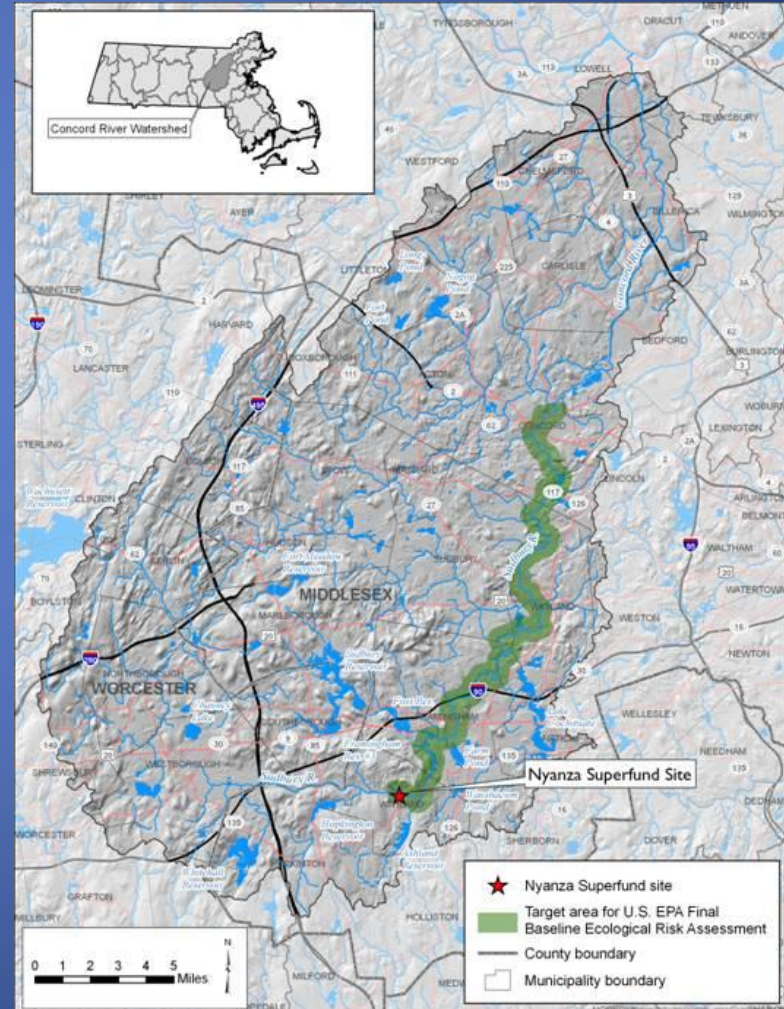
- Jointly plan, implement, oversee and monitor the implemented restoration of natural resources, other than groundwater (in accordance with the Plan)

# Natural Resource Injuries

- Fish Consumption Advisory



- Sudbury River, floodplain and associated resources





# Nyanza NRD Restoration Plan

## Restoration Planning Process:

1. Interagency consultation
2. Public meetings (June, November 2008)
3. Identify and evaluate restoration alternatives
4. Prepare Draft Restoration Plan/Environmental Assessment (RP/EA)
5. **Solicit public review and comment**
6. Revise RP/EA and prepare Final RP/EA
7. Implement restoration projects
8. Oversee and monitor project performance



# Criteria Used to Review Restoration Projects

- U.S. Dept of Interior regulations specify factors to consider (43 CFR 11.82)
- Nyanza NRD Trustee Council developed:
  - Eligibility Criteria
  - Evaluation Criteria
    - High Importance (10 criteria)
    - Medium Importance (6 criteria)
    - Supplemental (3 criteria)

# Proposed Restoration Alternatives

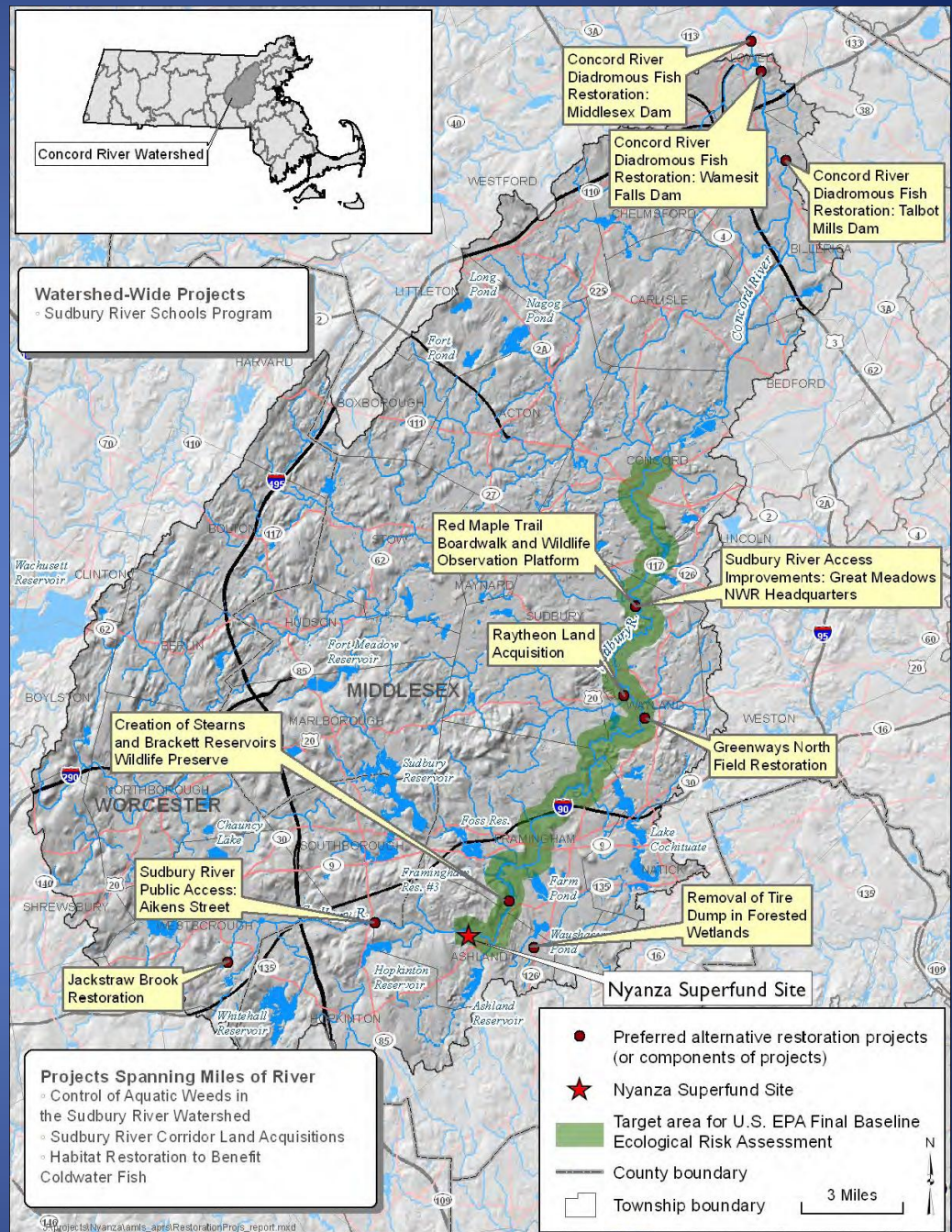
- Tier 1
  - Best fit criteria
  - Top priority for funding
  - Sufficient funding available to implement

As some uncertainty remains regarding implementation of all Tier 1 projects:

- Tier 2
  - Not guaranteed funding
  - Some Tier 1 projects may receive additional funding in Tier 2

# Proposed Restoration Alternatives

Tier 1: \$3,595,000  
 Tier 2: \$1,125,000



# Aquatic Biological Resources (\$1.9M Tier 1, \$425K Tier 2)

- **Removal of Tire Dump in Forested Wetlands (Ashland)**
  - \$0 (project completed by another entity)
- **Control of Aquatic Weeds in Sudbury River Watershed**
  - Tier 1: \$1,098,000 (Sudbury River mainstem)
  - Tier 2: \$395,000 (Concord and Assabet Rivers water chestnut control)
- **Habitat Restoration to Benefit Coldwater Fish**
  - Tier 1: \$300,000
- **Concord River Diadromous Fish Restoration: Feasibility and Stewardship**
  - Tier 1: \$425,000
- **Sudbury River Schools Program**
  - Tier 1: \$90,000
  - Tier 2: \$30,000



# Removal of Tire Dump in Forested Wetlands (Ashland)

- Project completed by another entity: Central Massachusetts Mosquito Control Project (CMMCP) worked with the Town of Ashland to remove tires from the site to remove the potential health hazard of mosquitoes breeding in the tires and spreading disease



# Control of Aquatic Weeds in Sudbury River Watershed

- Tier 1: \$1,098,000 (Sudbury River mainstem)
- Tier 2: \$395,000 (Concord and Assabet Rivers water chestnut control)
- Coordinated by SuAsCo Cooperative Invasive Species Management Area (CISMA)
  - Control purple loosestrife, an invasive species in wetlands
  - Control water chestnut, an aquatic invasive species that covers the water surface
  - Restore native wild rice populations to river reaches in the Great Meadows NWR where invasive species are controlled, with *MassWildlife*



Ron  
McAdow

# Control of Aquatic Weeds in Sudbury River Watershed

- Incorporates elements of the following project ideas:
  - *Aquatic Invasives Species Control (Water Chestnut) – Town of Concord*
  - *Sudbury River Invasive Species Removal (Loosestrife) – Town of Ashland*
  - *Invasive Plant Control (coordinated inventory, removal throughout watershed) – Town of Lincoln*



# Habitat Restoration to Benefit Coldwater Fish

- Tier 1: \$300,000
- Identify and implement habitat restoration actions to benefit coldwater fish populations in the SuAsCo Watershed, in streams that support or historically supported populations of cold water fisheries
- Candidate site: Jackstraw Brook, Westborough
- Other sites will be considered if restoration actions can be shown to provide benefits for coldwater fish populations
  - Vegetated riparian buffer degraded or absent



# Habitat Restoration to Benefit Coldwater Fish

- Incorporates elements of the following project ideas:
  - *Sudbury River Riparian Buffer Restoration - Sudbury River Watershed Organization*
  - *Restoration of Cold-Water Fish in The Sudbury River Basin – USGS and Sudbury River Watershed Organization*

# Concord River Diadromous Fish Restoration: Feasibility and Stewardship

- Tier 1: \$425,000
- Restore or enhance fish passage at:
  - Middlesex Dam
    - Review remnant dam structures and stream channel and determine what, if any, actions are necessary to enhance fish passage
  - Centennial Island Dam
    - Support assessments, based on volunteer-based observational data, of the current passage capability of the existing fishway
  - Talbot Mills Dam
    - Phased approach to investigate potential feasibility of fish passage
    - Phases 1-3: preliminary analyses (legal, hydrology, sediment)
    - Phases 4-5: feasibility and design (surveys, permits, conceptual design)<sub>1,3</sub>



# Concord River Diadromous Fish Restoration: Feasibility and Stewardship

- Incorporates elements of the following project ideas:
  - *Hydrologic and Water-Quality Support for Fisheries Restoration in Reaches of Sudbury River – USGS*
  - *Fisheries Resources Protection and Restoration (component that proposed “Identify the opportunities and barriers to restoring fish passage at the Talbot Mills dam in Billerica”)  
- Organization for the Assabet River (now OARS for the Assabet Sudbury and Concord Rivers)*

# Sudbury RiverSchools Program

- Tier 1: \$90,000
- Tier 2: \$30,000



HELP for the River MassAudubon

- Builds on an existing successful educational program developed and run by MassAudubon
- Work with one elementary and one middle/high school in five Sudbury River communities
- Combination of in-class and field-based environmental education
- Includes an additional component that will be integrated with Neotropical Connections project to communicate the benefits of protecting wintering habitat for bird species that migrate along the Eastern Flyway and utilize the SuAsCo Watershed

# Sudbury RiverSchools Program

- Incorporates elements of the following project ideas:
  - *Sudbury River Environmental Education Program/ Institute (school-based aspect) - SuAsCo Watershed Community Council*

# Riparian and Floodplain Biological Resources (\$1,369,000 Tier 1, \$700,000 Tier 2)

- **Greenways North Field Restoration**
  - Tier 1: \$34,000
- **Neotropical Connections (Belize)**
  - Tier 1: \$75,000
- **Sudbury River Corridor Land Acquisitions**
  - Tier 1: \$720,000
  - Tier 2: \$700,000
- **Creation of Stearns and Brackett Reservoirs Wildlife Preserve**
  - Tier 1: \$540,000



# Greenways North Field Restoration



- Tier 1: \$34,000
- Improve wildlife habitat for insectivorous birds (e.g., tree swallows, song sparrows and house wrens) that use the upland areas along the river for nesting, resting and feeding
- Control invasive buckthorn in a seven-acre field adjacent to the Sudbury River and encouraging the growth of native species
- Field is owned by Sudbury Valley Trustees and maintained as a conservation area

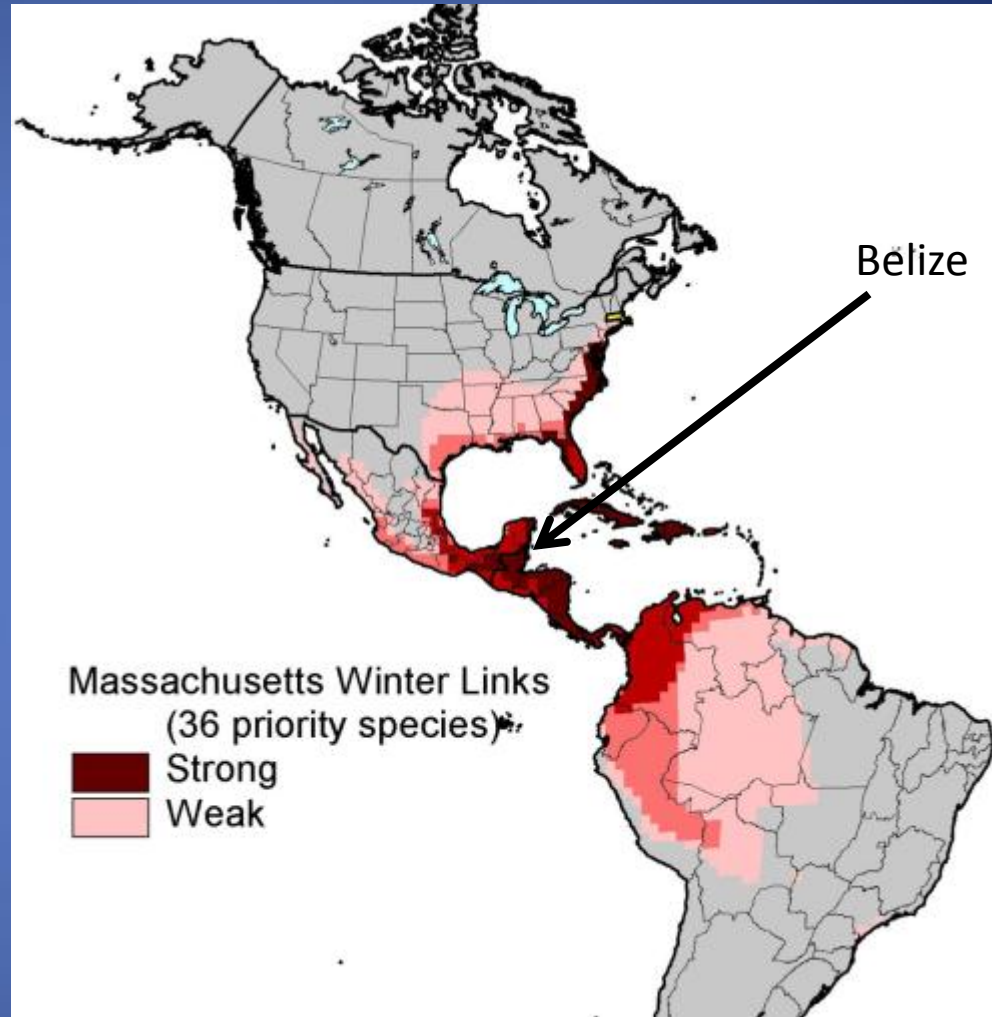
# Neotropical Connections (Belize)

- Tier 1: \$75,000
- Restore and protect neotropical songbird migrants such as warblers, flycatchers, and thrushes that were impacted by mercury contamination from the Nyanza Site
- Neotropical songbirds breed in SuAsCo but numbers are declining in large part because of loss of their overwintering habitat in locations such as Belize
- Work with local farmers to develop a profitable and self sustaining agro-forestry system that allows the forest to re-grow while planting shade-grown organic cacao or coffee
- Geolocators would be attached to neotropical songbirds in Belize; students in the SuAsCo will be able to learn where “their birds” overwinter

# Neotropical migrant link is strong between Massachusetts and Belize



Common Yellowthroat



# Sudbury River Corridor Land Acquisitions

- Tier 1: \$720,000
- Tier 2: \$700,000
- Acquire land parcels along the Sudbury River that are at risk of development and provide important natural resource benefits
- Candidate parcel: 5.5-acre riverfront parcel of forested wetland (red maple swamp) and wet meadow adjacent to the Great Meadows NWR
- Other parcels will be identified through a competitive proposal process (RFR)

# Sudbury River Corridor Land Acquisitions

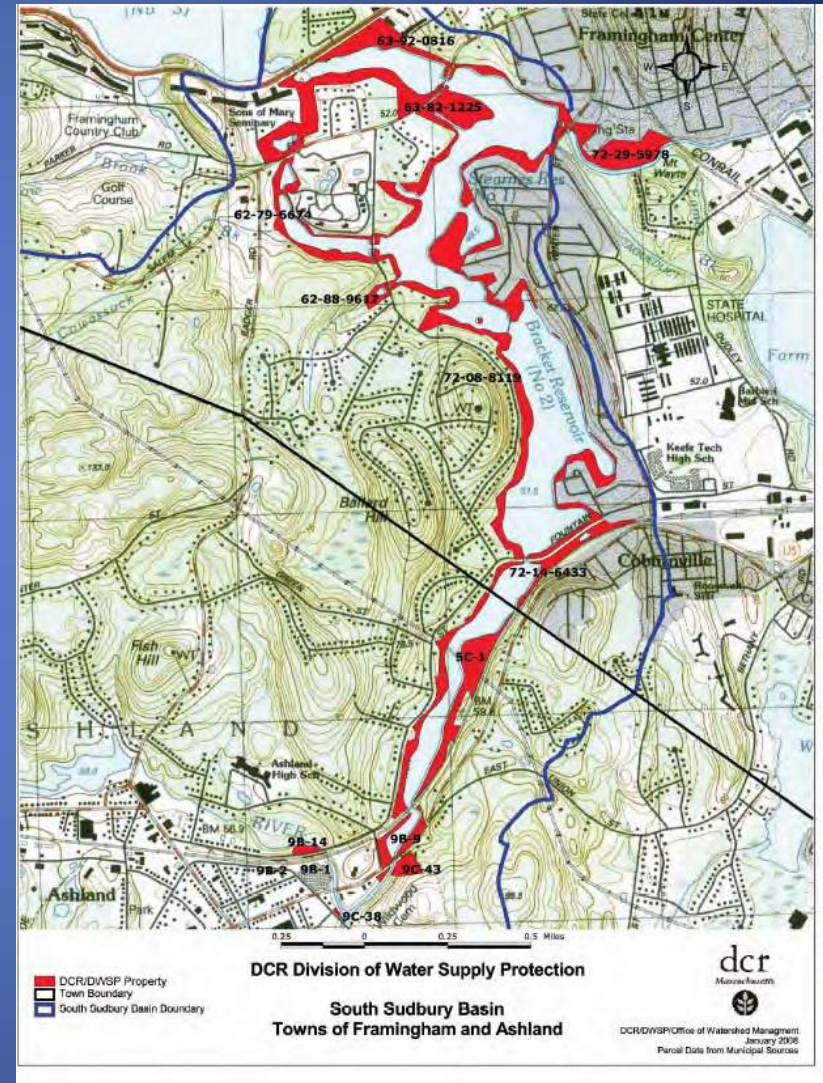
- Priority parcel attributes:
  - Degree of nexus to injured natural resources
  - Context of surrounding land use and land protection status
  - Whether the parcel has already been identified as a high priority for protection in existing local or regional land-use planning documents
  - Type and condition of natural resource benefits provided by the parcel
  - Nature and likelihood of development threats
  - Mechanism and cost of protection
  - Long-term maintenance and management needs

# Creation of Stearns and Brackett Reservoirs Wildlife Preserve

- Tier 1: \$540,000
- Transform the Stearns and Brackett Reservoirs, including 12 miles of shoreline and 175 acres of land into a wildlife preserve to protect and enhance ecological values and enable public access for recreation and education
  - Establish legal ability to allow public access to these lands and transfer management to a nonprofit organization or other appropriate entity
  - Complete a stewardship plan to manage the area as a wildlife preserve
  - Developing boat access to the reservoirs and appropriate educational signage and interpretive materials
  - Help create management facilities
  - Provide initial funding for implementation of the stewardship plan



# Creation of Stearns and Brackett Reservoirs Wildlife Preserve





# Creation of Stearns and Brackett Reservoirs Wildlife Preserve

- Incorporates elements of the following project ideas:
- *Canoe Launch at Fountain Street - Town of Ashland*
- *“Restoring the Sudbury River”: Outreach and Education Materials (educational kiosk component) – SuAsCo Watershed Community Council*
- *Public Information Kiosk - Town of Ashland*

# Recreation and Public Access (\$313,000 Tier 1)

- **Sudbury River Public Access: Aikens Road**
  - Tier 1: \$145,000
- **Sudbury River Access Improvements: Great Meadows NWR Headquarters**
  - Tier 1: \$7,000
- **Red Maple Trail: Boardwalk and Wildlife Observation Platform Construction**
  - Tier 1: \$161,000

# Sudbury River Public Access: Aikens Road

- Tier 1: \$145,000
- Create car-top fishing and boating access in Southborough on MassWildlife property along the Sudbury River

Paddle 2.5 miles downstream to the next formal river access site at High Street in Ashland, maintained by the MA Office of Fishing and Boating Access



## Sudbury River Public Access: Aikens Road

- Incorporates elements of the following project ideas:
- *Upper Sudbury River Public Access for Fishing and Trails – Sudbury River Watershed Organization*

# Sudbury River Access Improvements: Great Meadows NWR Headquarters

- Tier 1: \$7,000
- Improve boater access to the Sudbury River at the Great Meadows NWR headquarters in Sudbury and reduce overcrowding at Shermans Bridge Road
- Purchase two canoes, two kayaks, and three boat carts (and appropriate personal floatation devices, paddles, etc.) for the use of visitors to the NWR
- Great Meadows NWR to establish a system for allowing access to the equipment

# Red Maple Trail: Boardwalk and Wildlife Observation Platform Construction

- Tier 1: \$161,000
- Improve pedestrian access on a popular woodland walking trail at the Great Meadows NWR headquarters that overlooks the Sudbury River and floodplain habitat by installing:
  - elevated boardwalk over tree roots and wet sections
  - stone dust path in upland areas where roots are less prevalent
  - elevated wildlife observation platform along the bank of the Sudbury River at a location that overlooks a wide area of marsh
  - two interpretive panels to call attention to ecological and wildlife resources in the area



# Red Maple Trail: Boardwalk and Wildlife Observation Platform Construction





# Alternatives Considered but Not Recommended for Funding

- The Trustees chose projects for funding that best fit their criteria and that could be accomplished with the limited resources available
- In some cases, the Trustees took elements from a project idea that was not recommended for funding, and incorporated those elements into a project that was proposed as part of the proposed alternative
- Ranked lower against the evaluation criteria compared to the proposed restoration alternatives
- A recommendation for no funding should not be viewed as a judgment on the overall environmental or educational value of a project idea

# Nyanza NRD Restoration Plan: Next Steps

## 1. Solicit public review and comment

- Comments accepted through January 23, 2012

## 2. Revise RP/EA and prepare Final RP/EA

## 3. Implement restoration projects

- Competitive procurement (RFR), Cooperative Agreement, State- or Nation-wide contracts, Intergovernmental Agreements

## 4. Oversee and monitor project performance

Draft RP/EA available: Ashland Public Library, 66 Front Street

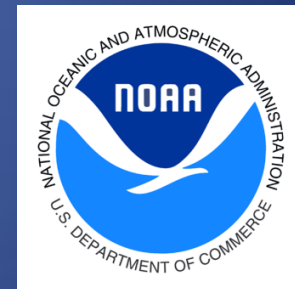
<http://www.mass.gov/dep/cleanup/sites/nrd/nydrpea.pdf>

# Nyanza NRD Trustee Representatives

## Points of Contact



- **Mass Department of Environmental Protection**  
Rosemary Knox, Trustee Representative  
617-556-1026  
  
Lisa Alexander, Alternate  
617-292-5716  
  
Karen Pelto, NRD Coordinator / Nyanza Trustee Council Coordinator  
617-292-5785
- **U.S. Fish and Wildlife Service**  
Molly Sperduto, Trustee Representative  
603-223-2541 x 20
- **National Oceanic and Atmospheric Administration**  
Eric Hutchins, Trustee Representative  
978-281-9313



This presentation available on:

<http://www.mass.gov/dep/cleanup/sites/nrd/nrdny.htm>

or request a presentation hardcopy.