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Groundwater Natural Resources Damages Assessment: A New Restoration Tool for Massachusetts

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Groundwater Natural Resource Damages Assessment: A New Restoration Tool for Massachusetts



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NRD Assessment & Restoration Program

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MA Water Resources Research Center
Conference

TOPICS

- **Overview**
 - Natural Resource Damages (NRD) Assessment and Restoration
 - Natural Resource Trustees
 - MA NRD Program
- **MA Water Policies and Practice**
 - Commonwealth
 - Local
- **Textron/MMR NRD Groundwater Restoration**
 - \$1 M Settlement
 - EEA Request for Proposals
 - Eligible Projects

Overview of NRD

- **Statutory Basis**

- CERCLA, CWA, OPA, State MGL 21E

- **Liability**

- For injury, destruction, loss of natural resources
- Resulting from
 - Discharge of oil
 - Release of hazardous substance

- **Natural Resources**

- Land
- Fish, Wildlife, Biota
- Air
- Water, Groundwater, Drinking water supplies...
- Belong to, managed by, held in trust by, controlled by Federal, state govt., or Indian Tribe



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



Trustees of natural resources on behalf of the public

FEDERAL

- **Dept. of Commerce**

 - NOAA

 - Coastal resources
 - Anadromous fish
 - Marine mammals
 - Marine Sanctuaries

- **Dept. of Interior**

 - FWS, BIA, NPS, BLM

 - Migratory birds
 - Endangered species
 - National Wildlife Refuges
 - National Parks
 - Anadromous fish
 - Marine mammals

- **Dept. of Defense**

 - Military Installations

- **Dept. of Energy**

 - DOE Facilities

STATE

- EEA Designated by Governor

- All resources plus groundwater

TRIBAL

- Federally recognized Tribes

Steps in NRD

- **Assess Injury:** Adverse change in chemical/physical qualities/viability
- **Quantify Damages**
- **NRD Demand to RP**
 - Damages
 - Cost to restore resource
 - Value of lost services
 - Physical & biological functions of resource
 - Human Use Services: e.g. Water supply or Recreational Use
 - Ecological Services: e.g. Wildlife Habitat
 - Trustee Assessment Costs
- **Use NRD for Restoration (CERCLA)**
 - Restore
 - Replace or
 - Acquire equivalent of injured resource



NRD Concepts

- **Mandatory Criteria**

- Discharge of oil or release hazardous substance/material
- Natural resources affected
- Quantity or Concentration sufficient to cause injury
- Assessment data available @ reasonable cost
- Response actions will not sufficiently remedy the injury



MA NRD Program

Staffing

- Currently 2 staff

EEA NRD Trust Fund

- Damages
 - For Restoration
- Trustee Assessment costs
 - For Assessments/Program Support



Cases Settled

- 12 Cases to Date
- Additional Cases in Negotiations

Colrain Acid Spill
\$ 30,000

PSC, Palmer
\$ 157,000

Charles George, Tyngsboro
\$ 1.2 Million

**Mystic River,
Medford \$ 26, 801**

Chelsea Creek:
Posavina, \$ 155,000
Global/Irving, \$312,500
**Everett Coal
Tar/Island End,
\$300,000**

**GE Housatonic
River, Pittsfield**
\$ 19.7 Million

Holyoke Coal Tar
\$500,000

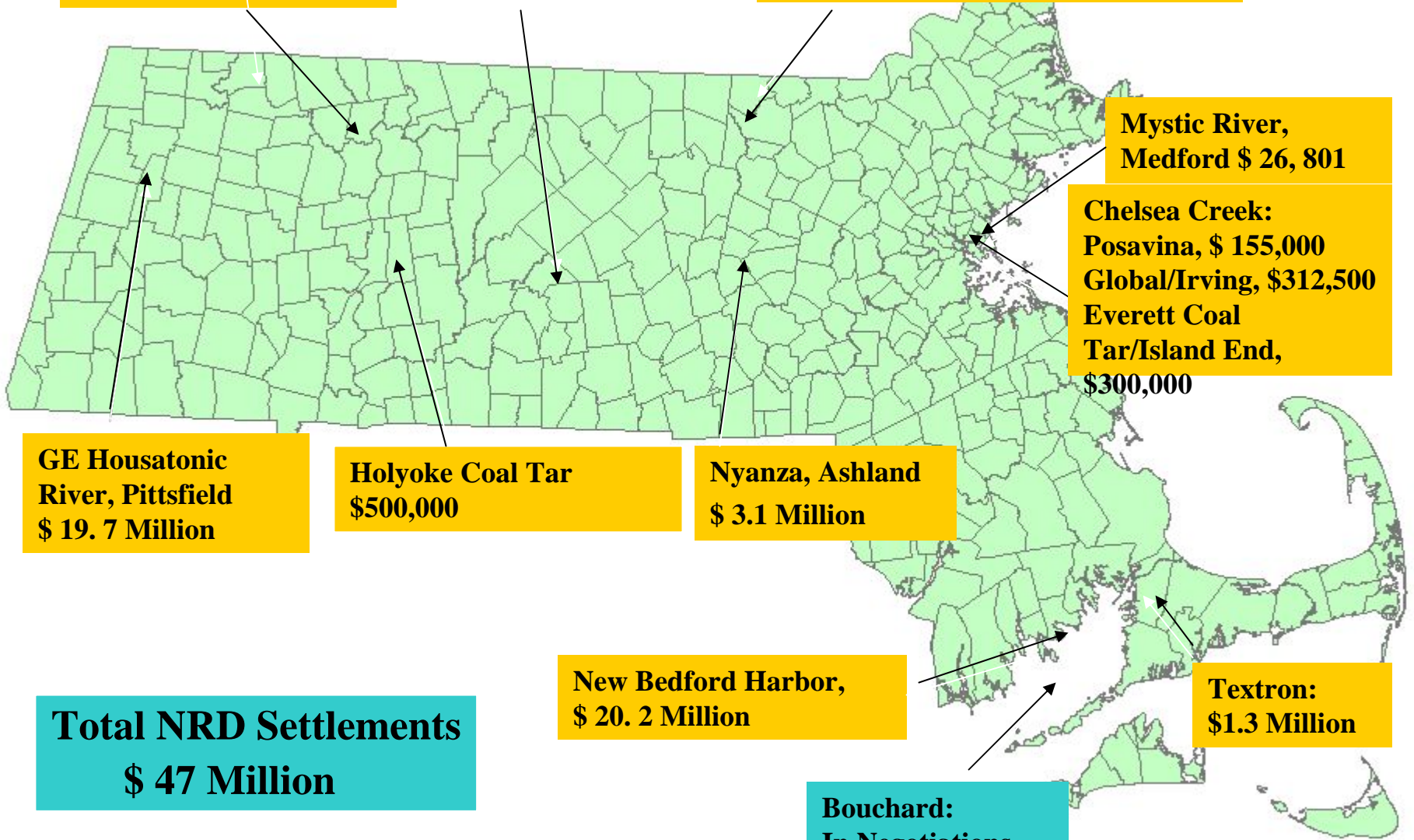
Nyanza, Ashland
\$ 3.1 Million

Total NRD Settlements
\$ 47 Million

New Bedford Harbor,
\$ 20.2 Million

Textron:
\$1.3 Million

Bouchard:
In Negotiations



MA Water Policy and Practice

- MA Water Supply Policy Statement
 - ensure that water is available in sufficient quantity and quality to meet current and future needs
- MA Water Policy
 - Keep water local
 - Protect clean water and restore impaired waters
 - Protect and restore fish and wildlife habitat
 - Promote development strategies consistent with sustainable water resource management

MA Water Policy and Practice

- MA Aquifer Protection
 - Wellhead Protection required for public water supplies
 - Drinking Water Grant Program
 - Local acquisition of land to protect water supplies
 - FY 09 awarded \$2,767,625
- Acting Locally
 - Zoning bylaws
 - Aquifer Protection Districts
 - Groundwater Protection Districts

OVERVIEW

TEXTRON NRD SETTLEMENT @ MMR

- **State and Federal Trustees**
 - Settled NRD w/ Textron Systems Corporation @ MMR
 - Based on Textron operations @ MMR J ranges
- **Total NRD settlement: \$1.3 Million**
 - To be used for
 - Restoration of Injured Resources
 - Reimburse Trustee Assessment costs
- **Consent Decree entered**
 - In US District Court Feb. 2008



Textron Consent Decree

Payment to State: \$1 Million

- **NRD funds to EEA**
- Based on claims for GW injury @ J-Range
 - **\$40,000:** Assessment costs
 - **\$460,000:** Restoration
 - In accordance w/ MGL 21E & Trustee MMR MOA
 - U.S. will not assert any right to funds
 - **\$500,000:** Restoration
 - In accordance w/ CERCLA & Trustee MMR MOA
 - Before Trustee expend funds
 - Publish Draft Restoration Plan
 - Provide notice to other Trustees
 - U.S. reserves right to dispute EEA jurisdiction

Textron Consent Decree

Payment to Federal Trustees: \$300,000

- **Funds to NOAA**
 - **\$25,000: Assessment costs**
- **Funds to DOI**
 - **\$100,000: Assessment costs**
- **Funds to Dept. of Defense**
 - **\$175,000: Restoration**
 - Based on NRD claims by DoD
 - Managed by DOI
 - In accordance w/ CERCLA & MMR Trustee MOA
 - Before expend funds
 - Publish Draft Restoration Plan
 - Provide notice to other Trustees

EEA RFR

- **Funding Solicitation –Request for Response (RFR)**
 - NRD Funds: \$960,000
 - RFR Solicitation released Jan. 12, 2009
 - RFR Responses received March 11, 2009
 - 11 Eligible Responses
 - Interagency Review Team

Eligible Projects

- 1) **Restore, replace, and/or acquire equivalent** of resources/services relating to GW injured by releases at J Ranges.
- 2) **In terms of cost, do not limit ability to accomplish goals** & serve Upper Cape Cod & its communities.
- 3) **Consistent w/federal, state, local law, regulation, or policy**
- 4) **Not “otherwise required” per statute, regulation, etc.** unless such public project benefits GW resources such as:
 - a) Accelerate pace of project performance which represents a calculable & substantial GW restoration benefit or
 - b) Increase likelihood of project performance as pre-requisite to substantial GW restoration or to further substantial GW restoration.
- 5) **Not inconsistent with ongoing or anticipated clean-up**, i.e. Rapid Response Actions or Final Decisions.

Eligible Projects

- **Strong linkage to GW resources/services**
 - For ecosystems & humans
- **Located On Upper Cape/Sole Source Aquifer**
 - Sandwich, Bourne, Falmouth, Mashpee

One of the following:

- **Protect quality of current & potential DWS**
- **Protect quantity of current & potential DWS**
- **Integrate management of current & potential DWS & WWT**

Eligible Projects

- **Protect quality of current & potential DWS**
 - Protect aquifers
 - Protect groundwater recharge areas
 - Protect drinking water watersheds
 - Protect environmentally sensitive lands/critical habitats



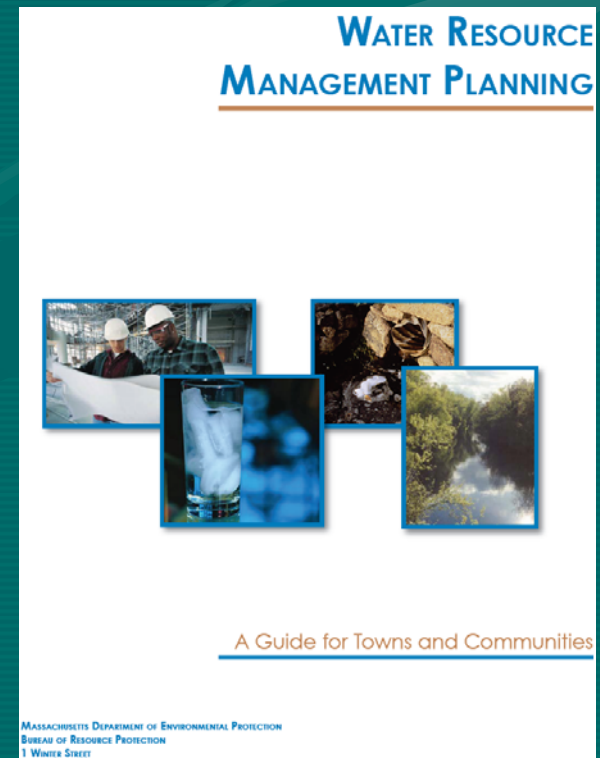
Eligible Projects

- **Protect quantity of current & potential DWS**
 - Implement measures to conserve water
 - Implement measures to provide recharge to aquifers
 - including offsets that mitigate impacts to water-dependent ecosystems



Eligible Projects

- Integrate management of current & potential Drinking Water Supplies & Wastewater Treatment
- Emphasis on land, energy, water & regional benefits



Opportunities for Public Input

- **Developing Restoration Project Proposals**
 - Via State procurement process
 - RFRs issued by EEA
 - Eligible applicants
 - All private entities; local, state, federal and tribal governments; academic institutions; non-profit and commercial organizations.
- **Public Comment on Draft Restoration Plans**
 - Prior to expenditure of public funds where required per CERCLA

Questions?

- **EEA Contacts**

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- 617-626-1007

- EEA NRD Program website

- [http://www.mass.gov/?pageID=eoeeahomepage&L=1
&L0=Home&sid=Eoeea](http://www.mass.gov/?pageID=eoeeahomepage&L=1&L0=Home&sid=Eoeea)