Natural Resource Damage Assessment and Restoration

MICHELLE CRADDOCK

NATURAL RESOURCE DAMAGES PROGRAM COORDINATOR

WATER RESOURCE COMMISSION MEETING 4/14/22



Overview of Presentation

NRD Trustees & Authority

NRD Assessment and Restoration Process

NRD Restoration Highlights

NRD Standard Surface Water Method

NRD Trustees

<u>Commonwealth of MA Trustee:</u> Secretary of EOEEA, program delegated to MassDEP

Federal Trustees:











<u>Tribes</u>

For shared natural resources, federal agencies, states, and tribes may act as co-trustees

In these cases, a Trustee Council may be formed

Natural Resource Damages Authority: State & Federal Laws

- Massachusetts Oil and Hazardous Material Release Prevention and Response Act (Chapter 21E, sections 5A and 11A)
- Chapter 21A, section 2A Establishes Secretary of EOEEA as NRD Trustee
- Acts of 2011, chapter 9, section 22 Establishes NRD Trust
- Comprehensive Environmental Response, Compensation, and Liability Act 1980 (CERCLA or Superfund) & DOI Regs: 43 CFR 11
 - Covers discharge of hazardous materials
- Oil Pollution Act of 1990 & OPA Regs: 15 CFR 990
 - Covers oil discharge into waters of the U.S.

What are Natural Resources?

- Land, fish, wildlife, biota, air, water, groundwater, and drinking water supplies
- Any other resources belonging to or managed by:
 - Federal government
 - State or local government
 - Any foreign government (OPA only)
 - Indian Tribe
- Use of the natural resources
 - Bird watching, hiking, swimming, boating, fishing
 - Cultural ceremonial, medicinal, subsistence

What are Natural Resource Services?

- Physical and biological functions performed by the resource
- Includes the quality of the physical, chemical, or biological resource
- Services to other natural resources
 - Food, shelter, nesting/breeding
- Services directly benefitting and/or used by humans:
 - provisioning services (water, food, raw materials)
 - regulating services (air quality, carbon sequestration, flood control)
 - cultural services (recreational use, spiritual use)
 - supporting services (pollination, nutrient cycling)

Example of Trust Resources



Resources include:

- Sea Lamprey
- Surface water
- Sediment

When oil spills or releases of hazardous materials, cleanup and assessment occur

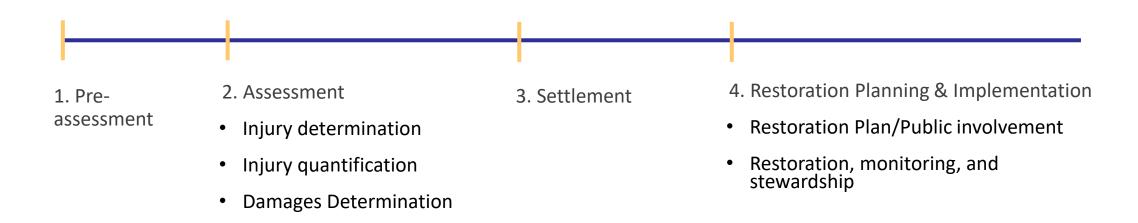
CLEANUP

- Determine nature and extent of contamination
- Evaluate, select, and take actions to eliminate or reduce risks to human health and environment and reduce to background to the extent feasible

NRD DAMAGE ASSESSMENT & RESTORATION

- Determine type and extent of injuries to natural resources
- Collect natural resource damages from liable parties
- Evaluate, select, and take actions to restore natural resources that compensate the public for injuries

General NRDAR Process



These processes are laid out in DOI/OPA regulations

Over \$70 million in NRD settlements in Massachusetts

New Bedford Harbor	\$20 M
Bouchard B-120	\$19.3 M
GE/Housatonic	\$15 M
Fireworks (Tronox)	\$6.8 M
Industri-Plex	\$4.3 M
Nyanza*	\$3.1 M
Sutton Brook*	\$1.65 M
Textron/MMR*	\$1.3 M
Charles George*	\$1.2 M
Blackburn & Union*	\$1 M
Rubchinuk	\$747,000

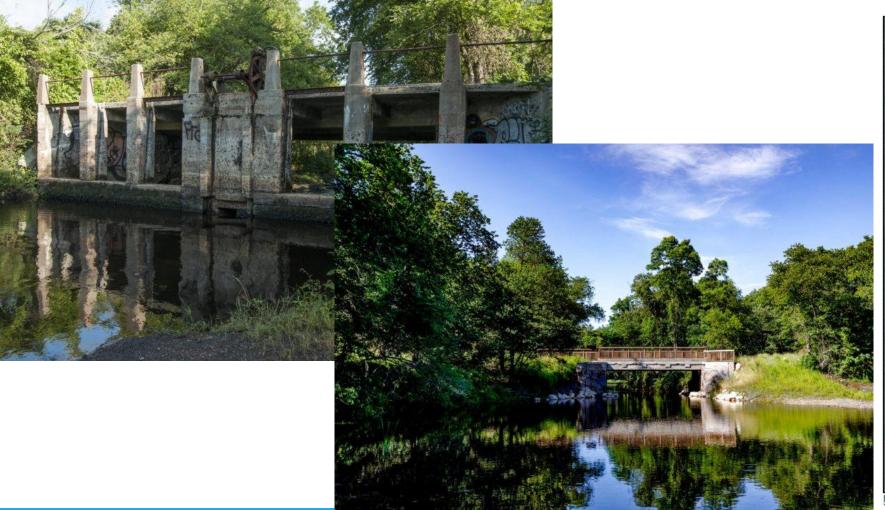
Holyoke Coal Tar	\$500,000
Global/Irving	\$312,500
Island End	\$300,000
Reed & Barton	\$236,447
Barnhardt (Colrain)	\$225,000
Framingham GM	\$157,425
PSC Palmer*	\$157,000
Posavina	\$155,000
Eversource	\$58,137
JP Noonan	\$55,100
PJ Murphy	\$52,746
Colrain acid spill	\$30,000
Hallmark/Mystic	\$26,801

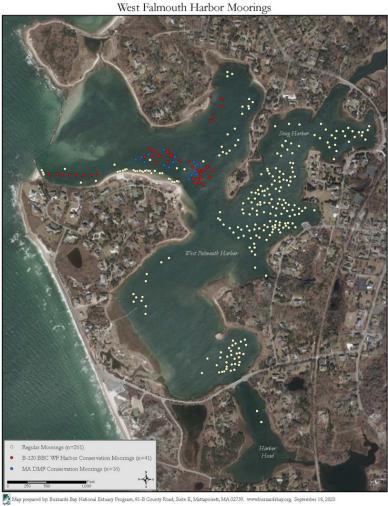
* Includes settlement funds for injury to groundwater



Restoration Highlights: Bouchard B-120

Loon translocation & restoration, bird habitat protection (Assawompset Pond and Cuttyhunk Island)





Restoration Highlights: Bouchard B-120

Horseshoe Mill dam removal (Wareham) & Conservation Moorings for Eelgrass restoration (West Falmouth Harbor)



Restoration Highlights: Blackburn & Union

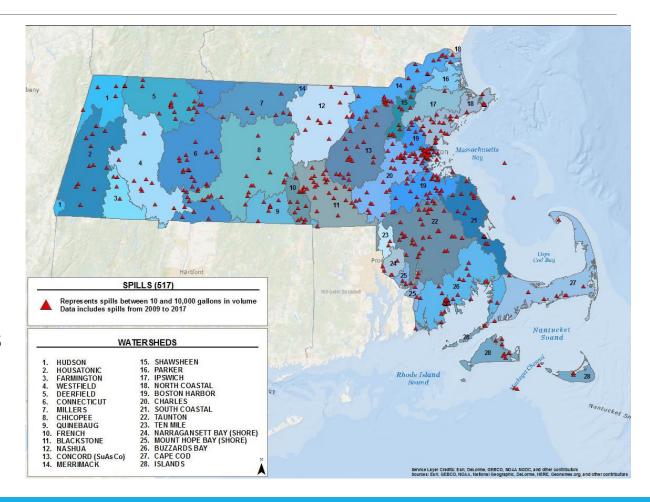
Traphole Brook restoration (removal of Mill Pond dam, design and permitting/data collection for 2 undersized culverts in Walpole and Sharon)

Standard Method for Small to Medium Sized Releases of Oil to Surface Water

Standard Method for Small to Medium Sized Releases of Oil to Surface Water

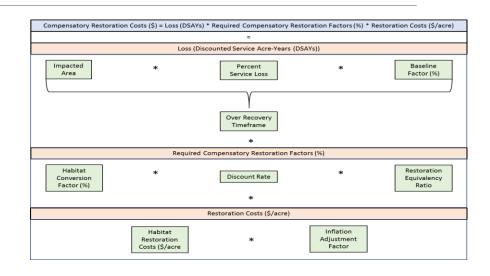
Goal: Develop a standard approach for assessing damages from small to medium volume oil spills in Massachusetts (>10 to <10,000 gallons)

- Increase efficiency and cost effectiveness of claims
- Expedite restoration
- Ensure Commonwealth and its citizens are compensated for natural resource injuries



Standard Method for Small to Medium Sized Releases of Oil to Surface Water

Data needed		
Type of oil released	Baseline ecological service factor	
Date of release	Impacted habitat type	
Volume of release	Designated natural resource area	
Maximally impacted area		



- Option for responsible party to complete assessment and submit payment
- Expeditious recovery credit
- Funds will be pooled by watershed or subwatersheds and distributed via grants

Questions?

Michelle Craddock

Natural Resource Damages Program Coordinator

Michelle.L.Craddock@mass.gov

