



DAMAGE ASSESSMENT, REMEDIATION, and  
RESTORATION PROGRAM (DARRP)

# OIL SPILL NRDA PROCESS AND DEEPWATER HORIZON INCIDENT

ROB WOLOTIRA  
RESTORATION CENTER  
OFFICE OF HABITAT CONSERVATION





## NRDA: What is it?

- A legal process to determine

Injuries to or lost use of the public's natural resources

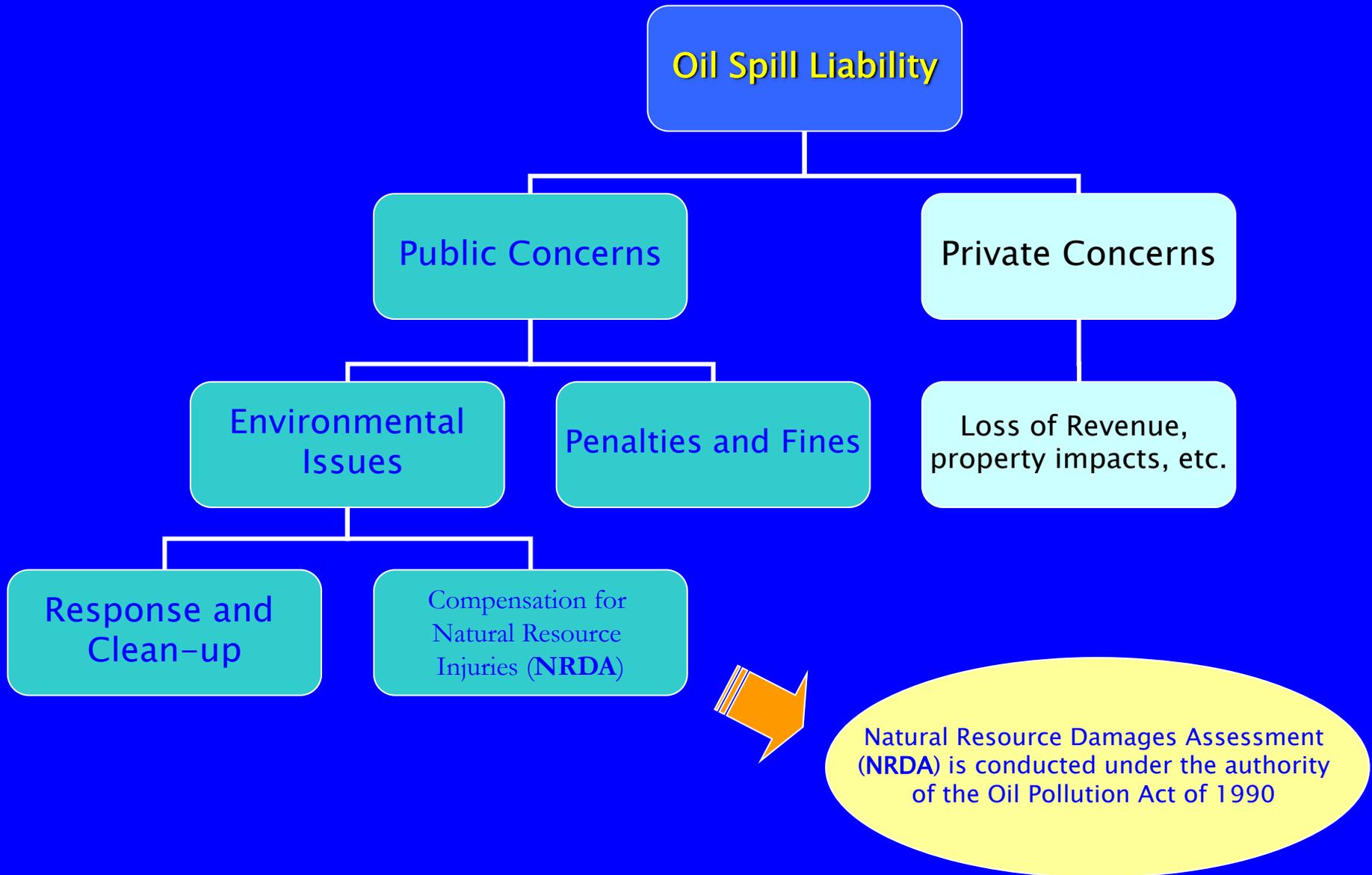
Appropriate amount & type of restoration needed to offset losses



- Goal is to “make public whole” following release of hazardous substances & oil
- Federal, state and tribal “Trustees” represent public and are required to demonstrate causality between release and the resource injury and lost use



# DAMAGE ASSESSMENT, REMEDIATION, and RESTORATION PROGRAM (DARRP)





# Oil Pollution Act (OPA) of 1990

33 U.S.C. §2701 et seq.

## ▪ **Specific Natural Resource Trustee Authorities:**

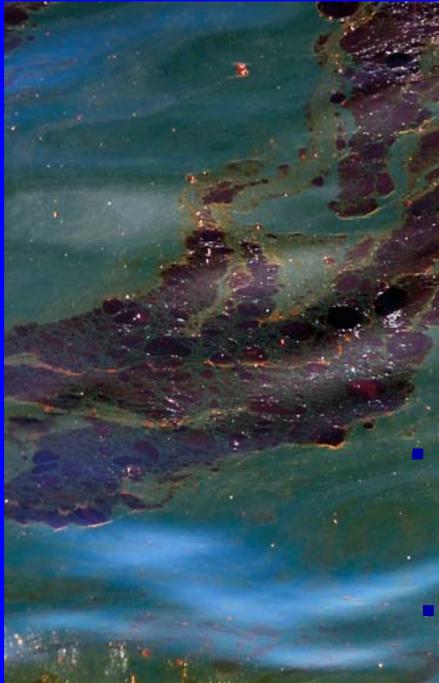
Section 2702: establishes liability for injury to, destruction of, loss of, or loss of use of natural resources

▪ Section 2706: designates natural resource trustees and authorizes recovery of natural resource damages

▪ Section 2706: also defines natural resource damages to include:

- --the cost of restoring, rehabilitating, replacing or acquiring the equivalent of the damaged resources;
- --the diminution in values of those natural resources pending restoration;
- --the reasonable cost of assessing damages; and

Required NOAA promulgate regulations for assessing natural resource damages under OPA (15 CFR 990).





# OPA Natural Resource Damage Claims

- OPA provides for damages for injury to, destruction of, loss of, or loss of use of natural resources, including the reasonable costs of assessing damages
- Collected damages used to make the environment and public whole





## More on Natural Resource Damages

- Only natural resource trustees may assess and recover damages
- Sums recovered for injuries must be used for restoration
- May use NOAA's natural resource damage assessment regulations at 15 CFR 990



# Natural Resource Trustees include

## Federal Trustees:

- NOAA
- DOI (8 Bureaus: USFWS, Park Service, BIA, etc.)
- Agriculture (e.g., USFS)
- Occasionally Others (DOD, DOE)

State Trustees (One or more as determined by  
Governor, **including municipalities**)

Federally-Recognized Tribes \*

\* Alaska Exception



# Focus and Goals of OPA Regulations

- Focus is on restoration
- Expanded role available to Responsible Party
- Open Process with public involvement





# Overview of NRDA Process Under OPA

- Pre-assessment Phase
  - Determine jurisdiction
  - Determine need to conduct restoration planning
- Restoration Planning Phase
  - Injury assessment
    - Determine injury
    - Quantify injury
  - Restoration Selection
    - Develop reasonable range of restoration alternatives
    - Select and scale preferred restoration actions
    - Develop restoration plan
- Restoration Implementation Phase



# Injury Assessment: goal, definition & process

- Goal -- determine the nature and extent of injuries to natural resources and services, thus providing a technical basis for evaluating the type of, and scale of restoration
- Injury Definition--an observable or measurable adverse change in a natural resource or impairment of a natural resource service.
- Trustees must determine that there is:
  - Exposure, a pathway, and an adverse change to a natural resource or service as a result of an actual discharge, or
  - an injury as a result of response actions or a substantial threat of a discharge



## Standards for Injury Assessment Procedures under OPA:

- Must be capable of providing information for determining the type and scale of restoration appropriate for a particular injury
- Additional costs of a more complex procedure must be reasonably related to the expected increase in the quality and/or quantity of information provided
- Must be reliable and valid for the particular incident
- Trustees must select the most cost-effective of two or more equally appropriate assessment procedures





# Restoration Under OPA

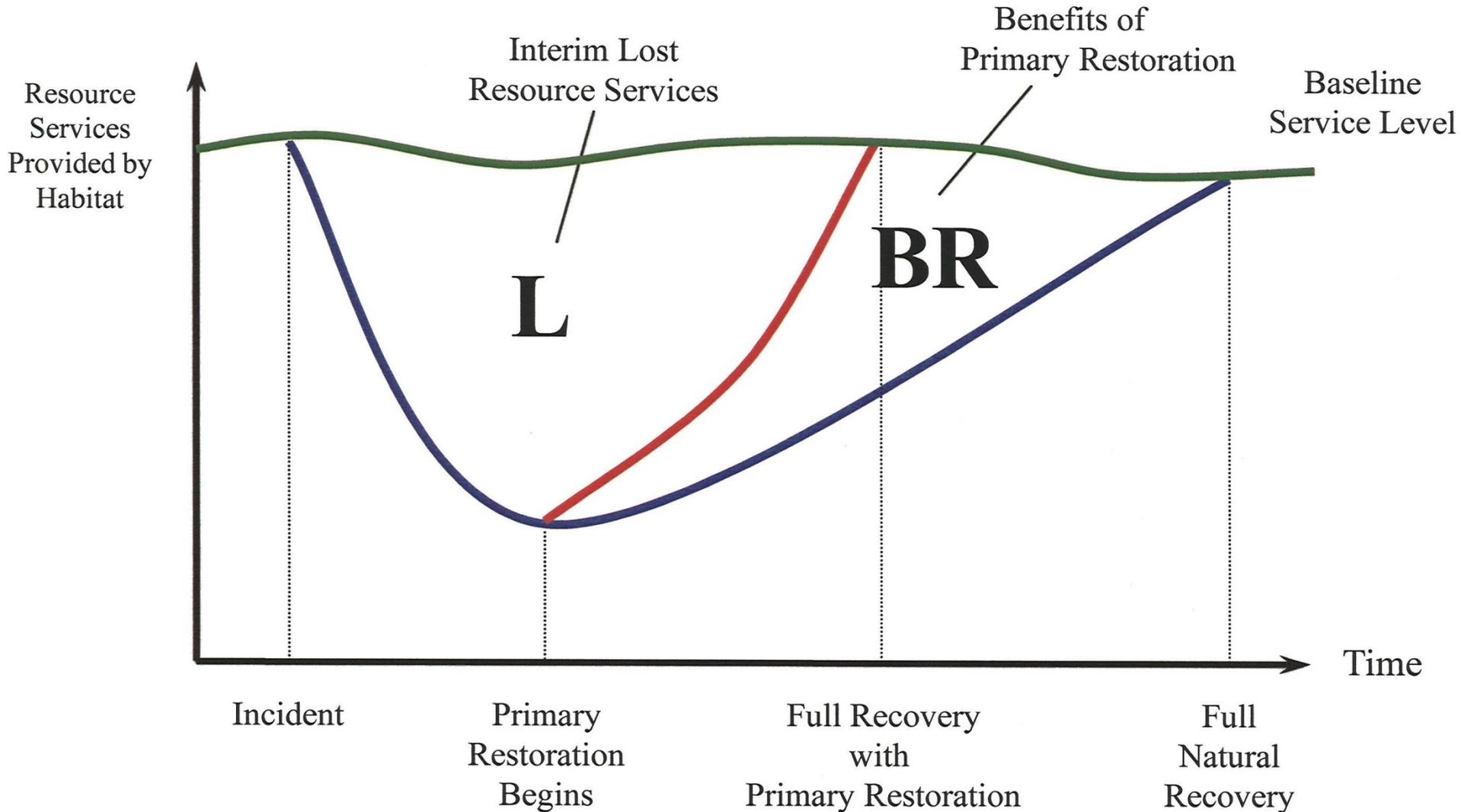
- **Primary Restoration:** actions taken to return the injured natural resources and services to baseline on an accelerated time frame (must consider natural recovery)
- **Compensatory Restoration:** actions to compensate for interim losses of natural resources and/or services pending recovery

## Two Types





# Graphical Depiction of Interim Losses





# Required Restoration Selection Criteria

For each restoration alternative you must:

- Determine cost for implementation
- Identify extent to which it will meet the trustees' goals and objectives
- Evaluate its likelihood of success
- Identify extent it will prevent future injury from the incident, and avoid collateral injury during implementation
- Determine extent to which it benefits more than one natural resource or service
- Assess its effect on public health and safety



# Restoration Plan

- Undergoes public review and comment during Draft Plan phase
- Describes preassessment activities, injury assessment activities, and results
- Evaluates restoration alternatives
- Identifies the preferred alternative(s)
- Final Plan developed only after considering public comment
- Final Restoration Plan becomes basis for damages claim to the Responsible Party





# Restoration Implementation

- The Final Restoration Plan is presented to responsible parties to implement or to fund the trustees' costs of implementing the plan
- If the Responsible Party declines to settle claim:
  - Trustees can pursue claim as civil action in federal court for the damages, or
  - Seek an appropriation from the Oil Spill Liability Trust Fund for the damages
- Monitoring of restoration projects is required



# In Summary, Three Things...

## 1--NRDA is Restoration-focused

- Determines type and amount of restoration needed for compensation
- Restoration is considered early and throughout the process
- Injuries and losses are balanced against, and directly scaled to restoration

## 2--NRDA is a Legal Process

- Guided by Oil Pollution Act and NOAA Regulations
- Trustees are required to demonstrate causality between release and resource injury/lost use
- The polluter pays for assessment and restoration

## 3--Getting to restoration requires a common vision



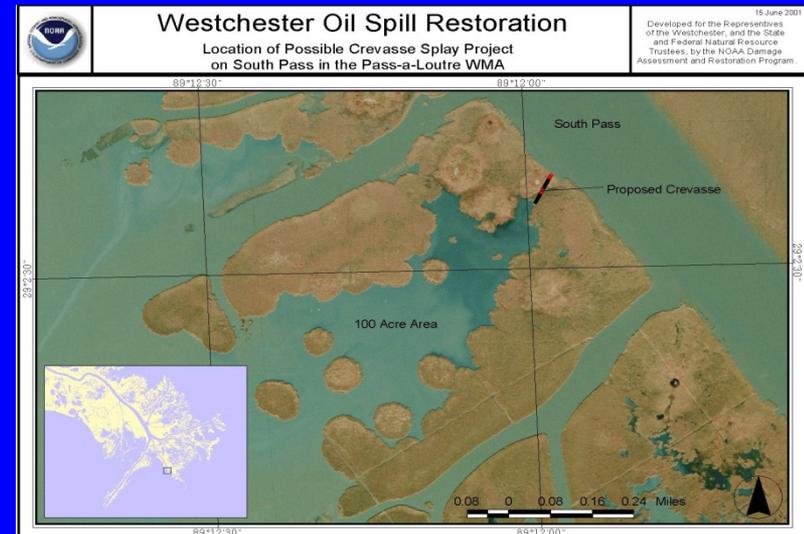
# Westchester Oil Spill NRDA Example

- On November 28, 2000, the T/V Westchester grounded on the Mississippi River, south of New Orleans releasing ~550K gal of crude oil
- Trustees collected water samples, made observations on nature and extent of oiling of habitats, and tracked carcass recoveries
- Models used to predict injuries to fish, shellfish, birds, mammals, and reptiles
- Habitat Equivalency Analysis used to estimate habitat injuries and amount of restoration required
- All ecological injuries addressed with marsh creation project
- Lost Human-Use (recreational hunting and fishing) estimated at 655 lost fishing days and 804 lost hunting days



# Westchester NRDA Example Continued

- Crevasse project to create marsh chosen to address ecological injuries
- Dock at area commonly used for camping in Wildlife Management Area built to enhance recreational usage
- Final Restoration Plan issued December 2001
- Settlement finalized in September 2003
- Crevasse excavated in September 2003
- Dock built Fall 2003
- Largest oil spill NRDA under OPA regulations except for Hurricane Katrina-related oil spills





# NRDA and the Deepwater Horizon Incident



- The TWGs continue to develop and implement baseline and post-impact field studies for multiple resource categories:
- In this Preassessment Phase, several technical working groups (TWGs) have been formed to address the following Federal Trusts for Data are being collected via (land, air, boat and ship-based resources) and the RPT.
  - Submerged Aquatic Vegetation
  - Shoreline habitats (beaches, wetlands, mudflats, mangroves)
  - Subtidal habitats
  - Shallow and Deepwater Corals
  - Birds
  - Marine Mammals and Turtles
  - Terrestrial Wildlife
  - Human Uses (e.g., fishing, and beach recreational closures.)

## Restoration Planning has begun



The contour interval is 200 meters on the West Florida Escarpment north of 26°52'N and south of 25°9'N and on the Blake and Bahama Escarpments east of 77°W. The contour interval is 100 meters everywhere else with supplemental 20 meter contours on the continental shelves and Hatteras Abyssal Plain.



# Deepwater Horizon NRDA Challenges

150 million gallons and counting

Release site is nearly 1 mile below sea surface

Geographically large

Offshore species such as bluefin tuna and squid exposed

Immense amount of lost recreational use

Jurisdictionally complex

Extreme visibility

Political pressures



# NRDA Websites

- [www.darrp.noaa.gov](http://www.darrp.noaa.gov)
- [www.fws.gov/contaminants](http://www.fws.gov/contaminants)

