

# Overview of Natural Resources Damage Assessment and Restoration

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# Topics

- Introduction to NRDAR Concepts
- Relationship to Cleanup
- Scope of Liability
- NRDAR Process
- Cooperative Assessments
- Summary

Things happen...



# Purpose and Concepts



# NRDAR

## What is it?

- A process to determine the appropriate amount and type of restoration needed
- Goal is to “make the public” whole following releases of hazardous substances
- “Trustees” represent the public
- NRDAR success is measured by the amount of appropriate restoration achieved





# NRDAR

## Purpose

- Trustees must use NRD recoveries to **restore, rehabilitate, replace, and acquire the equivalent of** injured natural resources and services
- Governments act as trustees "on behalf of the public" -- trustees must use the funds to replenish the common store of natural resources for public use and enjoyment
- Natural resource damages are entirely compensatory; no punitive element

# NRDAR

## What it is not!

- NRD is not an environmental tort claim (common law)
- Congress intended to go beyond common law remedies because it was dissatisfied with common law

# What is Injury?

- An observable or measurable adverse change in a natural resource or impairment of a natural resource service.
- Includes injuries resulting from the actual discharge of a hazardous substance or oil, a substantial threat of a discharge, and/or related response actions.





# What Are Services?

- Services are the beneficial outcomes that result from natural resources & ecosystem functions
  - Healthy habitat for fish and wildlife
  - Provision of clean water
  - Harvesting animals or plants
  - Recreation and cultural practices
  - Scenic views

# What Are Damages?

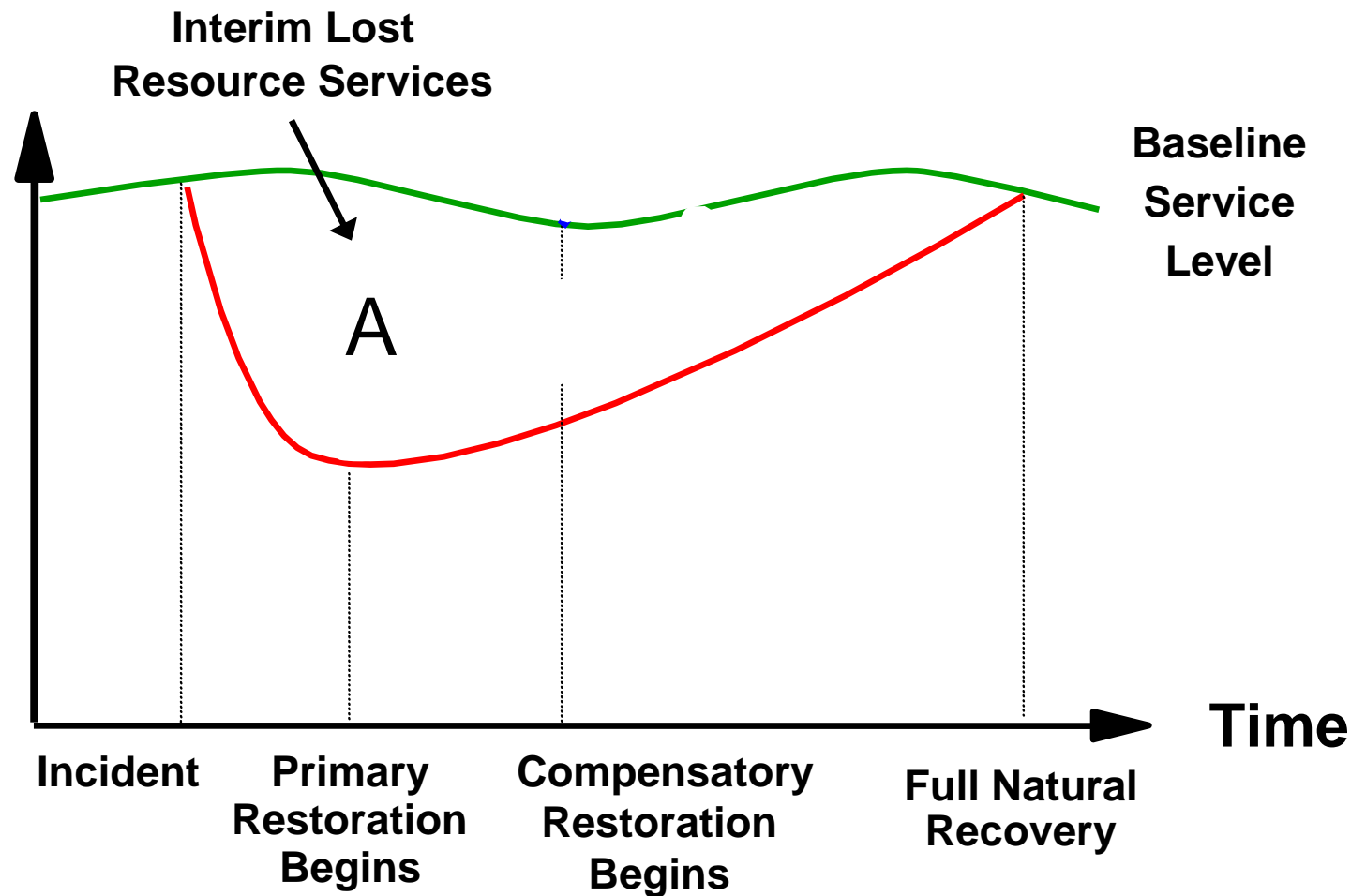
- Strictly speaking, money for
  - Restoration based on injuries
  - Costs of assessment
- Regulations focus on implementing restoration projects rather than collecting dollars

# What is Restoration?

- Primary restoration
  - Return injured resources to what they would have been were it not for the spill (baseline)
- Compensatory Restoration
  - To address losses through time
  - Beyond response
- Assessment cost recovery
  - Reimburse trustees for time and resources used to develop a claim

# Service Losses with Remediation & Restoration

Resource Services



# Laws



- Clean Water Act (CWA)
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund)
- Oil Pollution Act of 1990 (OPA)
- National Marine Sanctuaries Act (NMSA)
- Park System Resource Protection Act (16 USC 19 JJ)
- Applicable State Laws



# Regulations

- National Contingency Plan (40 CFR 300)
  - Requires response agencies to notify trustees and coordinate with them
  - Defines trustees: federal, state, tribal, foreign
  - Lists general responsibilities of trustees
- Regulations for NRD under CERCLA
  - Department of Interior (DOI) responsible
  - 43 CFR 11
- Regulations for NRD under OPA
  - Department of Commerce (DOC-NOAA) responsible
  - 15 CFR Part 990

# Natural Resources

- Trustees have jurisdiction over public natural resources
- Namely,



"land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States . . . , any State or local government, any foreign government, any Indian tribe, or, if such resources are subject to a trust restriction on alienation, any member of an Indian tribe"

- Resources need not be owned by the government to be "natural resources" (e.g. migratory birds)
- Only require a substantial degree of government regulation, management or other form of control over property (e.g., An aquifer is a trust resource whose injury gives the State a cause of action)
- Trusteeships may overlap; no double recovery

# Trustees

- State Governors
- Tribes
  - The tribal chairman or other representative may act as trustee for a tribe [NCP 300.610]
- Secretaries of Federal Departments
  - e.g. Commerce, Interior
- Foreign Governments (under OPA)



# Trustees...

- Coordinate w/response agencies (e.g., EPA) by integrating trustee concerns and science into the cleanup process
- Assess injuries
- Evaluate and scale restoration alternatives for
  - Returning resources to baseline
  - Compensating for interim lost resources and services
- Oversee and/or implement restoration plan



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# NRD Private Claims



- Private NRD claims are covered under OPA but not CERCLA
- Private claims include:
  - Damages to real or personal property
  - Net loss of taxes, royalties, rents, fees, and other lost revenues by federal or state governments
  - Loss of profits or loss of earning capacity due to injury to natural resources
  - Net cost of public services



# Relationship to Cleanup



# Relationship to Cleanup Actions

## Damages Are Residual to Cleanup

- EPA/USCG, state response agencies, or PRPs may clean up a site partially or completely; cleanup takes time
- NRDA seeks to recover for “residual” loss
- NRDA should take into account:
  - The extent and timing of cleanup action proposed or completed
    - more complete remedy = less future injury = less restoration required
    - the sooner the remedy, less restoration required
  - Likely effects of the cleanup action itself on natural resources

Release

Investigation

Planning

Construction

Return to Baseline

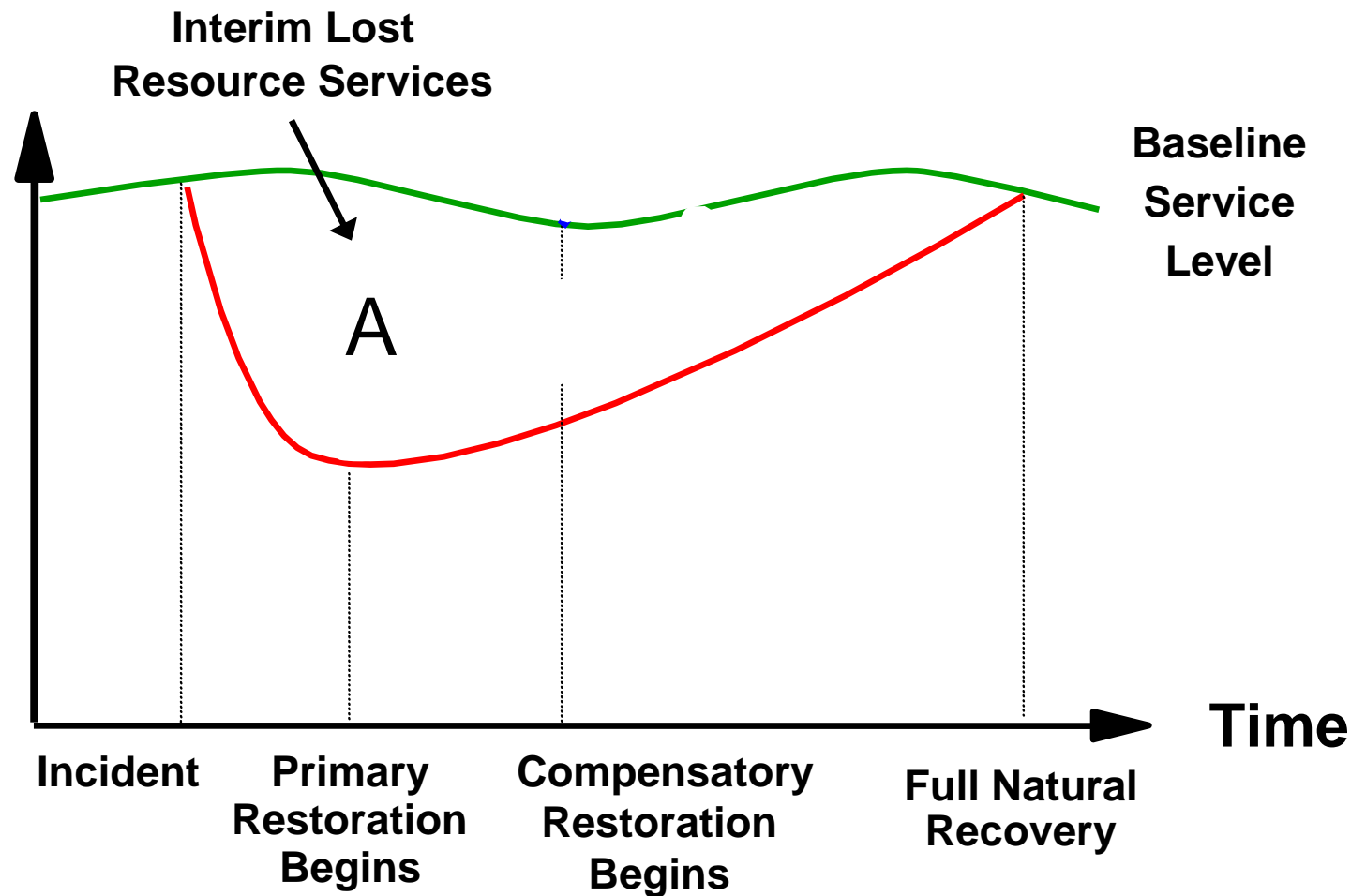
# Relationship to Cleanup Actions

## Damages Are Residual to Cleanup

- Damages are residual to cleanup because a cleanup action may address injured natural resources (restoration to baseline)
- Differing purposes of the cleanup and natural resource restoration:
  - The primary charge for cleanup is to select and implement an action that protects human health and the environment from further harm
  - NRD actions are to make the public whole: past, present and future
- Cleanups will not necessarily eliminate all of the harm resulting from past releases and harm may continue after cleanup construction work is completed (restoration for compensation)

# Service Losses with Remediation & Restoration

Resource Services



# Relationship to Cleanup Actions

## Damages-only sites

- Trustees may also bring NRD claims with respect to sites where no cleanup action would otherwise occur
- Examples
  - Montrose Chemical Co., DDT and PCB contamination in marine sediments off the California coast near Los Angeles
  - City of Seattle, contamination in Elliott Bay
  - Saginaw River and Bay, PCBs in sediments



# Relationship to Cleanup Actions

## Cleanup Agencies/Trustees Must Work Together

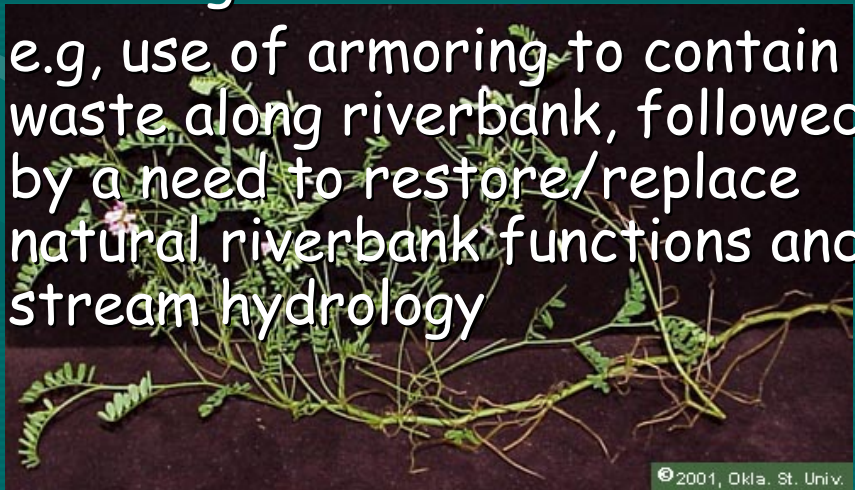
- Cleanup agencies must notify trustees, coordinate with NRDA investigations, and invite trustee participation in negotiations with PRPs
- Cleanup agencies and the trustees should coordinate early
  - Trustees' information needs and restoration objectives can be considered in cleanup investigations and decision making
  - Trustees can acquire sufficient information to play a meaningful role in subsequent actions and negotiations
- Timely coordination benefits cleanup agencies: avoids potential for disruption of settlement negotiations
- Timely coordination benefits PRPs: allows cost-effective investigations and development of alternatives that coordinate cleanup and restoration



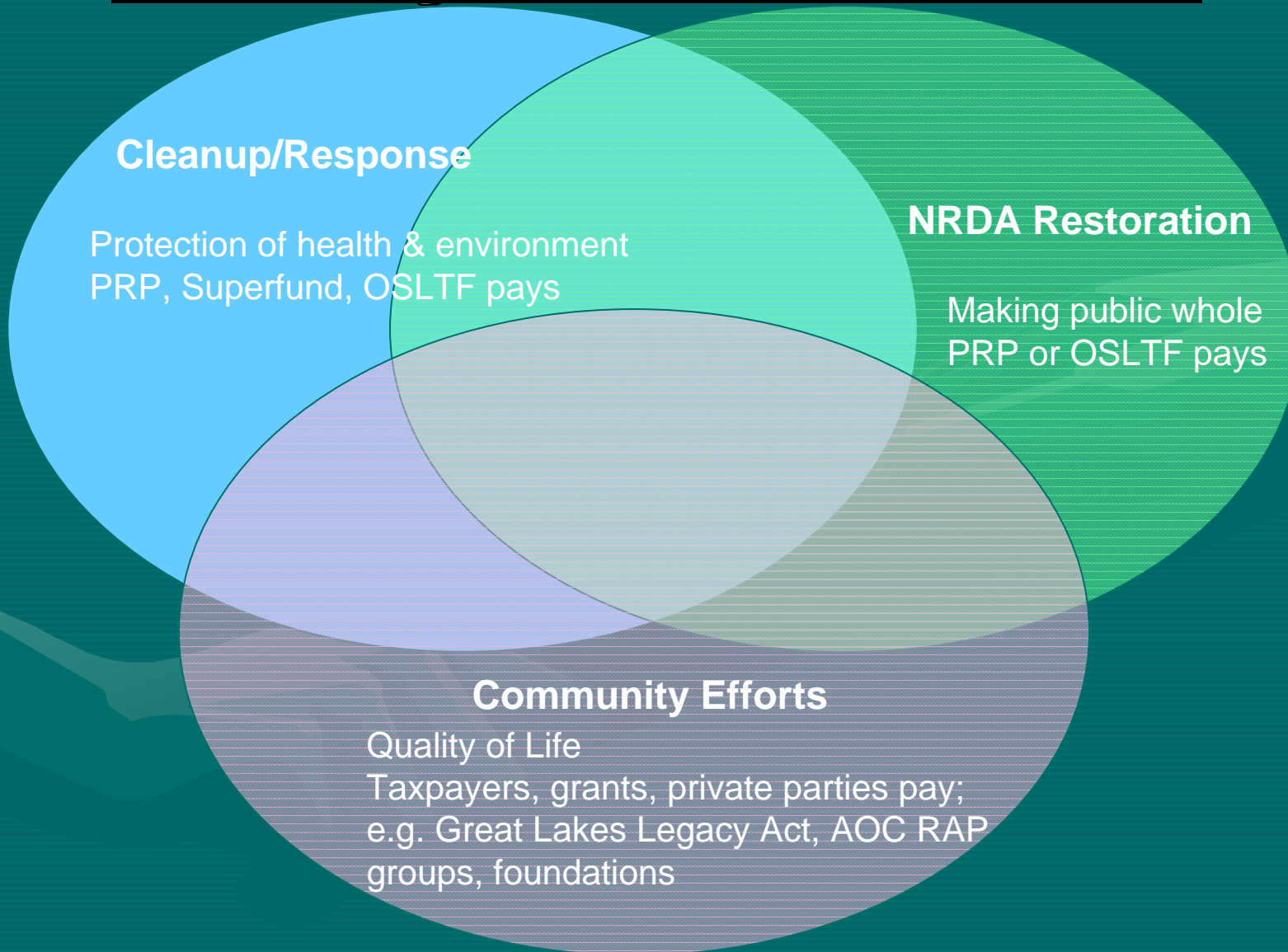
# Relationship to Cleanup Actions

## Cleanup Agencies/Trustees Must Work Together

- Coordination of cleanup and restoration avoids “undoing” a cleanup to achieve a restoration goal
- e.g., use of aggressive vegetation to prevent erosion, followed by need to eliminate that vegetation
- e.g, use of armoring to contain waste along riverbank, followed by a need to restore/replace natural riverbank functions and stream hydrology



# Relationship to Cleanup and Other Actions Benefiting the Local Environment



# Scope of Liability



# Scope of Liability for NRD

## Elements of Liability

- Trustees must demonstrate that there has been "injury" to natural resources "resulting from" a "release/discharge".
- Liability for natural resource damages, like liability for response costs, is joint and several unless a defendant can meet its burden of proving divisibility of the harm



# Scope of Liability for NRD

## Meaning of Injury

- Not defined per se in the law. CERCLA only refers to an "injury to, destruction of, or loss of natural resources".
- Injury is defined in 43 CFR 11 as "a measurable adverse change, either long- or short-term, in the chemical or physical quality or the viability of a natural resource"
- CERCLA regulations allow demonstration of injury either by:
  - Empirical evidence of an adverse change in a particular case (e.g., lower hatching rates, increased incidence of tumors), or
  - Reliance on a prior regulatory determination (e.g. WQC) to identify a threshold above which injury may be expected
- OPA has a comparable definition of injury, requiring proof of injury based on such standards of scientific reliability and validity



# Scope of Liability for NRD

## Causation

- The "resulting from" language imposes a burden on the government to establish a causal link between a release/discharge and natural resource injury -- the precise nature of the burden remains unsettled
- Past cases suggested various approaches, such as:
  - Determining a pathway
  - Predictive models
  - Demonstration of contributing factor
  - Koch's postulates (epidemiology)

# Scope of Liability for NRD

## Statutory Limitations and Exceptions

### "Cap" under CERCLA

- Recovery of NRD for each release or incident involving release is limited (to \$50M) unless the release resulted from willful misconduct/negligence or from a violation of federal safety/operating standards
- This may be a significant limitation in cases where the release was a one-time spill or release
- However, it should not affect most cases where hazardous substances were spilled over a long period (e.g., where typically occurrences are considered as multiple releases, separate incidents or incidents attributed to separate PRPs)

# Scope of Liability for NRD Statutory Limitations and Exceptions

## Losses Identified in a Permit under CERCLA/OPA

There can be no recovery for natural resource losses that were specifically authorized by permit or identified in an EIS/EA

# Scope of Liability for NRD

## Statutory Limitations and Exceptions

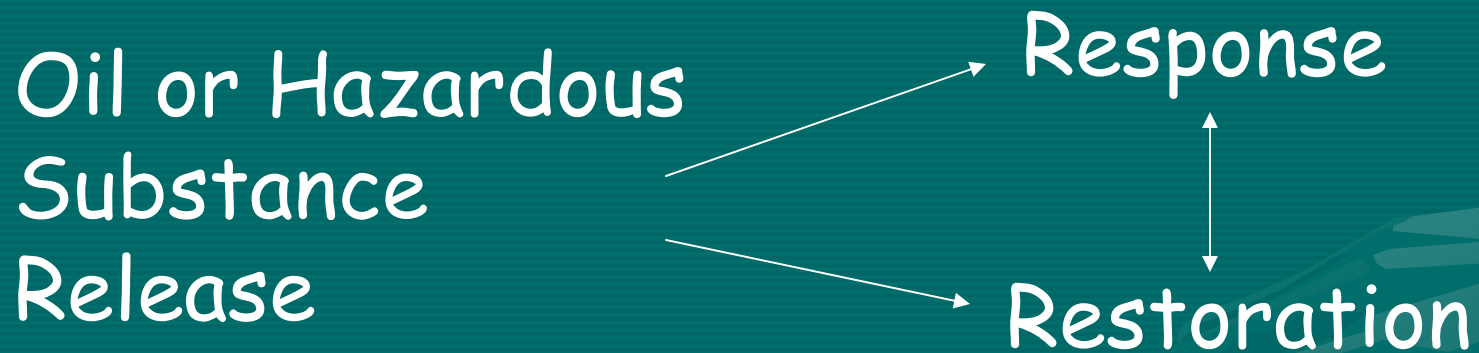
### The "pre-enactment damages" exception under CERCLA

- No recovery for NRD that occurred wholly before December 11, 1980
  - Trustees are entitled to recover all damages that occur after December 11, 1980, regardless of whether they result from pre-enactment or post-enactment releases
  - Where NRD is readily divisible, trustees cannot recover for damages that occurred before December 11, 1980
  - Where damages are not divisible and the damages or the releases continue post-enactment, trustees can recover for the non-divisible damages in their entirety (e.g., damages for aesthetic injury may be an example of damages that may be indivisible)
- Damages measured by restoration costs are probably not restricted by this exception.

# NRDAR Process

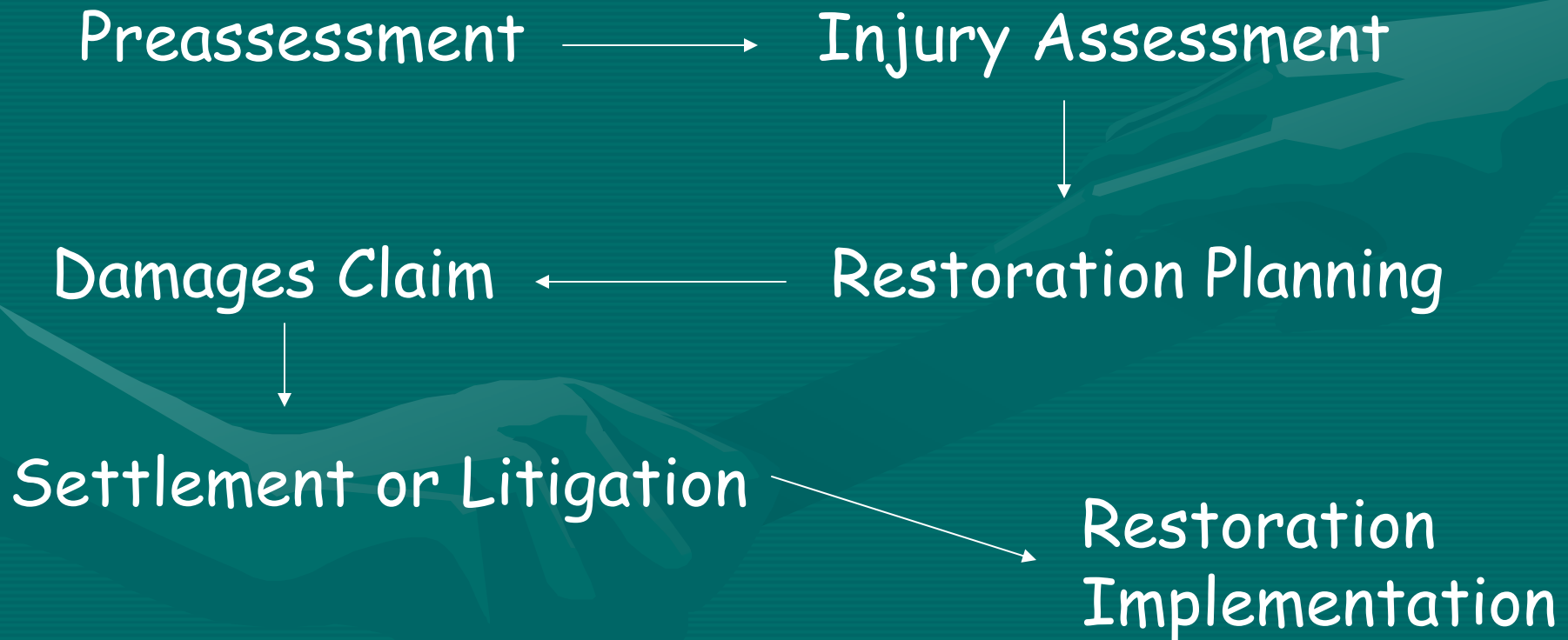


# The Big Picture





# General NRDAR Process



# NRD Process

## Regulations Describe Process

- Regulations implementing CERCLA (at 43 CFR 11) and OPA (15 CFR 990) provide rules that guide the NRDA process.
- The rules provide a framework for decision-making, transparent to public and PRPs.
- The rules allow for flexibility in some areas.
- Use of the NRD rules provides trustees with a "rebuttable presumption": the results of the assessment will be presumed to be correct.
- Following the rules is optional.

# NRDAR Process Phases

- OPA:
  - Preassessment
  - Restoration Planning
  - Restoration Implementation

- CERCLA:
  - Preassessment
  - Assessment Plan
  - Assessment
  - Post Assessment

# NRDAR Process

## Preassessment Phase

- OPA

- Determination of Jurisdiction
- Determination to Conduct Restoration Planning
- Data Collection
- Notice of Intent

- CERCLA

- Notification & Detection
- Emergency Restorations
- Data Collection
- Preassessment Screen

# NRDAR Process Next Steps

- OPA

Restoration  
Planning



- CERCLA

Assessment Plan  
&

Assessment





# NRDAR Process

## OPA Restoration Planning Phase

### Injury assessment

- Injury determination
- Injury quantification
- Analysis of natural recovery

### Restoration Selection

- Primary restoration
- Compensatory restoration
- Scale restoration actions
- Evaluation of alternatives

### Develop Restoration Plan



# NRDAR Process

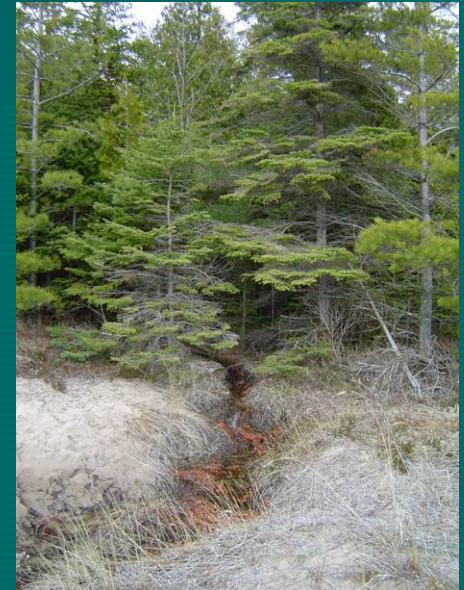
## CERCLA Assessment Plan Phase

- Coordination with all Trustees
- Notice of Intent
- Identify type of procedure to assess injury
- Determine how to confirm exposure
- Determine how to develop preliminary estimate of damages
- Public review of plan

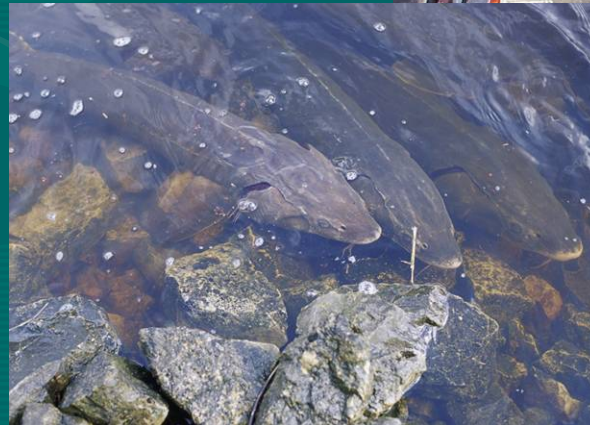
# NRD Process

## CERCLA Assessment Phase

- Injury Determination
  - Injury Quantification
  - Damage Determination
    - Restoration and Compensation Determination Plan
- \*Restoration alternatives



# NRDAR Process Biological Injury





# NRDAR Process

## OPA Restoration Implementation

- Close Administrative Record
- Present a Demand for Damages
  - Responsible party carries out restoration with Trustee oversight
  - Responsible party pays Trustees to complete restoration
- Restoration Implementation



# NRDAR Process

## CERCLA Post-Assessment Phase

- Report of Assessment and Demand for Damages
- Recover Damages
- Restoration Plan
- Restoration Implementation

How it usually actually happens:

- Negotiation
- Remedial and Restoration Design Coordination
- Global Settlement

# Cooperative NRDAR





# Coordinating with RPs / PRPs

## Emphasis on Restoration and Settlement

- Focus on restoration
- Encourage expedited assessments to:
  - Achieve restoration more quickly
  - Reduce interim losses
  - Reduce costs



# Cooperative Assessments Benefits

Lower costs with focus on restoration

Sound restoration plan developed

Consensus approach to resolving liability

Litigation avoided

# Cooperative Assessments

## What is Needed for Success

- Coordination with response agencies
- Data sharing
- Framework for cooperative planning
- Framework for objective decision-making
- Public participation
- Funding

# NRDAR Summary

- Process to make the public whole through restoration following releases of hazardous substances and/or oil
- Based on CERCLA, OPA, other laws and regulations
- Advantages to coordinating with response, community
- Liability is joint and several
- Liability is limited in certain ways:
  - \$50M cap, permitted releases, pre-CERCLA damages
- Processes are slightly different under CERCLA and OPA, but general steps are:
  - preassessment, injury assessment, restoration planning, damages claim, settlement/negotiation, restoration
- Cooperative assessments focus on restoration, employ expedited assessments, seek to reach consensus and settlement