



# DON RAB/TRC Training Workshop



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## Natural Resource Injury vs. Damages

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## Natural Resources Injury vs. Damages



# Presentation Objectives

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- Define: Natural Resource Injury (NRI)
- Define: Natural Resource Damage Assessment (NRDA)
- Review NRI policy
- Review Trustee Identification and how NRI and NRDA may impact your team



## Natural Resources Injury vs. Damages



# What is a Natural Resource?

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- A natural resource [CERCLA (107)] is defined as “land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by,... the United States, any State, local government, Indian Tribe”



## Natural Resources Injury vs. Damages



# What is NRI? - 43 CFR 11. 62, and 11. 14

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- **Injury** refers to the actual harm or reduction in services (the biological or physical function performed by the resource) that occurs to the resource
  - This can be assessed using scientific modeling and predictive measurement techniques



## Natural Resources Injury vs. Damages



# What is NRDA vs. NRI?

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- **Damages** means the amount of money sought by the trustee as compensation for the injury
  - *Note:* Damages are NOT paid from ER,N or BRAC funds; rather they come from the DOJ Judgment Fund



## Natural Resources Injury vs. Damages



# What is NRDA vs. NRI?

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- NRI is determining the injury to the resource
- NRDA is determining the value of the injury
  - Based on applying economic factors to the injury
  - There are specific processes to assess the injury and damages, if applicable



## Natural Resources Injury vs. Damages



### Natural Resources Injury

- What was injured?
- What quantities were injured?
- Analyzed during the eco risk assessment
- Address during remedy selection ...possible restoration ...Navy uses “cleanup funds” (ER,N)
- Interim injury ...economic loss for time period up until restoration ...addressed via damage claim →
- Residual injury ...economic loss for that not addressed by remedy ...Addressed via damage claim →

### Natural Resource Damages

- What is the value (and to whom) of damaged/lost resources?
- DOI/NOAA procedures for valuation
- PRP pays Trustee damages based on value of services
- This claim against the Government ...DOJ has standard procedures
- Navy uses DOJ “judgment fund”
- Controversial from public policy perspective



## Natural Resources Injury vs. Damages



# NRDA

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- Occurs after remedy is complete
- Is based on evaluations of the injury and how the resource is valued by the community
- Has specific procedures that must be followed by the trustee/s bringing the NRDA



## Natural Resources Injury vs. Damages



# NRDA

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- Federal funds cannot be transferred between federal agencies for NRDA; therefore any NRDA might result in restoration rather than damages (this does not apply to states)
- DON prefers to address injury during the CERCLA response process and let other trustee/s handle any NRD after the remedy is complete



## Natural Resources Injury vs. Damages



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# Risk Assessments vs. NRDA

<i>Receptors</i>	Humans/biological organisms	Resources (media, biota, services)
<i>Process</i>	Tiered	Tiered
<i>Result</i>	Risk estimation	Injuries identified
<i>Parties Involved</i>	Lead agencies, regulators	State, federal, tribal, trustees
<i>Results Used For</i>	Remedy decisions	\$\$\$ amount assigned for compensation



## Natural Resources Injury vs. Damages

# What is a Natural Resource Trustee?

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- A trustee is an organization (specifically the head or secretary of the organization) who is responsible for protecting the natural resource covered by their organization



## Natural Resources Injury vs. Damages



# Natural Resource Trustess

Trustee	Trustee For
<i>Department of Interior (FWS)</i>	Fish and wildlife
<i>Department of Commerce (NOAA)</i>	Fish in oceans, seas, and bays
<i>Department of Defense</i>	Natural resources on its property
<i>States</i>	Natural resources within the state
<i>Tribes</i>	Tribal resources (beyond just land, such as fishing resources)



## Natural Resources Injury vs. Damages



# Navy Focus: NRI

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- ER,N funds used for investigation of NRI
- ER,N funds used only for restoration at the site
  - ER,N funds *not* used for Interim Injury (economic loss for time period up until remedy—Judgment Fund)
  - ER,N funds *not* used for Residual Injury (economic loss for that not addressed by remedy—Judgment Fund)



## Natural Resources Injury vs. Damages



# DoD NRI Policy

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- Objective of the policy
  - “To promote earlier and more complete consideration of the risks to Natural Resources associated with past activities and cleanup alternatives; to lower total costs of the remediation programs; and to reduce the potential for response cost recovery or natural resource damage claims against the components”



## Natural Resources Injury vs. Damages



# DoD NRI policy

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- Key point
  - Address NRI as part of the site assessment and investigation when practicable
    - This implies that the primary goal is to address the CERCLA issues and, to the extent possible, address injury to the resource. This means collect cost effective information to document state of any injury, design remedies that minimize further injury, and minimize any residual injury to the resource



## Natural Resources Injury vs. Damages



# DoD NRI policy

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- Coordinate with trustees
  - Identify, with assistance from your natural resource department and partnering team members, all impacted trustees
  - Involve them in the site assessment and remedy selection process by including the trustees on distribution lists and by contacting the trustee when a major action or investigation may occur
  - Continue to focus on the goals of CERCLA and risk assessments while cost effectively striving to consider trustee concerns



## Natural Resources Injury vs. Damages



# DoD NRI policy

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- Consider which alternative in the FS best redresses the past NRI
  - Consider the impact of the release on the environment when developing alternatives
  - Can you establish a moderately certain baseline using techniques such as habitat evaluation procedures?
  - Can you address some of the lost services in your remediation?
  - You cannot replace past lost services that can only be redressed using actual dollars such as lost fishing revenue



## Natural Resources Injury vs. Damages



# DoD NRI Policy

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- Determine if implementation of the alternative will cause injury
  - Is the preferred alternative the most environmentally sensitive?
  - Can you reduce the impact to the natural resource via avoidance, minimization, replacement, or restoration?
    - i.e., rather than cap a marsh landfill, remove to a more central location or consolidate and restore the marsh



## Natural Resources Injury vs. Damages



# DoD NRI policy

- To the extent possible, while complying with CERCLA, select a response action that will result in the least residual injury once the action is completed
  - Is there unacceptable residual risk after completing the remedy?
  - Can you minimize this risk by choosing another alternative?
  - If there is residual risk, can you negotiate with your team to replace the predicted future losses by in kind, or equivalent on-base restoration as part of your remedy?



## Natural Resources Injury vs. Damages



# RAB Responsibility

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- Review remedial action alternatives for potential harm to the environment
- Recommend additional alternatives to meet the overall goal of protecting human health and the environment



## Case Study

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- **Goal:** Restore wetlands from remedial activities and to begin to offset the effect of future losses due to remedial activities
- Loss of 3.6 acres wetland (emergent, phragmites, which is a common, and undesirable reed) due to the capping of a landfill



## Case Study

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- Wetlands main service function was for flood control and filtration
- Replacing the wetlands on the cap is not feasible
- The project team determined that by restoring the nearby habitat to its full potential service (in terms of flood control, erosion, filtration, and habitat value) the resulting habitat service would be 3 times that of the lost wetland



## Natural Resources Injury vs. Damages

# Naval Construction Battalion Center Davisville, RI - Allen Harbor Landfill



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## Natural Resources Injury vs. Damages

# Naval Construction Battalion Center Davisville, RI - Allen Harbor Landfill

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- Landfill adjacent to Allen Harbor
- PCB area discovered in wetlands during remediation of landfill
- Trustees requested 1.5 acres of wetland restoration
- Rhode Island Coastal Resources Management Council and FWS provided wetland restoration design
- Navy RAC restored 2 acres of Phragmites-dominated wetland concurrent with remediation
- Cost savings approximately \$60,000



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## Natural Resources Injury vs. Damages

# Philadelphia Shipyard Girard Point

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- Landfill on the Delaware and Schuylkill Rivers
- Risk drivers were SVOCs, PCBs, Dioxins, TPH, metals, and asbestos
- Trustees' input influenced final remedy selection
- Regulators agreed with vegetative cap in lieu of impermeable cap and Geomembrane
- Cost savings over \$3 million



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# Philadelphia Shipyard Girard Point



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# Questions? Discussion?