Natural Resource Damage Claims:

Potential Liabilities and Mitigation Opportunities

LTC Daniel Sheehy USACHPPM

dsheehy@aquabio.com

Overview

- Basis for NRD Claims
- NRDA and Restoration Process
- Damage Measures
- Restoration Approaches
- Potential DoD Impacts
- Mitigation Opportunities

NRDA Claims

- Primary Federal Statutes
 - CERCLA DOI Rules
 - OPA NOAA Rules
- State Claims
 - Federal Statutes
 - State Fish/Game Laws, Civil Codes
- International Claims
 - Federal Statutes OPA
 - UN Compensation Commission

NRDA - Restoration Process

- Damage Assessment
 - Preassessment Phase
 - Assessment Planning Phase
 - Assessment Phase
 - Post Assessment Phase
- Restoration Implementation

Natural Resource Damage Measures

- Cost of restoration (primary damages)
- Compensable value of resource services lost from date of injury until restoration is complete

NRDA Restoration Includes:

- **Restoration** involves direct attempts to return the resource to its baseline condition
- Replacement provides a substitute for injured resources
- Acquisition of the Equivalent provides for the purchase, trade, and other acquisition or protection of resources that are similar or related to injured resources

Restoration Planning Considerations

- Nature and extent of injuries/damages
- Baseline conditions
- Natural recovery rates
- Impacts of proposed cleanup efforts
- Potential restoration methods
- Guidance provided in the NRDA rules
- Stakeholder concerns

Potential DoD Impacts

- Training restrictions
- BRAC
- FUDS
- Problematic IRP sites
- Disposal activities
- International agreements

Mitigation Opportunities

- Take advantage of existing defenses
- Anticipate and prevent or minimize potential claims
- Take a proactive approach if claims are made

Existing Def

- Claimed damages were identified in an EIS or similar analysis as irreversible and irretrievable commitment of resources
- The decision to grant a permit or license authorized a commitment of resources
- The permitted facility operated within the terms of its permit or license

Anticipatory Management

- Assess vulnerabilities
 - Identify potential sites
 - Rank sites based on possible damages
 - Take preventive measures
- Establish and/or preserve baseline data
- Identify potential replacement or acquisition opportunities

Proactive Measures

- Act while DoD has trustee standing
- Seek cooperative or negotiated settlements
- Use habitat equivalency analysis methods to address damage compensation
- Improve restoration planning and implementation

Enhancing Restoration

- Improve the decision making process
- Expedite restoration implementation
 - Integrate restoration with remediation
 - Consider early stakeholder participation
- Consider innovative alternatives that are cost-effective



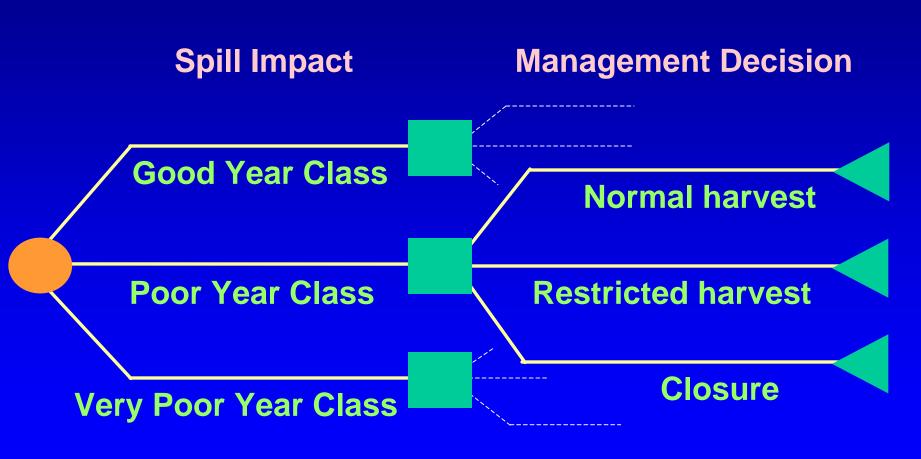
Decision Analysis Methods to Support Restoration Planning

- A structured modeling approach that is used to provide insight for complex decisions
- Helps integrate different factors and/or explicitly consider uncertainty
- Enables planners to explore future scenarios and identify key information needs
- Expedites restoration decisions and documents the project selection process

Exxon Valdez Oil Spill: Avoiding Additional Injury

- **Decision -** How to adjust fishing pressure to minimize further injury to returning salmon?
- **Issue -** Protective closure approach was risky since this was a culture-based fishery
- Method Decision Tree used to assess the expected value of additional information about returns
- **Results -** Justified real-time monitoring of returns that enabled adaptive management of harvest to reduce the potential for additional injury

Fishery Management Strategy: Simplif



Maitland/Elpis Grounding: Expedite Restoration

Decision - How to select the best engineering methods to structurally repair coral reefs?

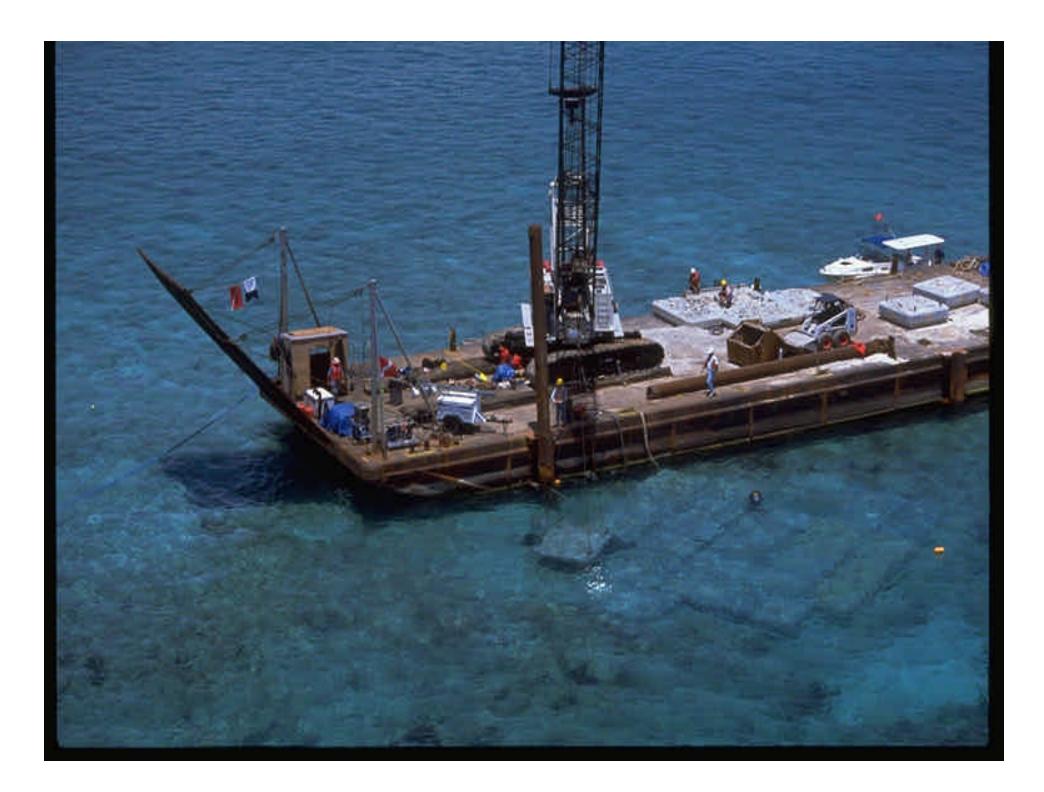
Issue - Urgent need to implement restoration; controversy over NOAA sanctuary policy

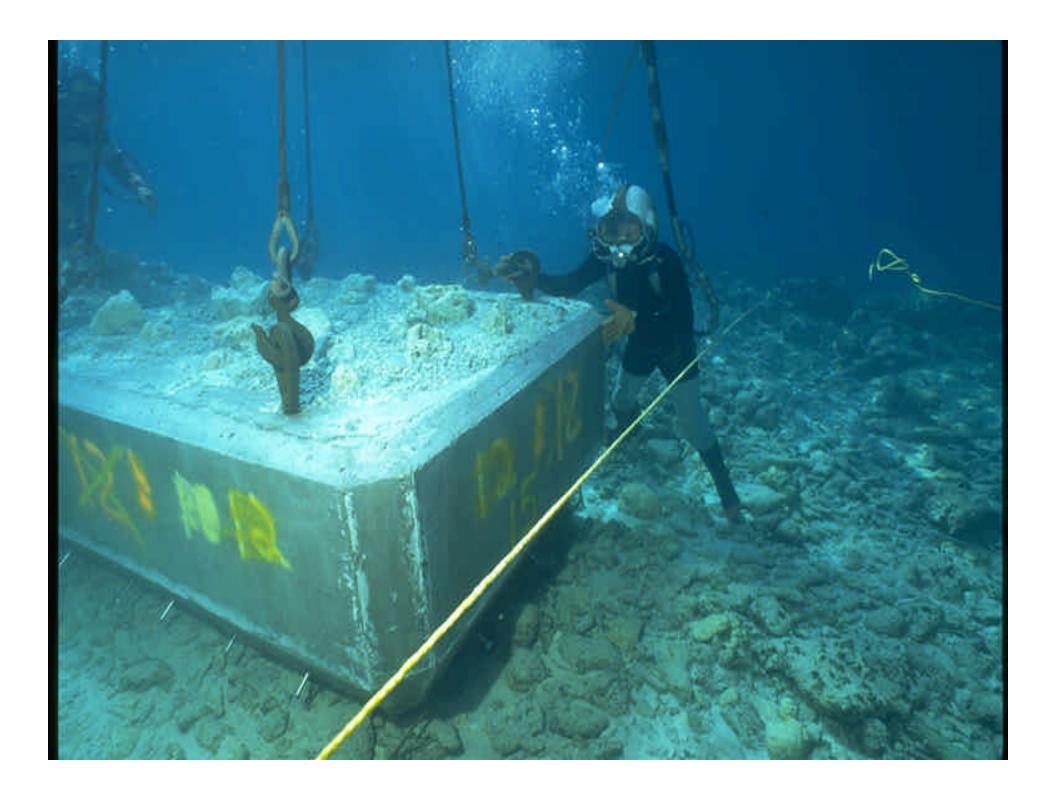
Method - Group multicriteria methods used to link trustee planning to design process

Results - New methods quickly selected, tiered NEPA documents to DA, and use of "Best Value" contracting for implementation

Linking Planning and Design

Engineering Design Decision Analysis Injury Investigation Restoration Objectives Site Survey/Characterization Attribute Definition Conceptual Design Alternatives Identified Design/Development Selection of Preferred Alternatives Final (Construction) Design Sensitivity Analysis Mitigation Requirements Contractor Selection Implementation







Cantara Loop Toxic Spill: Restoration Project Selection

- **Decision -** How to select an annual portfolio of restoration projects over a 5 year period?
- **Issue -** Consistent and defensible approach needed due to active intervention by stakeholders
- Method Group multicriteria decision analysis based on criteria in charter documents; turnkey software used by expert peer review panel
- **Results -** Provided defensible framework for soliciting & evaluating proposals

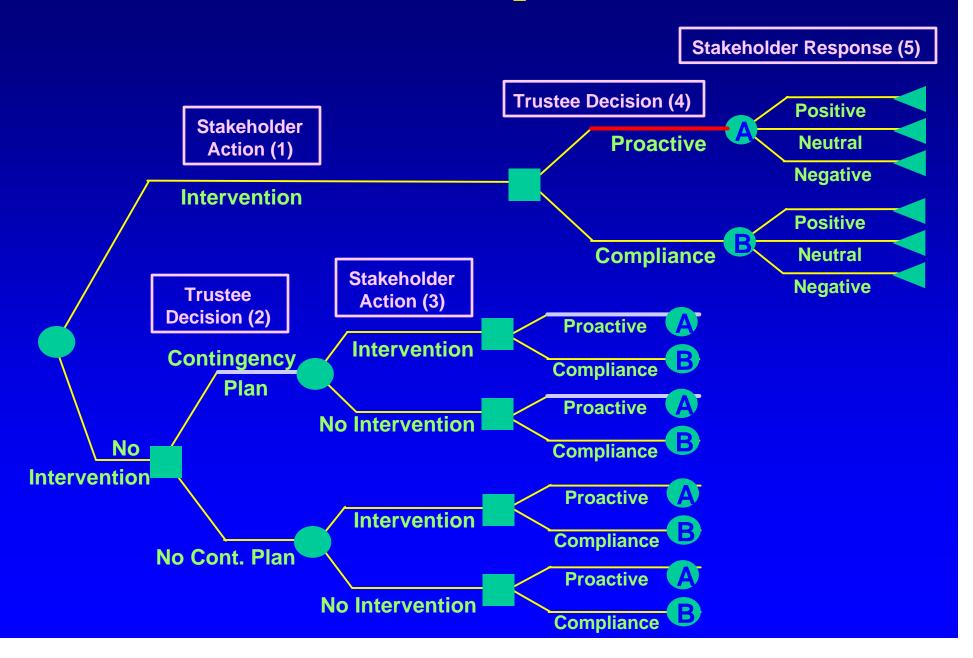
Relationship Between Panel Evaluation and Council Decisions

Tier Assigned by Panel	% Funded by Trustees	% Consistency
I	94	88
II	33	83
III	3	98

Evaluating Options f Participation in Restoration Planning

- **Decision -** How and when to involve stakeholders in the restoration planning process?
- **Issue -** Diverse stakeholders, potential for adverse impacts due to stakeholder intervention
- **Method -** Retrospective analysis used to create decision tree to explore site-specific costs of alternative participation scenarios
- **Results -** Suggested the expected value of a more proactive stakeholder participation

Stakeholder Participation Decision



Current Trends NRDA Practice

- State claims
- Cooperative agreements
- Restoration cost as the prime measure of damage (Habitat Equivalency Analysis)
- Closer linkage between injury and proposed restoration,
- More proactive stakeholder participation

Conclusions

- DoD is vulnerable to NRD Claims
- Impacts on training and operations
- Anticipatory management can help avoid claims or reduce their scope
- Proactive approaches can reduce costs and promote a positive image