

# Natural Resource Damage Assessment and Restoration in California

CalRecycle 2016 Used Oil/Household Hazardous  
Waste Training & Conference  
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**Steve Hampton, Ph.D.**  
Resource Economist  
Office of Spill Prevention and Response  
California Dept of Fish & Wildlife



# Overview

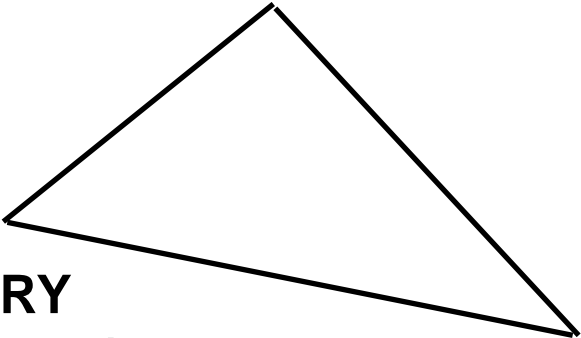
- **What are Natural Resource Damages?**
- **Who are the Trustee Agencies?**
- **Coordination with Others**
- **Process and Methodologies**



# Potential Components of a Pollution Settlement



**FINES, PENALTIES**



**COST RECOVERY  
(Response & NRDA)**

**NATURAL  
RESOURCE  
DAMAGES**

**THIRD PARTY CLAIMS**

# What are Natural Resource Damages?

- Compensation for natural resource injuries
- Compensation for loss of use and enjoyment
- “Injuries” are biological impacts  
“Damages” are monetary
- Damages are based upon the amount of **restoration** needed to make the environment and the public whole (OPA, CERCLA, Lempert-Keene-Seastrand)

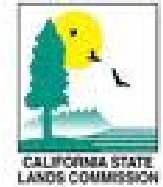
# Legal Authority

- OPA 90 – oil; CERCLA – other haz mat
- Other Federal Laws (e.g. Clean Water Act)
- Lempert-Keene-Seastrand Oil Spill Act (CA)
- Other State Laws



# Potential Trustees

- CA
  - **CDFW\***
  - State Parks
  - State Lands



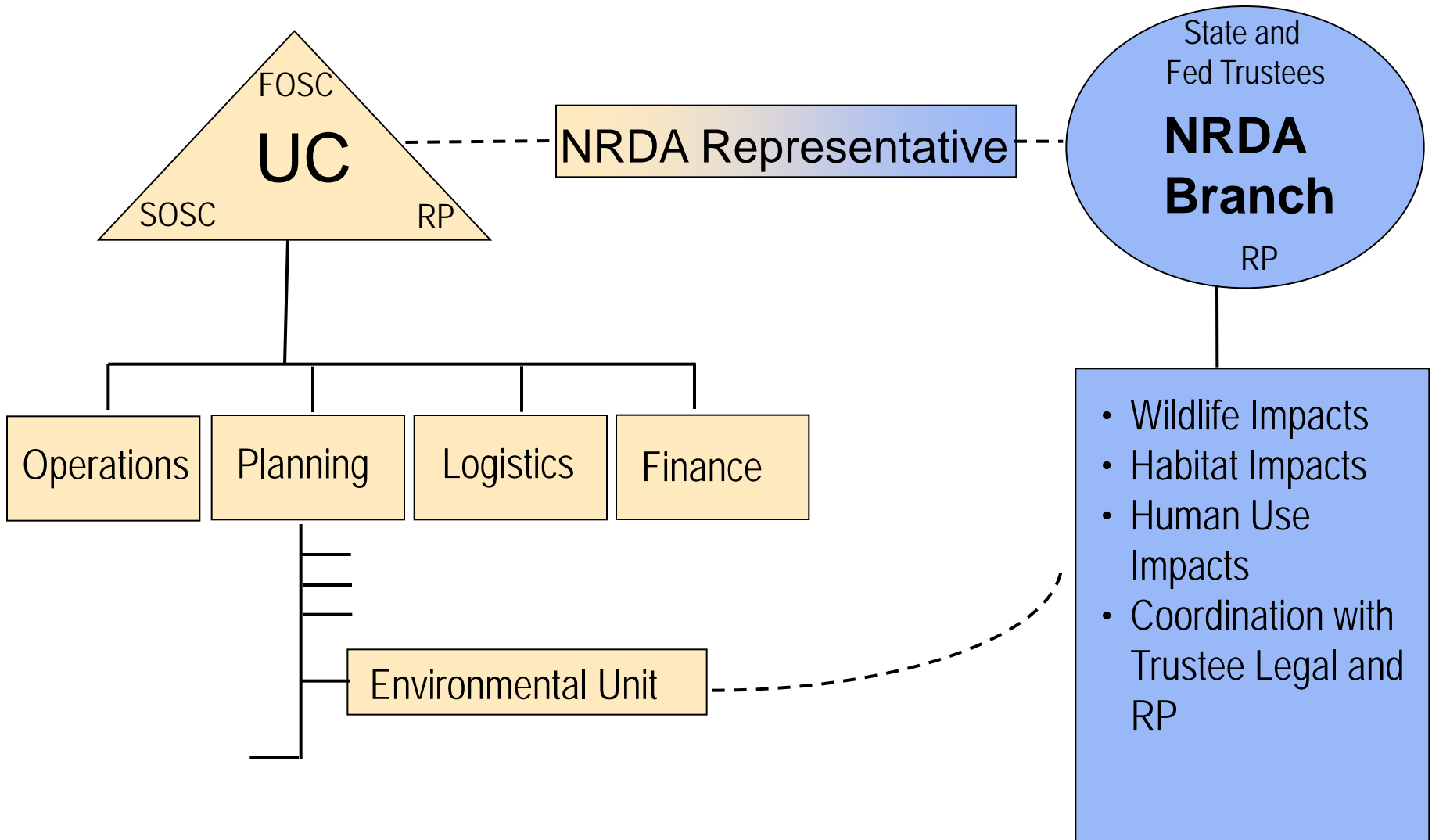
- Federal
  - **NOAA\***
  - **USFWS\***
  - NPS
  - BLM



- Tribes

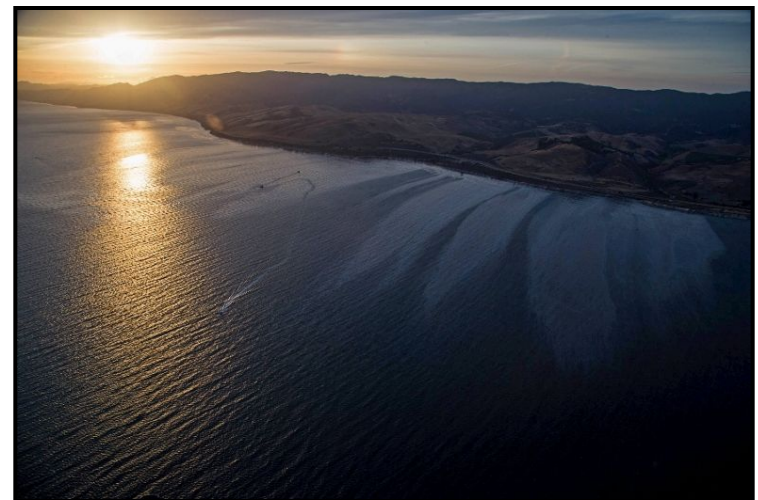
\* Primary agencies typically involved in NRDA

# Coordination during Response



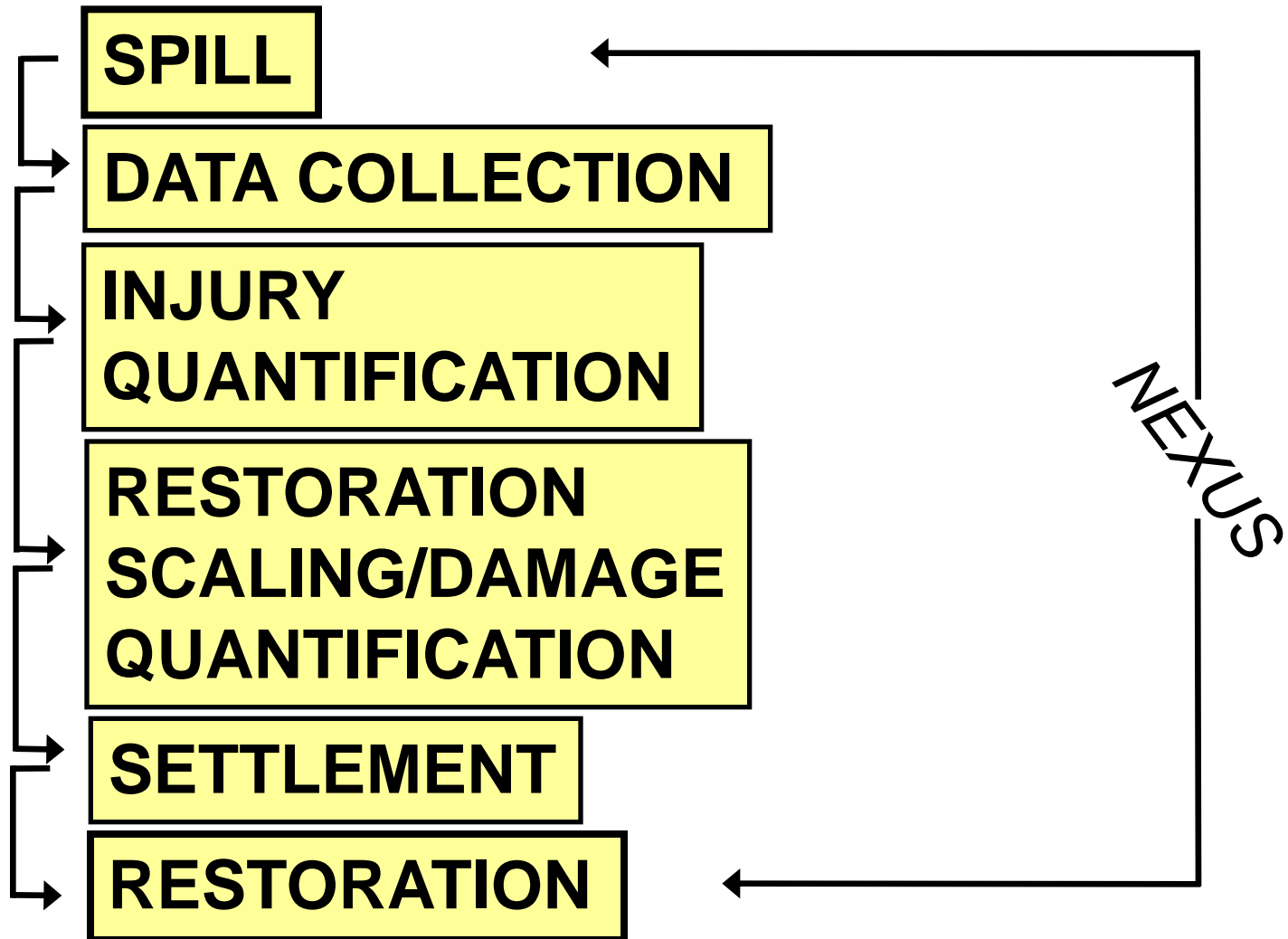
# NRDA Myths

- NRDA is a black box of smoke and mirrors and there is no standard method for calculating damages
- Natural resource damages are usually much larger than response costs
- NRDA is punitive
- Trustees are only interested in “cash out” settlements
- Settlement money goes into the general fund



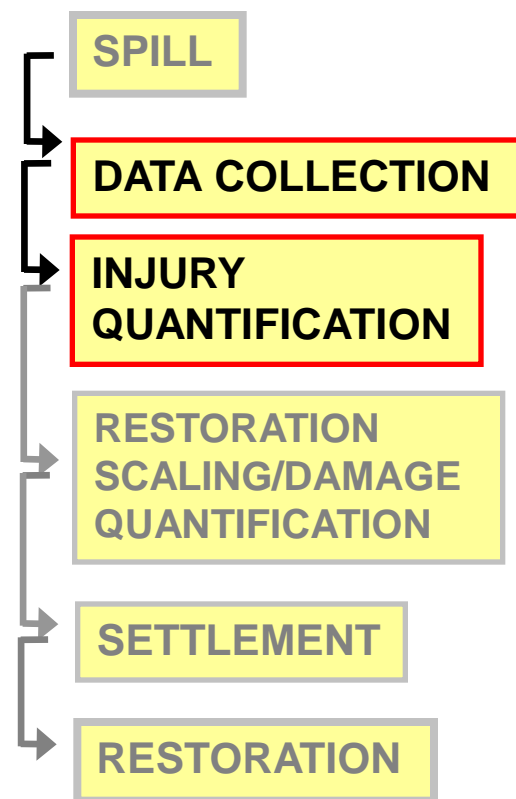


# The NRDA Process



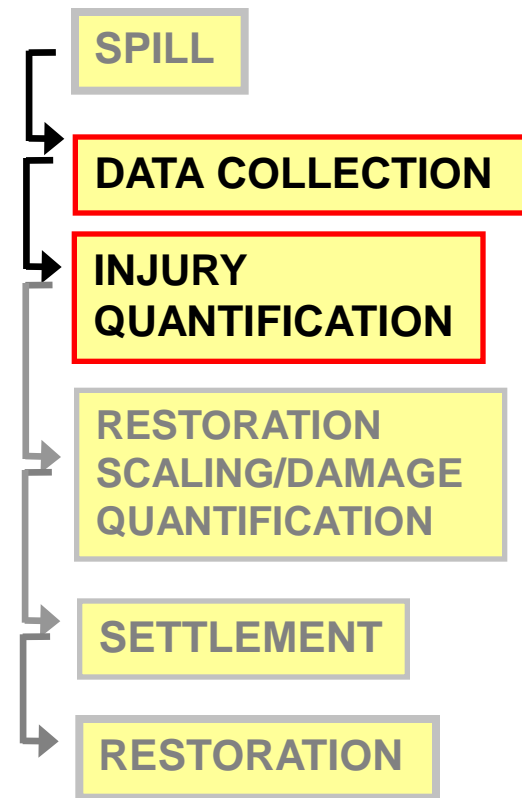
# Data Collection and Injury Determination

- Central Questions
  - What was injured?
  - How much? (# animals, # of acres)
  - How badly?
  - For how long?
  - Use Reports & Study Data



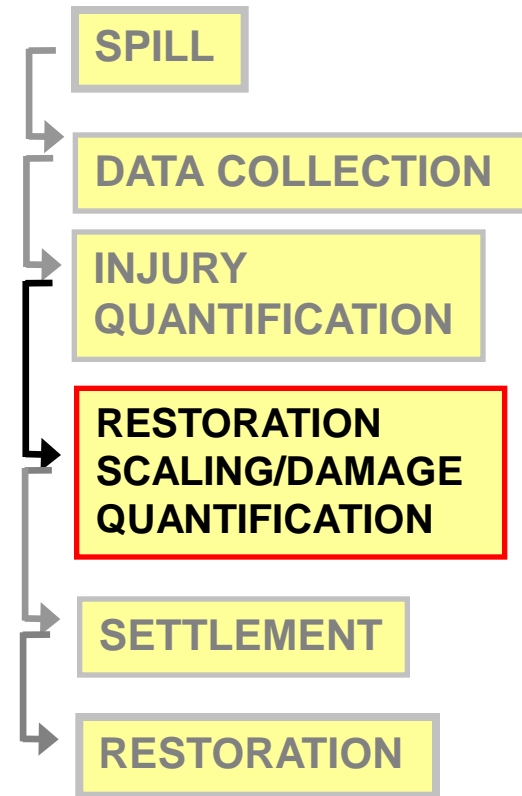
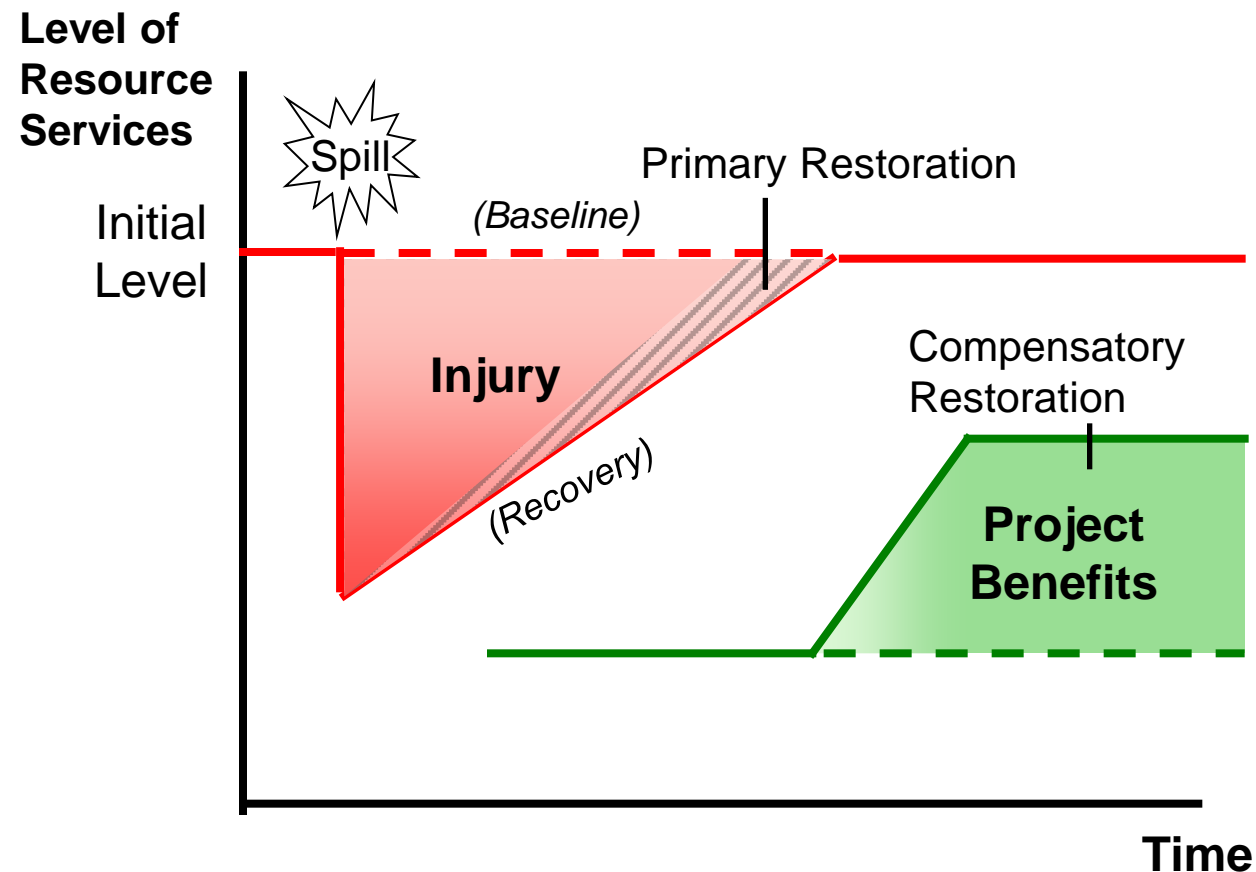
# Data Collection and Injury Determination

- Later activities: “Putting it all together”
  - Modeling
  - Subsequent NRDA studies



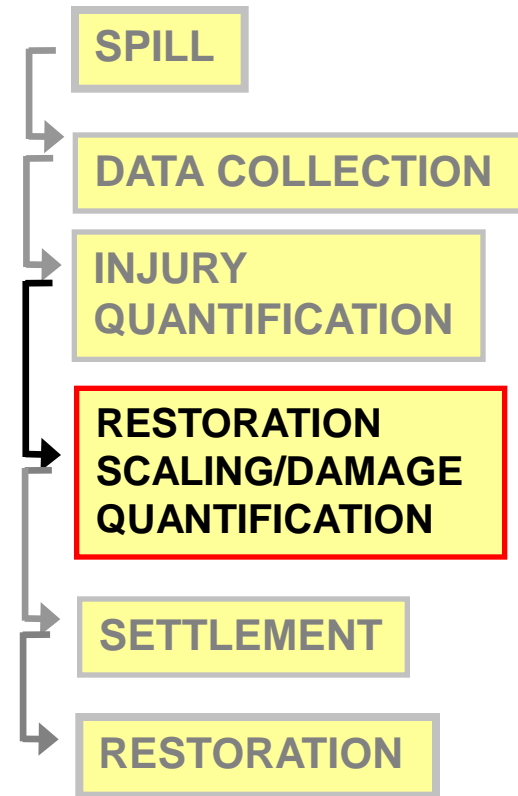
# Restoration Scaling/Damage Quantification

**Acre-Years of Loss Due to Spill = Acre-Years Gained from Restoration Project**



# Damage Quantification for Human Rec Uses

- Human Recreational Uses
  - Beach Activities
  - Fishing
  - Wildlife Viewing
  - Tribal Uses
- Use surveys, car counters, input from land managers
- Damages for Use Losses
  - Value of Lost and Diminished User-Days



# Methodology: Summary

- Standardized methods that use degree and spatial/temporal extent of injuries to calculate damages
- Often uses information gathered during response and investigation, but additional field work may be needed
- Bottom Line: Damage Assessment “studies the spill”

# NRDA Coordination After Response

- NRDA tasks done cooperatively among trustees and possibly RP
- NRD settlement coordinated with fines and penalties from multiple agencies for a *global* settlement
- NRD settlement is based on one or more compensatory restoration projects

# Restoration Projects

- birds → PROJECT
- mammals → PROJECT
- fish → PROJECT
- rocky intertidal habitat → PROJECT
- sandy beach habitat → PROJECT
- subtidal habitat → PROJECT
- recreational uses → PROJECT



# NRDA Stats (Dec. 2015)

- **Large Cases: 29**
  - Settled: 25 (Total = \$203 million)
  - Active: 3
- **Small Cases: 190**
  - Settled: 113 (Total = \$7.7 million)
  - Terminated: 29
  - Active: 51
- **Restoration Projects: 400<sub>(approx.)</sub>**
  - Completed: 249
  - On-going: 74
  - Planned: 77



# Contacts

## OSPR NRDA

- **Primary Contact, Supervisor**
  - **Michael Anderson**  
**916-324-9784**
- Toxicology and Field Sampling
  - Beckye Stanton
  - Regina Donohoe
  - Bruce Joab
- Economics, Birds, and Recreational Use
  - Matt Zafonte
- Restoration & Response
  - Bryand Duke



<http://www.dfg.ca.gov/ospr/NRDA/>