Refugio Beach Oil Spill

Natural Resource Damage Assessment and Restoration

Public Meeting
January 20, 2016

Refugio Beach Oil Spill Trustee Council

Overview

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

Potential Components of a Pollution Case Settlement

- response and clean-up costs
- penalties
- natural resource damages

- other claims
  - public entities (lost tax revenue, lost parking fees, extra staff time, etc.)
  - private claims (lost income, injury to property, etc.)

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, Lempert-Keene)

Legal Authority

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

Who are the Trustees?

- California Department of Fish & Wildlife (CDFW)
- California State Lands Commission (CSLC)
- California Department of Parks & Recreation (CDPR)
- University of California
- United States Fish & Wildlife Service (USFWS)
- National Park Service (NPS)
- Bureau of Land Management (BLM)
- National Oceanic and Atmospheric Administration (NOAA)

Coordination

Plains All American Pipeline, L.P.

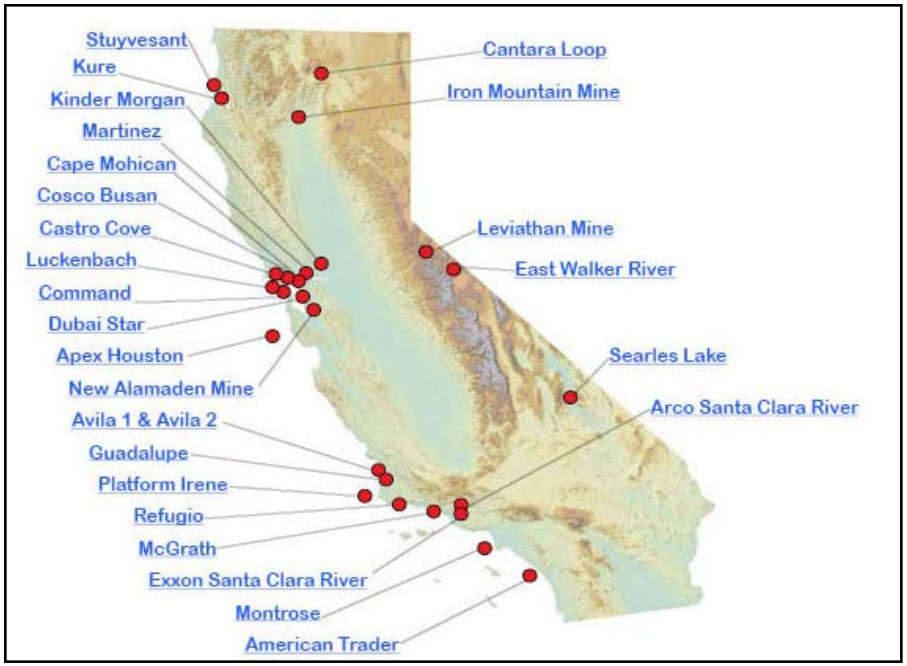
Several cities and counties

Several bands of the Chumash Nation

Many non-government organizations

Local and national experts

The Process



1) Oil Spill
2) Data Collection
3) Public Information Meetings **WE ARE HERE**
4) Injury and Damage Quantification
5) Public Scoping Meeting
6) Draft Restoration Plan
7) Public Comment Period
8) Final Restoration Plan
9) Implement Restoration Projects

Refugio NRDA to Date

- Multi-disciplinary, multi-agency team
- Collecting data and planning NRDA tasks since May 19

Refugio NRDA to Date

• Currently divided into seven teams according to injured resource category:

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

Injury Quantification

- Wildlife (birds, mammals, fish): size (#), duration (years lost)
- Habitat: size (acres), degree (%), duration (years)
- Recreational Uses: size (# of lost user-days)

For Wildlife and Habitat

Methods are Restoration-based

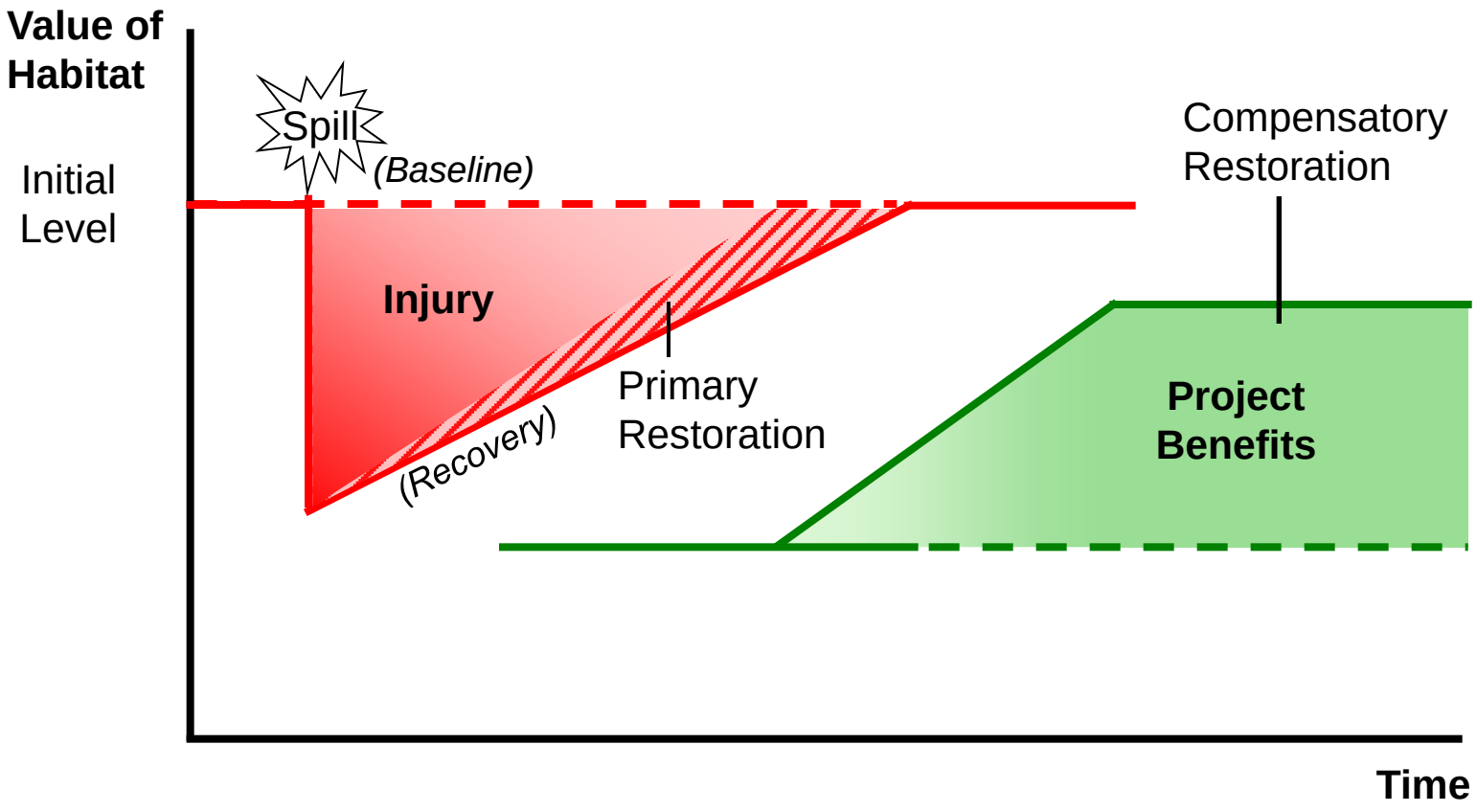
KEY QUESTIONS:

- How big of a restoration project do we need to compensate for the injury? How much will that cost?

- Use Habitat Equivalency Analysis (HEA) as the tool to scale restoration to injuries.

Habitat Equivalency Analysis

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



For Recreational Use Losses

- Basic Calculation:
  - Lost Use =

    (# of Lost User-days) X

    ($Value per Lost User-Day)

- Types of Recreational Use
  - Camping
  - Water-related activities (e.g., surfing, sailing, swimming)
  - Fishing (e.g., pier, shoreline, charter boat)
  - General beach use

Restoration Projects

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

Restoration Project Selection Criteria

- Nexus to Injured Resources
- Technical Feasibility
- No Duplicate or Replacement Funding
- Legality
- Likelihood of Success
- Cost Effectiveness
- Multiple Resource Benefits
- Duration of Benefits
- Public Health and Safety
- Avoidance of Adverse Impacts
- Opportunities for Collaboration

To Submit Restoration Project Ideas

- on-line form: http://bit.ly/refugiorestoration

- Email: RefugioRestoration@fws.gov