Dubai Star Oil Spill NRDA

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Prevention First 2010 Symposium
October 20, 2010; Long Beach, CA
DUBAI STAR SPILL

- Location – San Francisco Bay, south of Bay Bridge
- Spill – IFO 380 spilled during refueling on October 30, 2009
- Oiling along Alameda shoreline
NRDA Organization

- Organize by Resource Subgroups
  - Birds
  - Shoreline Habitats
  - Human Recreational Uses

- Participants
  - Trustees – US FWS, CA DFG, NOAA
  - Responsible Party Representatives
  - Involvement by East Bay Regional Parks District
IMPACTS TO BIRDS
BIRD INJURY

- Bird groups impacted
  - Shorebirds
  - Large Grebes
  - American Coots

- Numbers of live and dead birds collected or observed

- Estimate total mortality
BIRD RESTORATION

Predator Exclusion Fence
Elsie Roemer Bird Sanctuary

- Problem - Domestic predators impacting marsh birds
- Project - install fence to deter predators
- Benefits - increase bird survival
Impacts to Shoreline Habitats

- Habitats Impacted
  - Rocky Intertidal
  - Sandy Beach (Crown Beach)
  - Tidal Flats and Eelgrass
  - Salt Marsh
HEA – Acres Impacted

- Use Response SCAT data for shoreline oiling
  - Oil band only - sandy beach and salt marsh
  - Oil band and lower intertidal zone - rocky intertidal
- Area of tidal flats and eelgrass adjacent to oiled shoreline
HEA – Level of Injury

- % oil cover from Response SCAT data
- Smothering / Fouling by Oil
- Rocky intertidal community surveys
- PAH concentrations in bivalves and water
- Response activities
HEA – Recovery

- Specific for each habitat type
- Degree and duration of oiling
- Life history of organisms
Habitat Restoration Projects

- Rocky Intertidal
  - Fucus restoration via transplants
- Sandy Beach
  - Remove invasive plant species
  - Re-vegetate with native plant species
- Salt Marsh and Tidal Flats
  - Reduce and remove sand from Elsie Roemer marsh
  - Remove invasive plant species & re-vegetate with native plant species
IMPACTS TO HUMAN RECREATIONAL USES
Types of Human Recreational Uses

- General Shoreline Use
- Shore-based Fishing
- Boating
Recreation Damages

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\text{Lost Value ($)} = \left( \frac{\text{Number of Affected Trips}}{\text{Lost, Diverted, Diminished}} \right) \times \left( \frac{\text{Value per Trip}}{\text{Varies by Activity}} \right)
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Potential Recreational Use Projects

- Projects to benefit
  - Shoreline use
  - Fishing
  - Boating
- Near spill location, if possible
Questions?

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- Dubai Star NRDA info on DFG-OSPR website