An Introduction to the Office of Response & Restoration

Effects of Diluted Bitumen on the Environment
Dec. 3, 2014
Our Mandate

OR&R supports some of the nation’s strongest ocean protection laws:

- Oil Pollution Act
- CERCLA/Superfund
- Marine Debris Research, Prevention and Reduction Act
- Clean Water Act
OR&R Divisions

Emergency Response
Assessment & Restoration
Marine Debris
Disaster Response Center
Business Services

Emergency Scientific Support
Damage Assessment, Remediation and Restoration Program
Where We Work

[Map of the United States with city locations marked, including Anchorage, Seattle, Portland, San Francisco, Alameda, Santa Rosa, Long Beach, Honolulu, Orlando, New Orleans, Baton Rouge, Mobile, St. Petersburg, Miami, Silver Spring, New York, Sandy Hook, Philadelphia, Ann Arbor, Cleveland, Oak Harbor, Chicago, and Boston.]
Oil and Chemical Spills

**Emergency Scientific Support**

- Lead scientific adviser to the On-Scene Coordinator
- Cleanup strategies and endpoints
- Shoreline assessment and aerial observations
- Coordinate NOAA’s resources (i.e. forecasts, fisheries)
- Analyze pollutant chemistry & environmental effects
- Identify Resources at Risk
- Train emergency responders

**Key Products**

- Environmental Response Management Application™
- Oil fate and behavior modeling, including trajectory analysis
- Environmental Sensitivity Index Maps
Restoring Injured Natural Resources

Damage Assessment, Remediation and Restoration Program

- OR&R and co-trustees have generated approximately $2.3 billion for natural resource restoration projects (1B is DWH) through resolution of liability, and worked cooperatively to restore over 15,000 acres of habitat, 47 stream miles, and built facilities to support the public’s use of coastal resources.

Key Products

- Habitat Equivalency Analysis
- Natural Resource Economic Surveys
- Damage Assessment and Restoration Plans
Some areas of interest for OR&R:

- **Fate & Behavior**
  - Range of variability among products
  - Data suitable to update existing models (ADIOS, GNOME)
  - Density changes over time
- **Effects**
  - Including the diluent alone
- **Worker health considerations**
  - Volatile organics, flammability ranges
- **Relative toxicity to wildlife**
  - Including the diluent alone
- **Suitability to shoreline treatment alternatives**
  - Chemical treating agents
Questions?

Web: response.restoration.noaa.gov
Blog: usresponserestitution.wordpress.com
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