



Intro to Oil Spill Response

Patrick Hogan

Tri-State Bird Rescue & Research, Inc.

Intro to Oil Spill Response - Outline

Wildlife Agency Roles in US Oil Spill Response

Who Leads Response in Different Spill Scenarios

How NGOs Plug Into Spill Response Structures

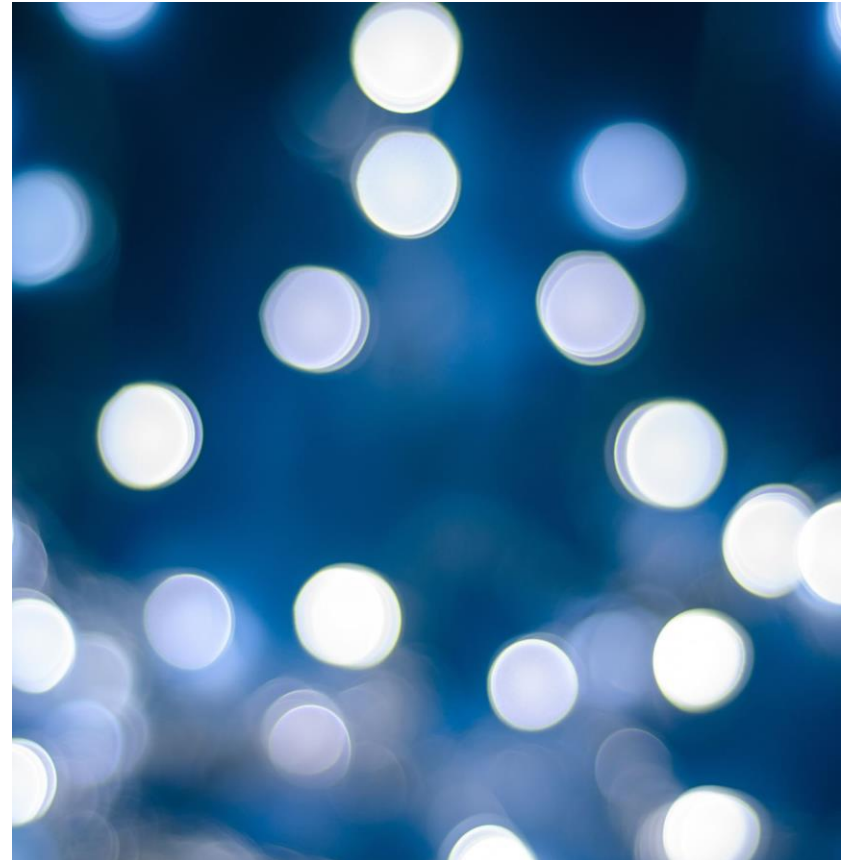
Basic ICS Structure for Spill Response – Wildlife Integration

Working Together for Preparedness, Planning, and Response

Different types of oil, behavior, and environmental impacts

Top Five Oil Spills – Volume spilled

MV Treasure Oil Spill Response – Cape Town, South Africa



Wildlife Agency Roles in US Oil Spill Response

Big Picture Framework

All oil spill wildlife response occurs under:

- National Oil and Hazardous Substances Pollution Contingency Plan (NCP)
- Oil Pollution Act of 1990 (OPA-90)

Wildlife agencies *do not direct cleanup*, but they:

- Authorize and oversee wildlife capture, care, and release
- Protect sensitive species and habitats
- Assess injury and lead restoration



Federal Wildlife Agencies - USFWS

- **Primary federal wildlife authority for most non-marine spills**

- Lead/oversee wildlife rescue and rehabilitation for:
 - Migratory birds
 - Terrestrial wildlife
 - Freshwater species
- Approve oiled wildlife response plans
- Provide biological advisors to Unified Command
- Act as Natural Resource Trustee (NRDA)
- Manage impacts to:
 - Migratory Birds
 - Endangered Species
 - National Wildlife Refuges



Federal Wildlife Agencies – NOAA

- Primary federal authority for marine resources
 - Marine mammals, fish, fisheries, marine habitats
 - Trajectory modeling and fate analysis
 - Scientific Support Coordinator (SSC)
 - Co-lead marine NRDA



State Wildlife Agencies

Core Roles:

- Lead or co-lead wildlife response within state boundaries
- Operate or approve wildlife rehabilitation facilities
- Provide local species, habitat, and seasonal expertise
- Enforce wildlife state laws
- Act as the state Natural Resource Trustee



**Department of
Environmental
Conservation**

Tribal Wildlife and Natural Resource Agencies

- Core Roles:
 - Protect tribal trust and treaty resources
 - Act as a Natural Resource Trustee
 - Participate in Unified Command or Trustee Councils
 - Conduct Tribal NRDA
 - Provide Traditional Ecological Knowledge
 - Lead wildlife response on tribal lands where applicable



Who Leads Response in Different Scenarios

Offshore Marine Spill (e.g., Deepwater Horizon)

Lead Wildlife Authorities:

- NOAA Fisheries – Marine mammals, fish, offshore habitats
- USFWS – birds and nearshore wildlife

Operational Wildlife Lead:

- Federal wildlife agencies, with states supporting



Coastal / Nearshore Spill (Estuaries, marshes, beaches)

- Lead Wildlife Authorities:
 - USFWS: birds, endangered species
 - State Wildlife Agency: local habitats, rehab facilities
 - NOAA: fish, marine mammals
- Operational Wildlife Lead:
 - Joint federal-state leadership



Inland River or Freshwater Spill

- Lead Wildlife Authorities:
 - USFWS – migratory birds, ESA species
 - State wildlife agency – primary operational lead
- Operational Wildlife Lead:
 - State wildlife agency – with USFWS oversight



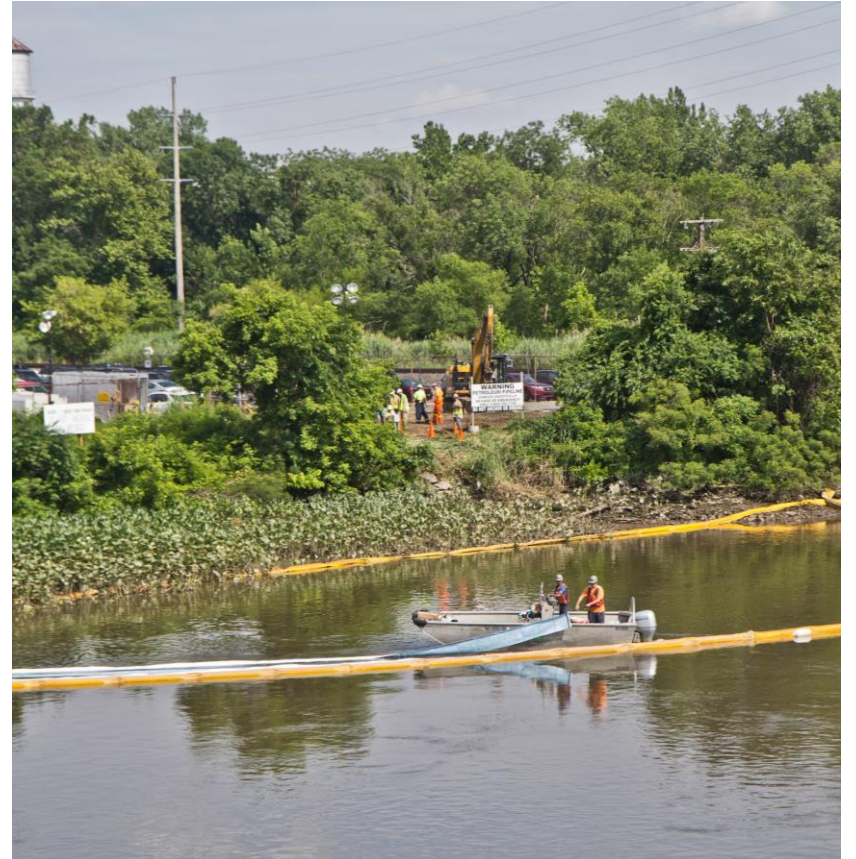
Spill on Tribal Lands or Affecting Treaty Resources

- Lead Wildlife Authorities:
 - Tribal wildlife or natural resource agency
 - USFWS and/or NOAA (as co-trustees)
- Operational wildlife Lead:
 - Tribal government, unless delegated otherwise



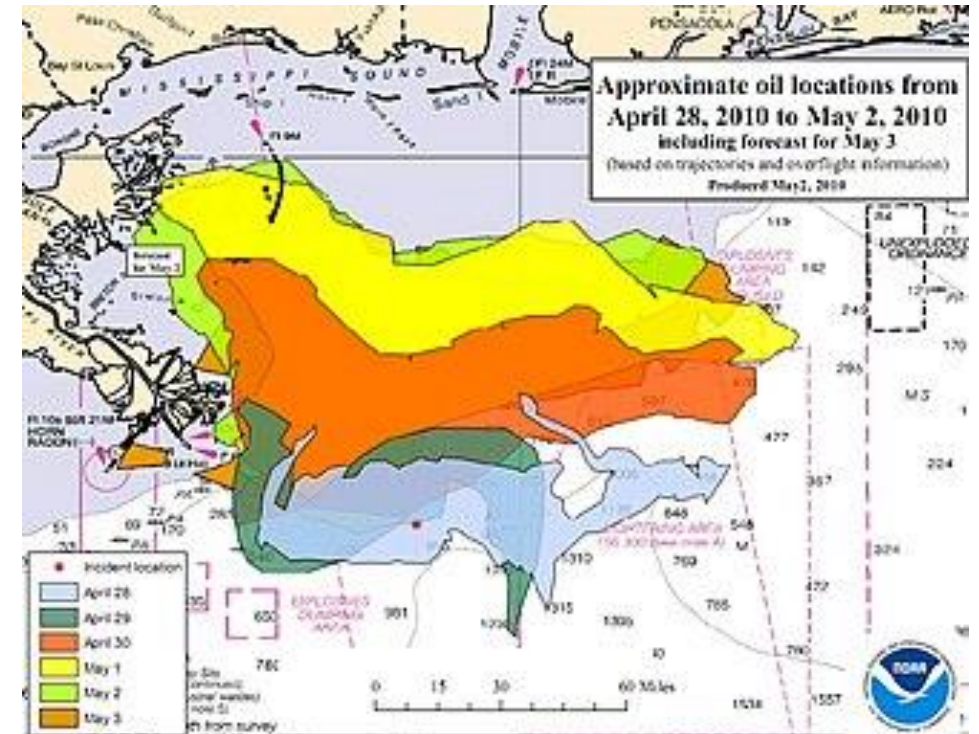
Spill Affecting National Wildlife Refuge or Federal Lands

- Lead Wildlife Authorities:
 - USFWS
- Operational Wildlife Lead:
 - USFWS



Multi-State or Catastrophic Spill

- Lead Wildlife Authorities:
 - USFWS & NOAA: Federal Coordination
 - Multiple State Agencies
 - Tribal Governments (where affected)
- Operational Wildlife Lead:
 - Federal agencies, with state and tribal co-leads



Key Takeaway

- Wildlife response leadership is both **jurisdiction** and **species** driven, not based on spill size alone
 - Federal agencies lead where species are migratory, endangered, or offshore
 - States lead where local knowledge and facilities matter most
 - Tribes lead where sovereignty and treaty rights apply
- All 3 converge during NRDAR, where legal authority – not logistics – ultimately drives outcomes



Wait! What about wildlife NGOs?

- Wildlife NGOs do not have authority and are not trustees
- Instead, they operate by delegation
 - Authorized agents
 - Operational contractors
 - Technical Specialists
- Once authorized by the lead wildlife agency, NGOs may:
 - Capture, stabilize, decontaminate, and condition wildlife for release
 - Operate rehabilitation centers
 - Train responders and volunteers
 - Provide surge capacity during large spills
 - Collect standardized data for agencies (evidence collection, medical records...)



Wait! What about wildlife NGOs?

NGOs plug in through:

- Pre-existing **MOUs**
- State or Federal **wildlife rehabilitation permits**
- Inclusion in **Area Contingency Plans**
- Direct tasking under Unified Command





Laws, Regulations, Statutes, and Authorities



Creation of the National Contingency Plan (NCP) - 1968

- 1967 Torrey Canyon spill in England
- Adopted NCP in 1968 in response
- NCP gave rise to the National Response System (NRS)
- Under the NRS:
 - National Response Center (NRC)
 - National Response Team (NRT)
 - NRT:
 - 16 Federal Agencies (including DOI)
 - NRT is supported by the RRT



Regional Response Teams

RRT Areas



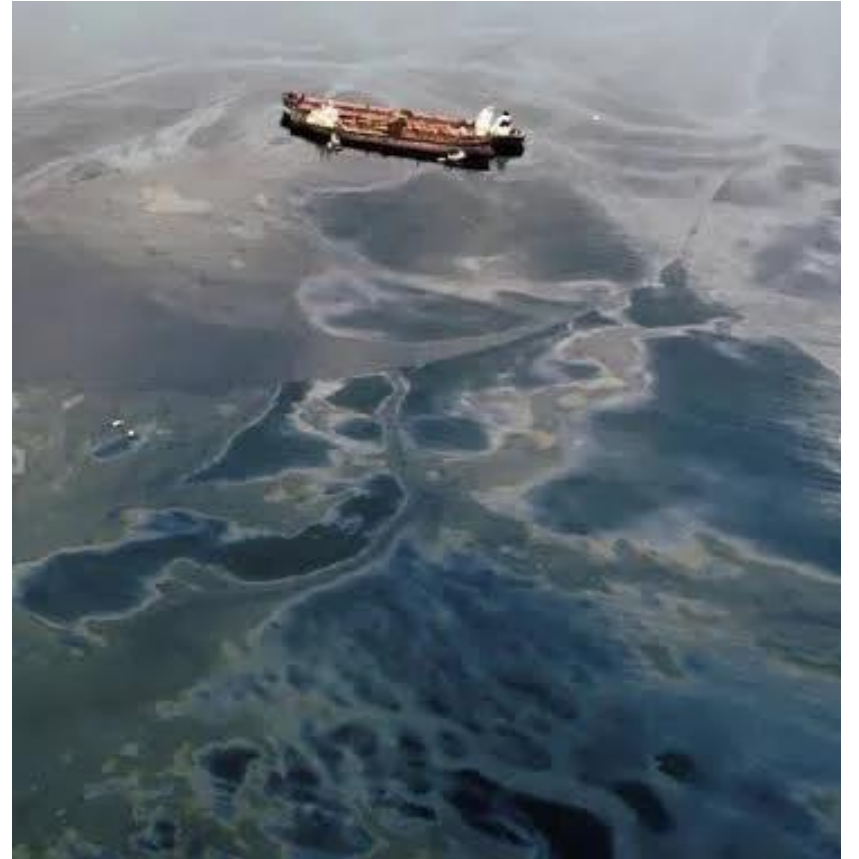
Clean Water Act - 1972

- Section 311
- Originally the Federal Water Pollution Control Act of 1948
- the 1972 amendments completely overhauled the legislation, establishing the modern structure for regulating pollutant discharges and water quality standards.
- Prohibits the discharge of oil into waters of the US
- Establishes Area Committees and the preparation of Area Contingency Plans



OPA-90

- 1990 (if it wasn't obvious already)
- As a response to the disaster that was the Exxon Valdez, Congress passed legislation that became the Oil Pollution Act of 1990.
- OPA amends the CWA and creates major authorities and better coordinated with Federal, State and local authorities and industry.
- OPA created the Oil Spill Liability Trust Fund
- Required the development of Area Contingency Plans



Other Statutes and Authorities



Fish and Wildlife Coordination Act (1934)- Any federal agency that proposes to control or modify any body of water must first consult with FWS to prevent loss of and damage to wildlife resources



Endangered Species Act (1973)- Section 7 consultation, Section 9 prohibits take, requires permits to rescue species. New Sec 7 MOA between Coast Guard, EPA and Natural Resource Trustees.



Migratory Bird Treaty Act (1918)- prohibits take, requires permits to hold species. New MBTA amendments for wildlife rehabilitation.

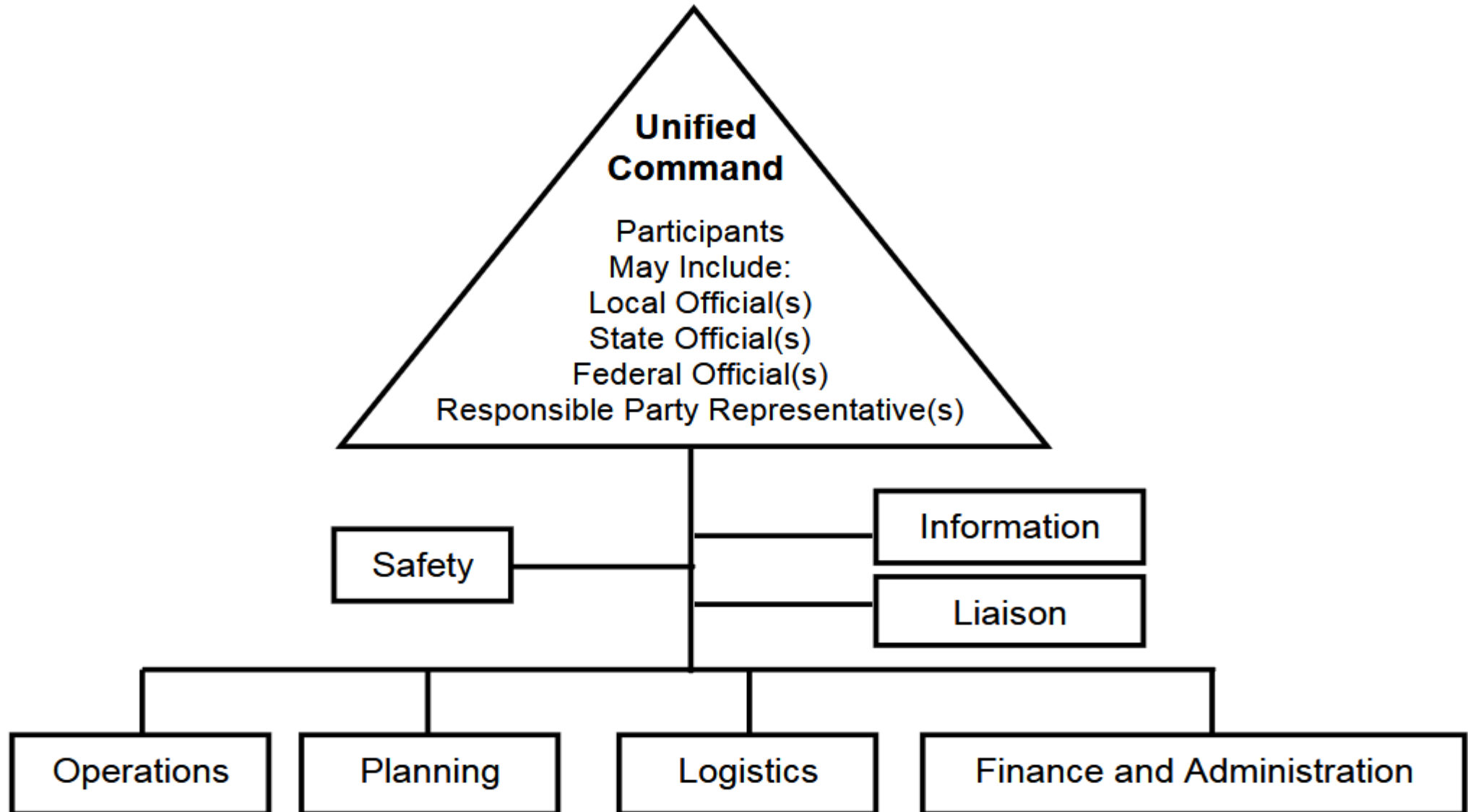
More Statutes and Authorities

- **National Wildlife Refuge System Administration Act (1966)** - Prohibits destruction of refuges
- **Anadromous Fish Conservation Act (1965)** - DOI to recommend the elimination or reduction of polluting substances detrimental to fish and wildlife
- **Marine Mammal Protection Act (1972)** - enacted to prevent marine mammal species from declining due to human activities, establishing a federal moratorium on the taking and importation of marine mammals and their product
- **Bald Eagle Protection Act (1940)** – provides criminal penalties for takes



Basic ICS Structure for Oil Spill Response

Unified or Incident Command



Working Together for Planning, Preparedness and Response



Scaling a Response – Proactive Strategies

- Planning and Initial Activation (0-24 hours)
 - Implement pre-spill plans
 - Establish a wildlife hotline
 - Activate Specialized Teams – use recognized OWROs
- Proactive Mitigation (prevent oiling)
 - Hazing, deterrence, and exclusion
 - Pre-emptive capture
 - Sensitive habitat protection
- Scaling Operations (recovery and field stabilization)
 - Recon, Survey, Assessment
 - Establish Field Stabilization Site
 - Start documentation and evidence collection

Scaling a Response – Proactive Strategies

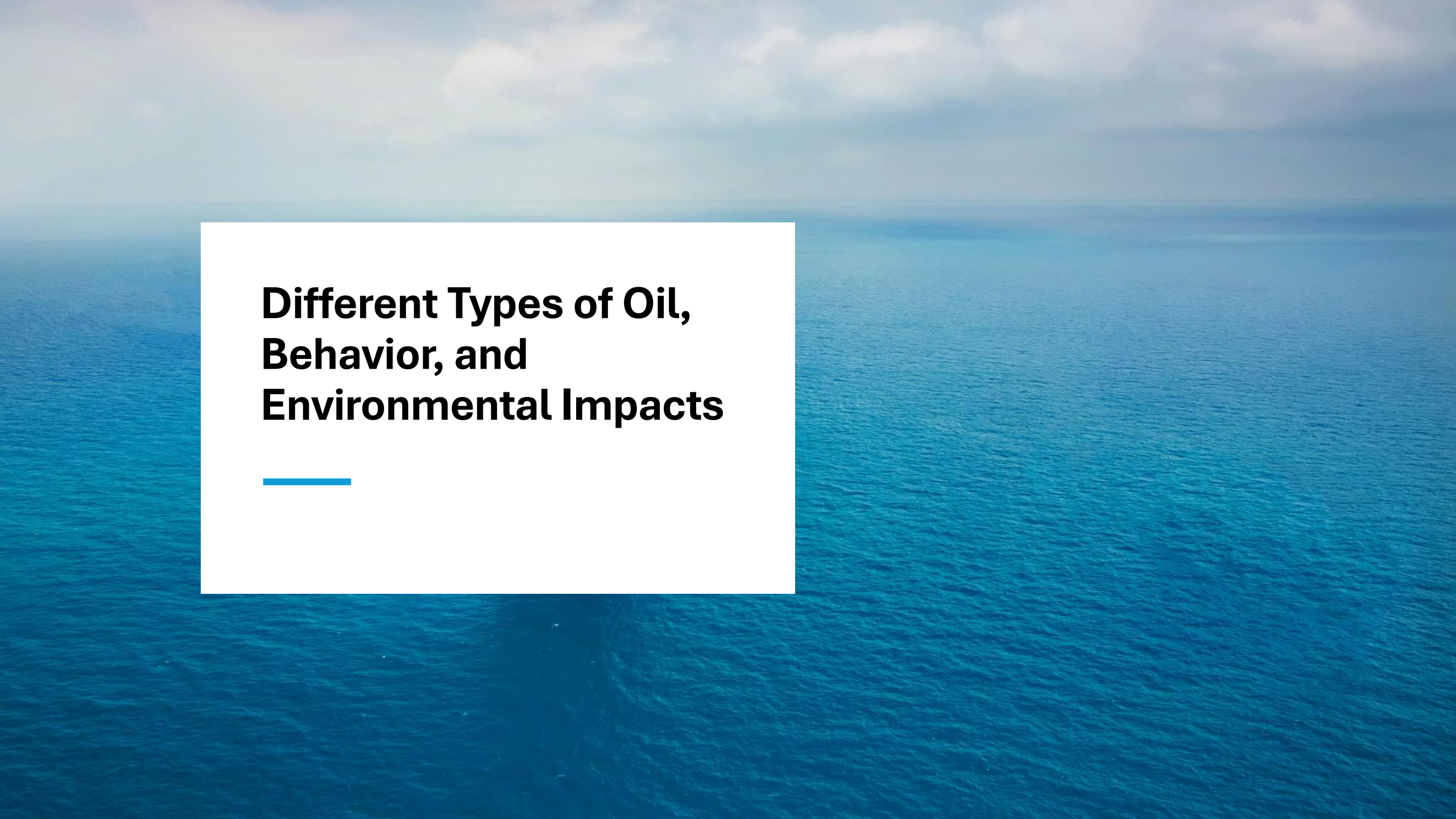
- Scaling Rehabilitation Facilities
 - Primary Care Center – purpose-built facility, or retrofitted existing facility
 - Facility of Opportunity – pre-identified, or sourced during the response
- Personnel, Safety, and Logistics
 - Responder Management
 - Safety Protocols
 - Fatigue Management
- Communication and Collaboration
 - Unified Command
 - Stakeholder Engagement
- **Tri-State can help with ALL OF THESE!**

Tri-State's Recommendations for NY DEC

- Continue supporting our Rehabilitation Permit
- Develop statewide wildlife response plans
- Strategic location equipment stockpiles
- Require contaminated wildlife reports from licensed rehabilitators
- Exercises and Drills – agency, industry, responders
- Attend RRT2 meetings and Area Committee Meetings
- Sponsor skills trainings for field, rehab, H/S for responders
- Advocate for state funding, allocated towards oil spill preparedness
- Help us pre-identify facilities and responders for *Tier 1-3* responses

Dive Deep into Oil Spill Response Trainings!

- Science of Oil Spills (SOS)
- Shoreline Cleanup Assessment Technique (SCAT)
- Hazardous Waste Operations and Emergency Response (HAZWOPER)
- Science of Chemical Releases (SOCR)
- Inland Oil Spill Response For DOI
- ICS courses! 100, 200, 300, 400, 700, 800



Different Types of Oil, Behavior, and Environmental Impacts

Petroleum Product Spectrum

- Petroleum products are classified by their API gravity, which measures how light or heavy a petroleum liquid is compared to water (water = 10 API)
- Higher API (>40) = lighter/less viscous (typically higher volatility)
 - Gasoline, jet fuel, kerosene
- Middle API (20-30)
 - Diesel, intermediate crude, dielectric fluid
- Lower API = Heavier/more viscous (typically lower volatility)
 - Heavy fuel oil, asphalt







Top Five Oil Spills – Volume Spilled

- Lakeview Gusher (1910) – Kern County, CA – 9 million barrels of crude
- Deepwater Horizon (2010) – Gulf of Mexico – 4.9 million barrels of crude
- Ixtoc I Oil Spill (1979) – Gulf of Mexico – 3 million barrels of crude
- Exxon Valdez (1989) – Prince William Sound, AK – 262k barrels of crude
- Argo Merchant Tanker Spill (1976) – Nantucket Island, MA – 183k barrels of Heavy Fuel Oil



MV Treasure Oil Spill Response

- https://m.youtube.com/watch?v=gFJ-rig_pw0
- 20,000 Oiled African Penguins
- 94% success rate
- Largest animal rescue effort ever
- In October 2024 – African Penguins became a Critically Endangered Species
- They may be extinct by 2035

