

An Overview of Tri-State's Response Program

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A Long History of Impacted Wildlife



History of Tri-State

40 Years of Service to Wildlife:

<https://www.youtube.com/watch?v=S-UUehynOkM>

Chicago Tribune, Thursday, December 30, 1970 Section 1, p. 8

Hotel guests rescued

A Boston Traveler center is now authoring from credible information from the Coast Guard that the ship was carrying 170 people, including 130 hotel guests, on board. The ship was carrying 170 people, including 130 hotel guests, on board. The ship was carrying 170 people, including 130 hotel guests, on board.

Captain of tanker arrested for Delaware River oil spill

The captain of the Ashland-Keokuk tanker, Captain George, was arrested on the Delaware River on Dec. 29. The ship was carrying 170 people, including 130 hotel guests, on board. The ship was carrying 170 people, including 130 hotel guests, on board.

Ford says he's 'likely' to end gasoline controls

President Ford said today that he is "likely" to end the controls on gasoline prices. He said that he would like to see the controls removed as soon as possible. He said that he would like to see the controls removed as soon as possible.

New credit discrimination ban also aids poor, aged

The new credit discrimination ban is expected to help the poor and aged. It will allow them to get credit more easily. It will allow them to get credit more easily.

U.S. study finds solar heat is cost-competitive

A study by the U.S. Dept. of Energy finds that solar heat is now cost-competitive with other energy sources. It will allow them to get credit more easily. It will allow them to get credit more easily.

Navy finds lost yacht

The Navy has found a lost yacht. It was carrying several people. It was carrying several people.

THERE IS NO CLEARANCE LIKE AN SFA CLEARANCE

20% 50%

archives.chicagotribune.com



Associated Press



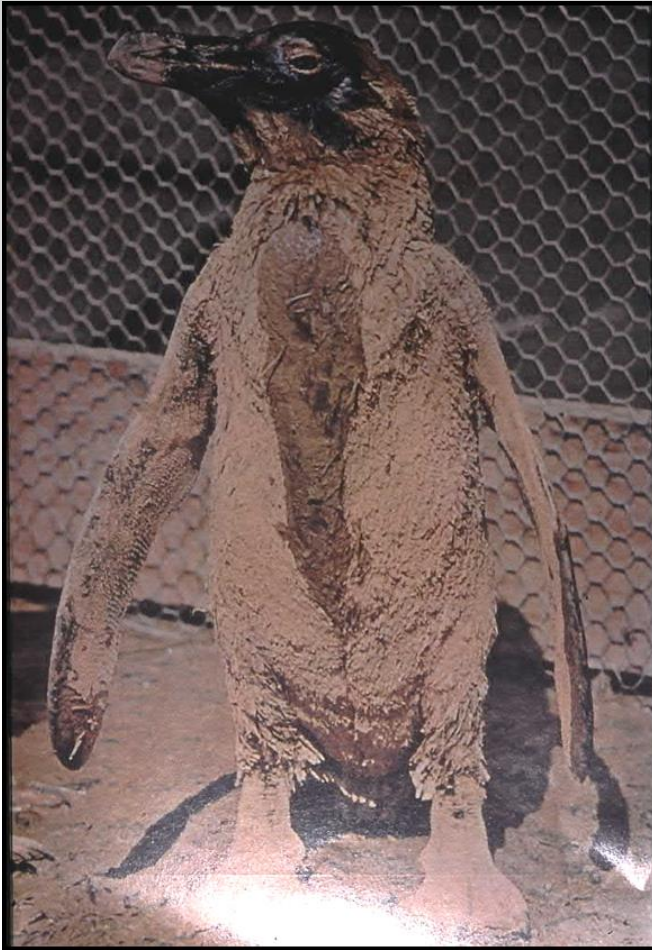
Barneys Joy Dartmouth, April 29

<http://www.buzzardsbay.org/oilspill-4-28-03.htm>



TRI-STATE Oiled Wildlife Response

Early Decontamination Attempts



Shampoos, kitty litter,
organic sorbent
products, various soaps,
oils...

Establishing Best Practices

Helm et al. 2015

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OVERVIEW OF EFFORTS TO DOCUMENT AND REDUCE IMPACTS OF OIL SPILLS ON SEABIRDS

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- 17.1 Introduction
- 17.2 Vulnerability
- 17.3 Effect of Oiling on Individual Birds
 - 17.3.1 External Oil Effects
 - 17.3.2 Internal Oil Effects
 - 17.3.3 Oil Effects on Reproduction
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 - 17.7.1 *Apex Houston* Barge Oil Spill, Central California
 - 17.7.2 *American Trader* Oil Spill, Southern California

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Principles of Oiled Bird Rehabilitation

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HISTORY AND BACKGROUND

Oil, its additives and contaminants, through simple physical contact, inhalation, ingestion and transcutaneous absorption have demonstrated detrimental effects on wildlife. These effects include, but are not limited to, contamination of feathers and fur, and damage to vital organ systems, including: the lungs and air sacs, kidneys, liver, heart, blood, and gastrointestinal tract. (Leighton, Butler, et al. 1983, Leighton 1991, Pierce 1991, Langenberg 1983, Miller 1982).

Rehabilitation of oiled wildlife is a complex, crisis-oriented endeavor requiring an experienced staff with medical, technical and crisis-management skills. Federal and state permits and specialized training for Occupational Health and Safety Administration (OSHA) compliance are also required to conduct an oiled wildlife response. Historically, efforts to rescue and treat wildlife affected by oil have met with limited success. The image of an oil-soaked bird or other struggling to shore elicits a tremendous emotional response in human beings. This atmosphere of public concern often results in well-intentioned people attempting to do a complex job for which they lack the training and the experience.

Tri-State Bird Rescue & Research (Tri-State) was established in 1976 to study the effects of oil on wildlife, design effective response mechanisms for wildlife affected by oil, and develop appropriate treatment protocols. Although Tri-State's scope has broadened beyond oil-contaminated wildlife, it has gained an international reputation for its oil spill response and training capabilities. This paper will provide a general overview of the effects of oil on birds, the basic treatment protocols, the rehabilitation and husbandry techniques, and the criteria for pre-release evaluation currently found to be effective by Tri-State.

Rehabilitation of oiled wildlife focuses primarily on the adverse physiological effects of oil on individual birds. These effects, while complex, can often be successfully counteracted through the

cooperative efforts of veterinarians, biologists and rehabilitators with oil spill response experience. The primary objective of wildlife rehabilitation is to care for injured animals and release them to their natural environment. Wildlife rehabilitation fills two purposes in an oil spill response:

- 1) philosophically, or morally, it provides a humane response to wild animals harmed through man-related activities;
- 2) biologically, it attempts to treat and return impacted animals to healthy breeding populations in the wild. Rehabilitation efforts can be particularly important when endangered or threatened species are contaminated.

THE EFFECTS OF OIL ON BIRDS

In general, the effects of oil on birds can be characterized as environmental, external, and internal.

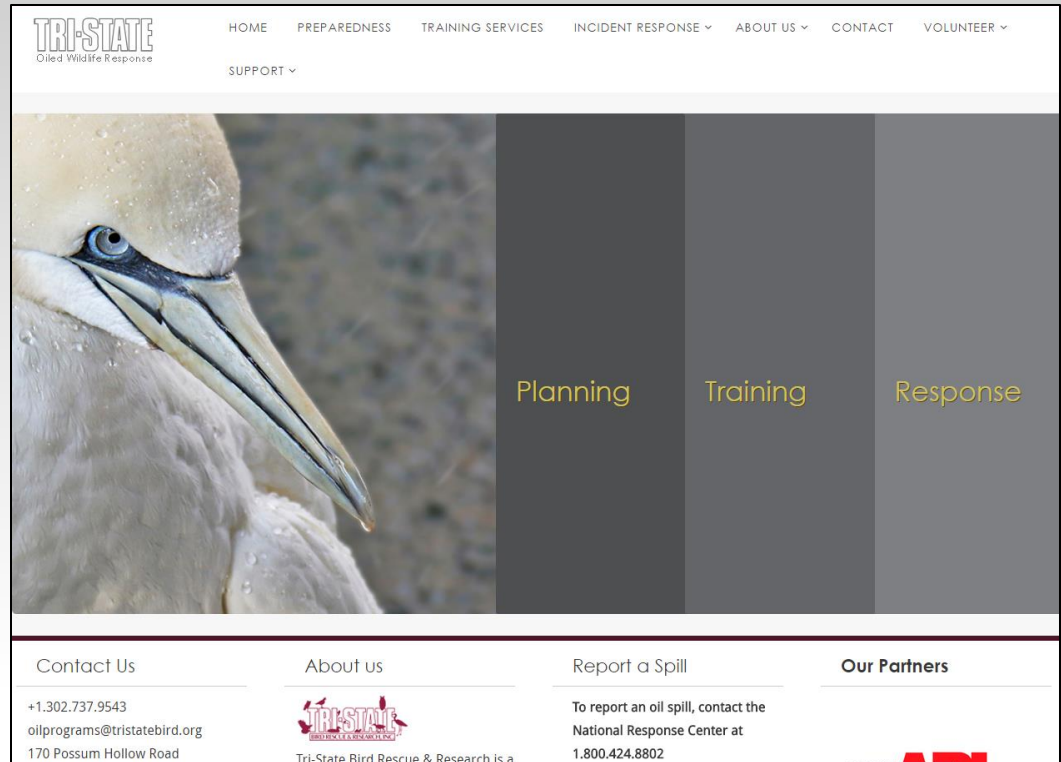
Environmental Effects

Environmental effects are perhaps the broadest category of the effects of oil on wildlife. Environmental effects include, but are not limited to: immediate contamination of the food source biomass; reduction in the breeding animals and plants that provide future food sources; contamination of nesting habitat, and reduction in reproductive success through contamination and reduced hatchability of eggs or temporary inhibition of ovarian function (Albers 1977, Albers 1991, Leighton 1991).

In a number of spills, the environmental effects of the oil may be minimal (acute and temporary), while the physiologic effects on the individual animals and/or local populations may be life-threatening (either acute or chronic, and often long-lasting). For example, a tidal marsh which is contaminated by oil early in a spill may suffer damages which are largely temporary, in that certain types of oil may flush out of the marsh after only one or two tidal cycles. On the other hand, more permanent damage may be incurred following oil contami-

Tri-State's Oil Spill Response Program

- Dedicated Staff
 - Over 40 years of experience
- State of the art facility
- Training, planning, and response
- Local, regional and international reach



TRI-STATE
Oiled Wildlife Response

HOME PREPAREDNESS TRAINING SERVICES INCIDENT RESPONSE ▾ ABOUT US ▾ CONTACT VOLUNTEER ▾

SUPPORT ▾

Planning Training Response

Contact Us

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170 Possum Hollow Road

About us

TRI-STATE
BIRD RESCUE & RESEARCH

Tri-State Bird Rescue & Research is a

Report a Spill

To report an oil spill, contact the
National Response Center at
1.800.424.8802

Our Partners

www.tristatebird.org/oil

Tri-State's Wildlife Response Annex



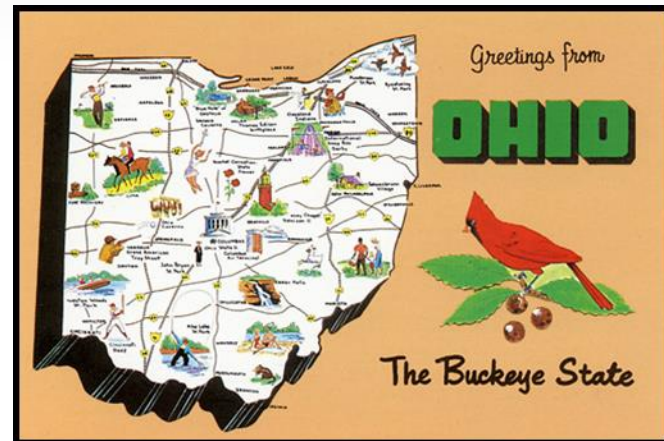
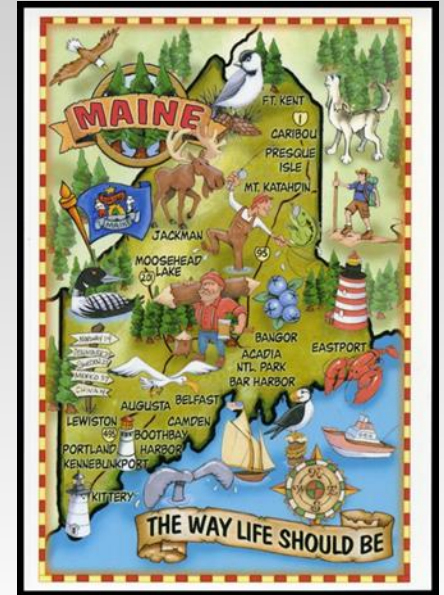
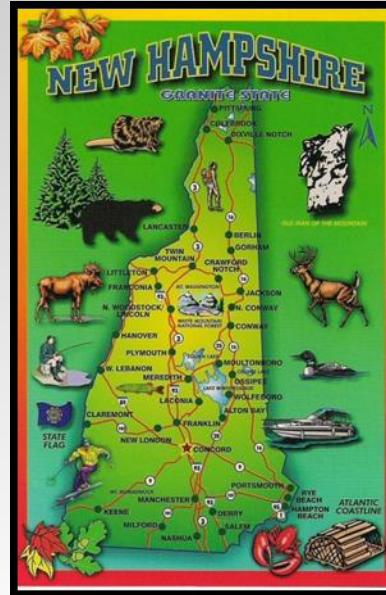
Non-Spill Activities

- Contingency Planning
- Workshops
- Education
- Supporting Rehabilitators & Industry Partners
- Drills & Exercises
- Attending Meetings
- Conferences
- Research



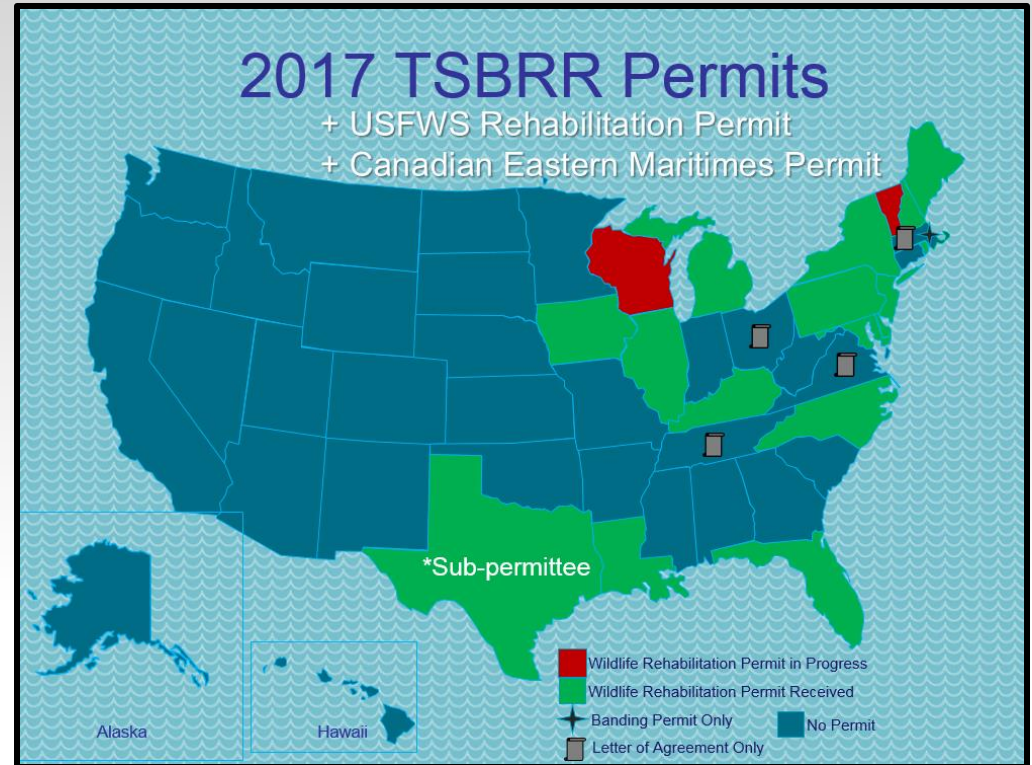
Preparedness: Contract Services

- Pre-Identified Facilities
- Facility Plans
- Stockpile Supplies
- Training Seminars
- Area Committee Meetings
- Organize Exercises
- Response Services
- Wildlife Response Plan



Preparedness: Permits

- Annual renewal process
 - As industry changes & expands, we seek new permits
 - Specific reporting procedures
 - Partnership with Agencies
- Implications in preparedness & treatment for contaminated wildlife
 - Relationships, resources
 - Threatened & Endangered Species



Caribbean Island Preparedness

- CRRT
- Developed a Wildlife Response Plan
- Created a non-perishable stockpile
- Outlined perishables for purchase
- Joint workshop with Sea Alarm Foundation in Trinidad & Tobago



Tri-State Bird Rescue & Research, Inc.

Wildlife Response Plan

Part I – Initial Wildlife Response Procedure

Prepared for:
HOVENSA, LLC



Wildlife Response Plan

Part II – Wildlife Response Elements

Prepared for:
HOVENSA, LLC



Global Oiled Wildlife Response System

- 11 Organizations
- 1st Stage (JIP 20)
 - Industry Funded (IPIECA)
 - Develop Tier 3 Structure
 - Deliverables:
 - Animal Standards
 - SOP
 - Governance Structure
 - Readiness Information
- 2nd Stage (Beta Phase)
 - Funded by Oil Spill Response Limited (OSRL)
 - Readiness activities
 - Operations
 - Reach out to Stakeholders
- Industry support through the Industry Advisory Group (IAG)



Key Principles for the Protection and Care of Animals in Oiled Wildlife Response



Key Principles for the Protection and Care of Animals in Oiled Wildlife Response



Initial Notification

24 Hour Response Hotline:

800-261-0980

TSBRR Coordinates with:

US DOI

US FWS

State/Territory Wildlife Trustee(s)

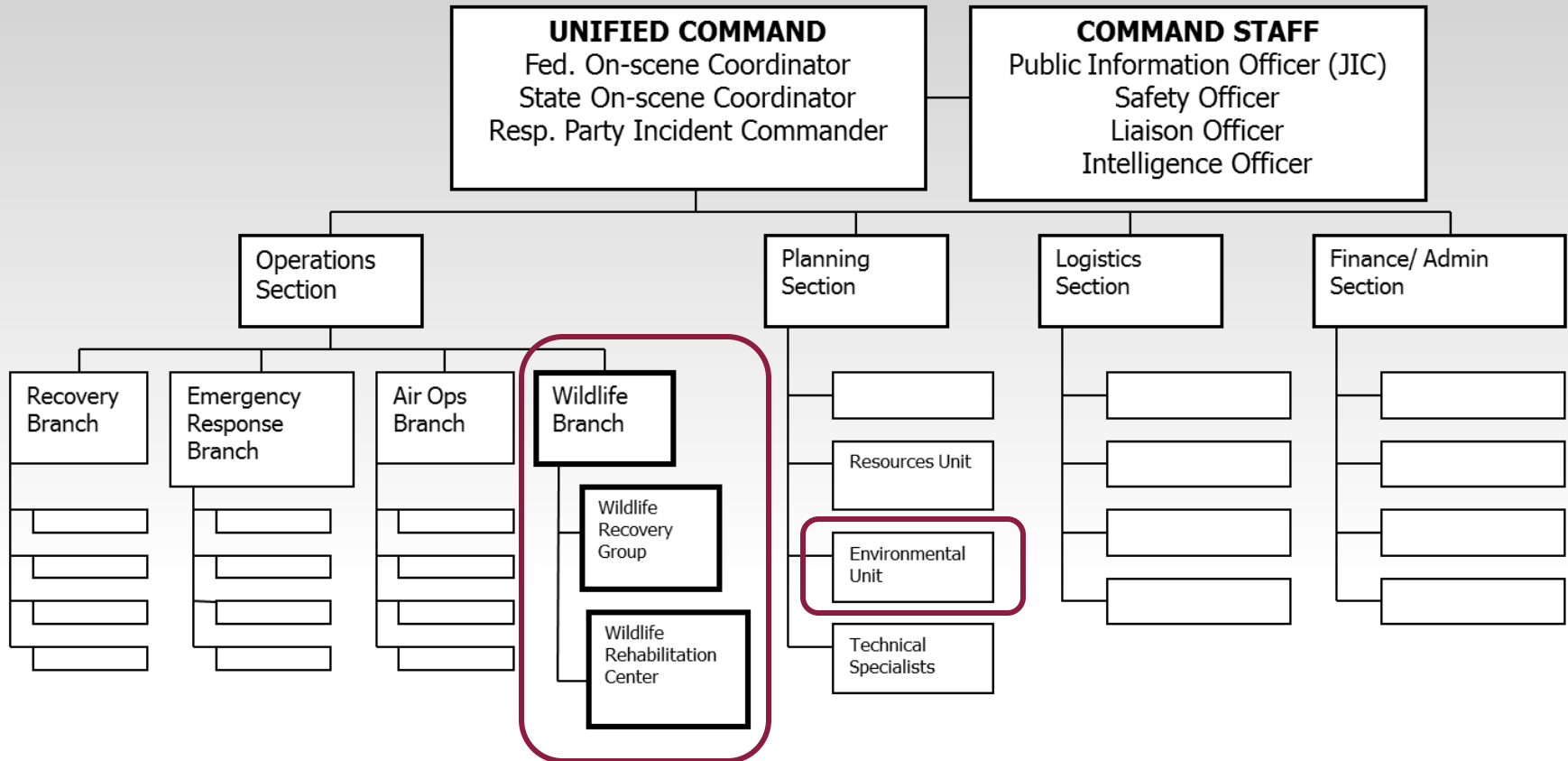


Levels of Activation

- Alert
- Assessment
- Response

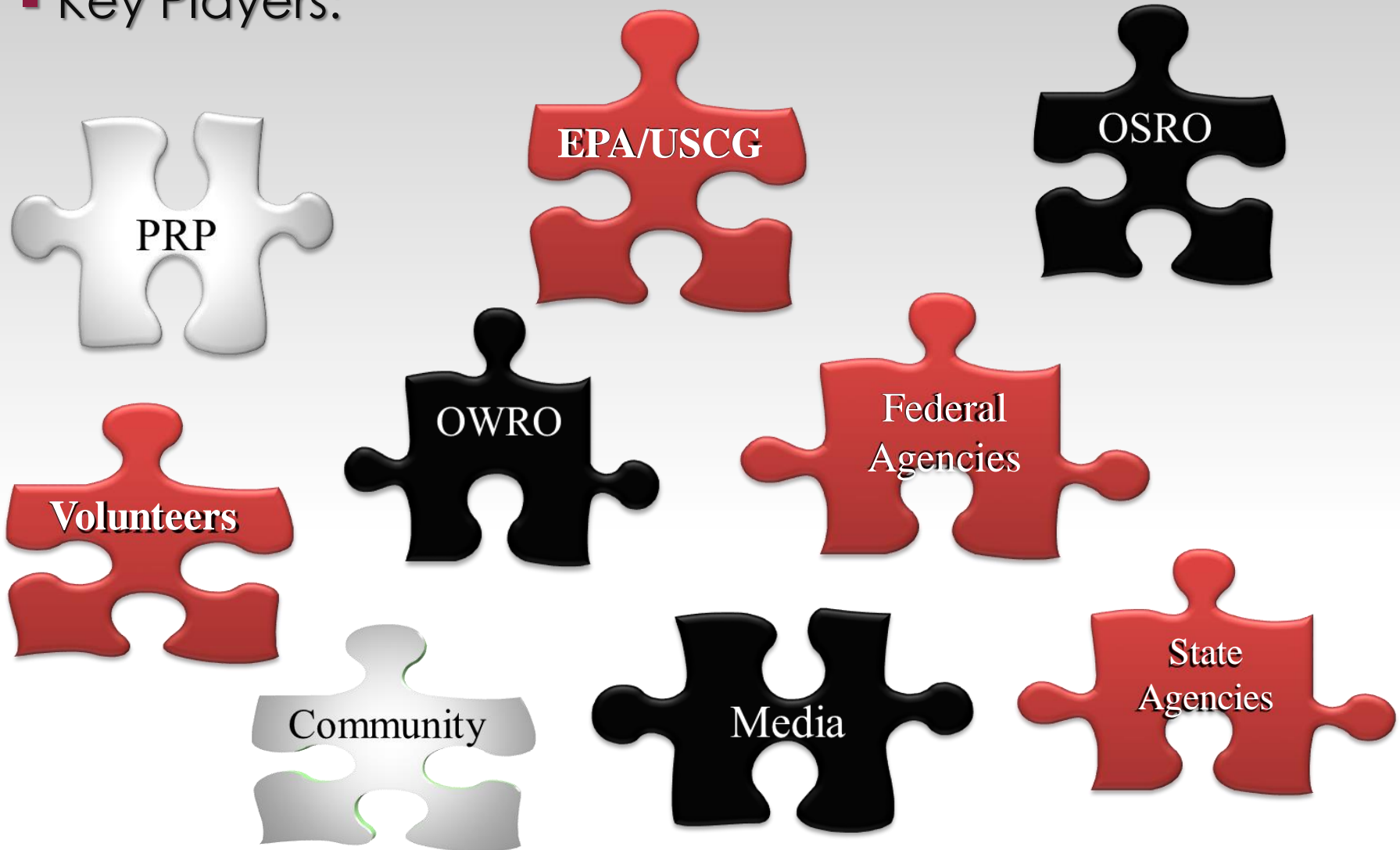


Integration into the Incident



Who Makes Up an Oiled Wildlife Response?

- Key Players:

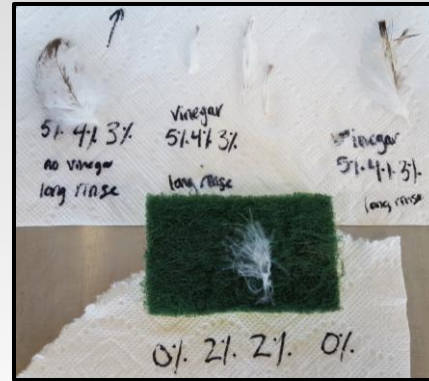


Oiled Wildlife Response Considerations

- Potentially Hazardous Contaminant
 - Safety
 - Containment
- Number of Animals
 - Variety of species
 - Rapid fluctuation
- Facility Demands
 - Housing requirements
 - Water specifications
 - Large Demand on Resources
- Legal Considerations
 - Agency collaboration
 - Evidentiary concerns



So What Goes Into 'Cleaning' Wildlife?



Save the Date:

13th International Effects of Oil on Wildlife Conference

International Effects of Oil
on Wildlife Conference

May 7 - 11, 2018
Royal Sonesta Harbor Court
Baltimore, MD USA

EOW 2018
EOWCONFERENCE.ORG

Presented by:



Hosted by:



Thank you!