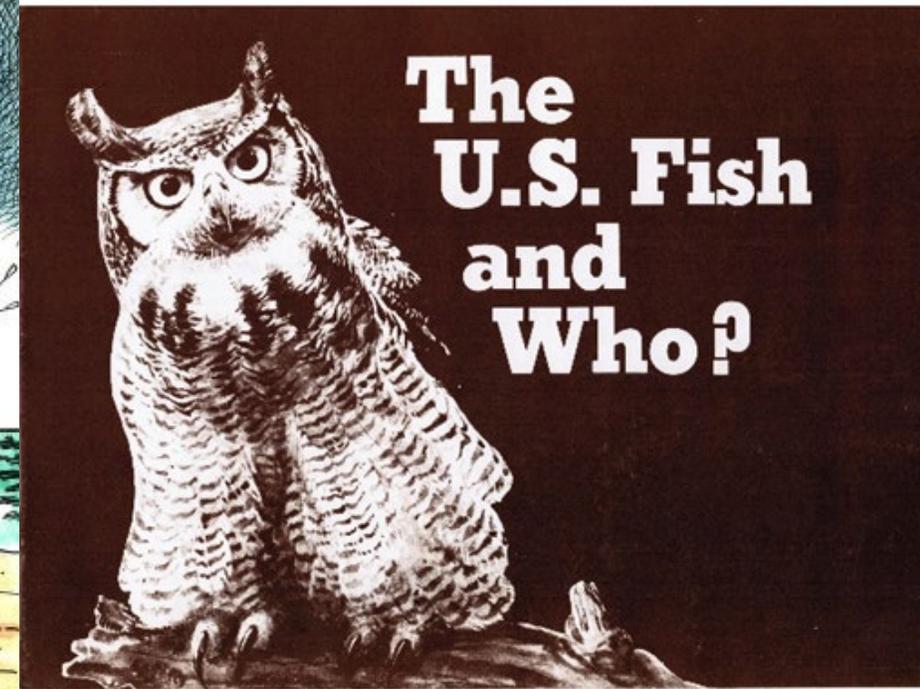


Endangered Species MOA Between U.S. Coast Guard; U.S. Environmental Protection Agency; National Oceanic and Atmospheric Administration; and U.S. Dept. of Interior For Spill Response



DAVE GRANLUND © www.davegranlund.com



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First a Disclaimer, Endangered Species are NOT the Only Trustee Resource

Other Trustee Resources Are:

Government Managed Lands, Refuges, National Parks, etc, including military bases, (DOD is a Natural Resource Trustee on their lands).

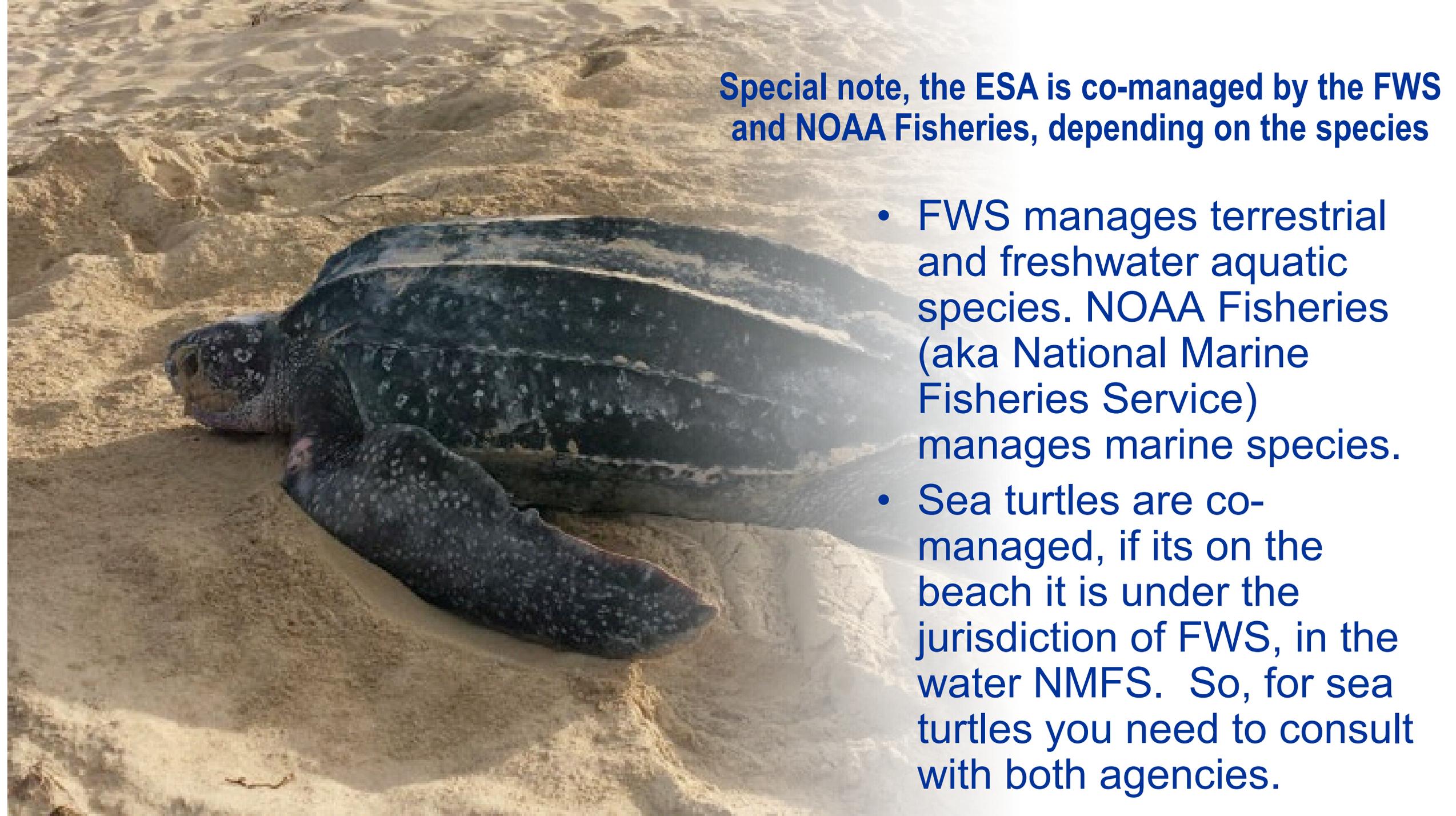
Migratory birds, marine mammals, anadromous “fish” (river shrimps in the tropics, etc) and **their supporting ecosystems.**

State, Commonwealth or Territorial natural resources

Historic or Cultural sites (SHPO sec 106)



U.S. Department of the Interior

A large sea turtle, likely a leatherback, is resting on a sandy beach. The turtle is dark in color with a mottled pattern on its shell and flippers. It is positioned on the left side of the frame, facing towards the left. The background shows the texture of the sand and the edge of the ocean.

Special note, the ESA is co-managed by the FWS and NOAA Fisheries, depending on the species

- FWS manages terrestrial and freshwater aquatic species. NOAA Fisheries (aka National Marine Fisheries Service) manages marine species.
- Sea turtles are co-managed, if its on the beach it is under the jurisdiction of FWS, in the water NMFS. So, for sea turtles you need to consult with both agencies.

Why Consult
Under the ESA,
First, **IT's THE
LAW...ITS**
MANDATED by
FEDERAL
REGULATION

Each Federal agency **shall**, in consultation with and with the assistance of the Secretary, ensure that **any** action authorized, funded, or carried out by such agency (here in after in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary.

"An action means **all** activities or programs **of any kind** authorized, funded, or carried out, in whole or in part, by federal agencies in the United States or upon the high seas." (50 CFR 402.02)

The MOA

In 2001, the Coast Guard and EPA developed and signed with the Inter-Agency Memorandum of Agreement Regarding Oil Spill Planning and Response Activities Under the Federal Water Pollution Control Act's National Oil and Hazardous Substances Pollution Contingency Plan and the Endangered Species Act with NOAA and DOI.



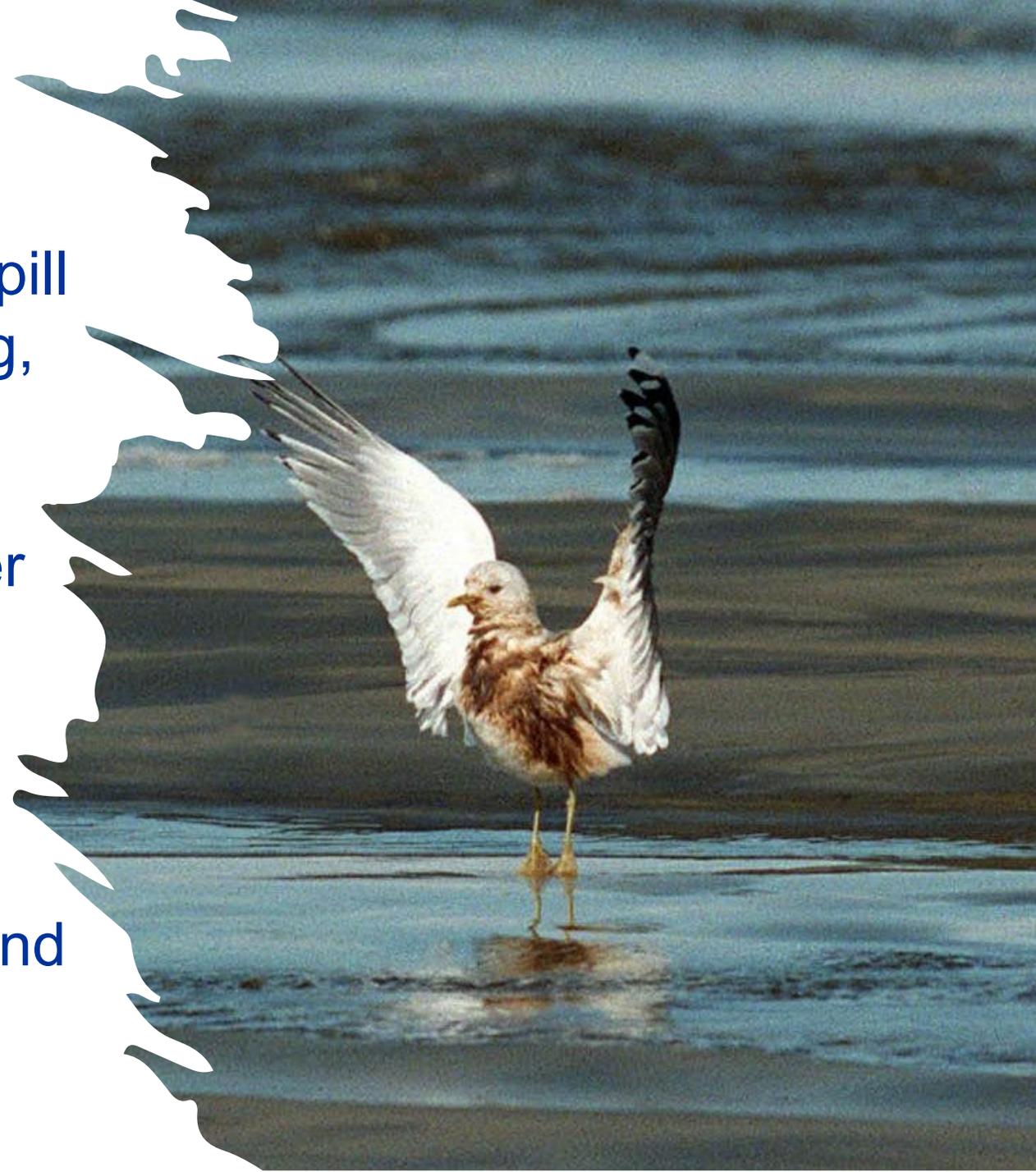
The MOA Process

The Services have determined that oil spill response actions qualify as an emergency action. During a spill, ESA consultation is conducted as Emergency Consultation in accordance with the National Contingency Plan (NCP).

- Emergency Consultation: Is considered informal, **consultation may be conducted informally through alternative procedures** that the Director determines (50 CFR § 402.05).
- The MOA is that alternative procedure which provides the structure for the process. The MOA coordinates the consultation requirements specified in the ESA regulations, 50 CFR 402, with the pollution response responsibilities outlined in the NCP, 40 CFR 300.

The MOA

- It addresses all three phases of oil spill response activities: pre-spill planning, spill response actions, and post-spill activities. It identifies the roles and responsibilities of each agency under each activity and **calls for active participation of the Services.**
- The goal of this agreement is to engage in informal consultation wherever possible during planning and response.



A decorative graphic on the left side of the slide, consisting of several concentric, overlapping circles in various shades of light blue, creating a soft, circular frame around the title.

PRE-SPILL PLANNING

- While the drafting Area or Regional Contingency Plans themselves may not result in effects to listed species, actions implemented under the plans may. It is essential that the Coast Guard or EPA Area Planning Committee and USFWS and NMFS engage during the planning process while developing or modifying contingency plans and response strategies.
- By consulting on the anticipated effects prior to implementing response actions, decisions can be made rapidly during the spill, harm from response actions can be minimized, and implementation of response strategies specifically designed to protect listed species and critical habitat can be achieved. During this phase, this can be conducted as formal or informal consultation depending on the effects determinations for response actions.



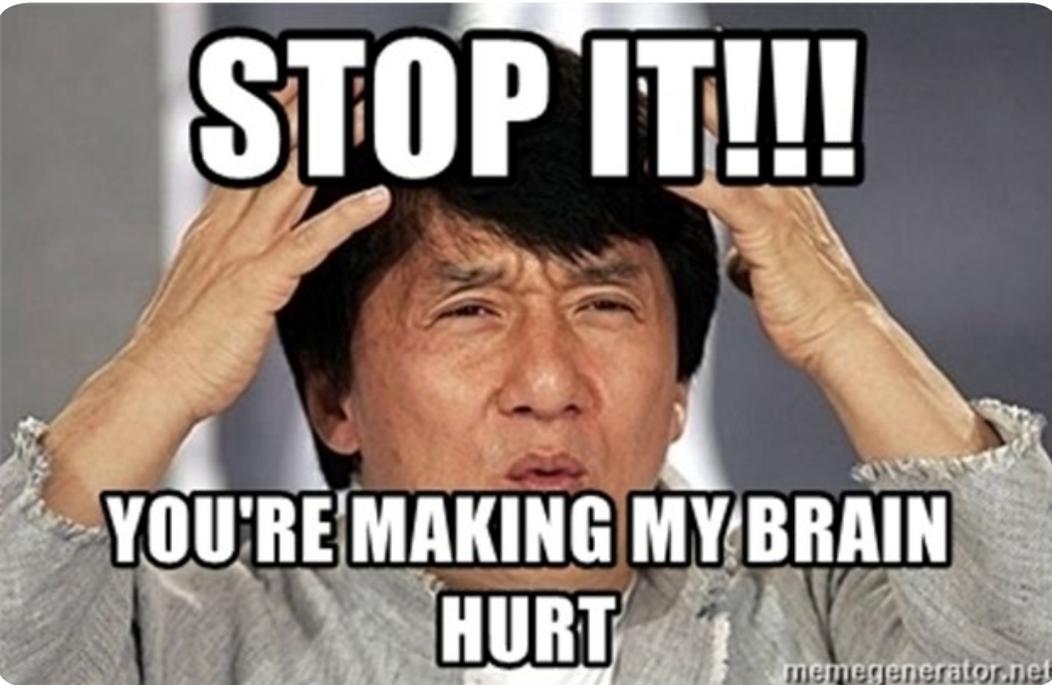
PRE-SPILL PLANNING

The Area Committee chair should request technical assistance from the Services and the Services should **designate** a listed species expert or Section 7 practitioner to assist the Committee. The Services **will** reply orally within 30 days and in writing within 60 days, MOA Section V, A(2).

The Planning Process in itself can constitute informal consultation which could lead to formal consultation if needed. The end result needs to be translated into practical response options, BMPs, etc., to minimize adverse effects to species.



OIL SPILL RESPONSE



Emergency consultation procedures allow the Federal On Scene Coordinator (FOSC) to incorporate listed species and critical habitat concerns into response actions. The consultation only addresses the effects of the response actions to listed species and critical habitat, not the effects of the spilled product (that is a NRDA issue).

The Services shall provide the FOSC with **timely recommendations** to avoid and/or minimize impacts to listed species. The Services may, be asked by the FOSC to participate within the Incident Command. It is the responsibility of both the FOSC and the Services' representatives to maintain a record of written and oral communications during the oil spill response. If you're in the ICS it's your daily report or 214.

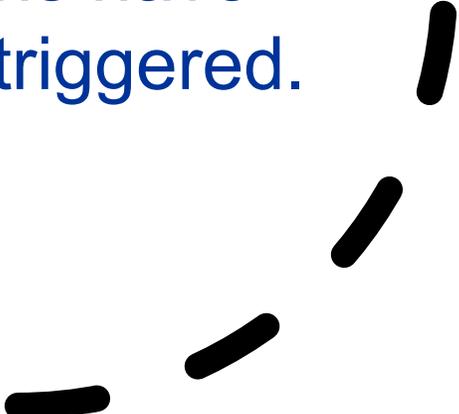
A decorative graphic on the left side of the slide, consisting of several concentric, overlapping circular bands in various shades of light blue, creating a sense of depth and movement. The bands are thicker at the top and bottom, tapering towards the sides.

OIL SPILL RESPONSE

- USFWS and/or NMFS biologists at the Incident Command may be asked to oversee and be responsible for the gathering of the required species and critical habitat information for consultation purposes.
- The Services will continue to offer recommendations, taking into account any response changes, to avoid and minimize the potential for adverse effects to listed species and critical habitat. “Rolling Sec 7 Consultation”.
- Develop BMPs, monitor/modify BMP or response actions as appropriate.
- The Service’s policy is to assist the FOSC with their ESA compliance issues during an emergency response, but never delay the necessary response actions.

When Do You Stop Consultation

The emergency continues until removal operations are completed and the case is closed. The FOSC will continue to conduct emergency consultations, if needed, until the emergency is over, and the case is closed. NPFC has recognized that funding may have to continue after response actions have ceased if formal consultation is triggered.



Where Does All This Consultation Stuff Take Place ??

The new USCG Incident Management Handbook (IMH), states, the NOAA Scientific Support Coordinator will facilitate the ESA 7 consultation process with other agencies, but where ?? At the empty table in the back ? In the hallway ? Talking on 3 cellphones ?

No, at the Planning Section, Environmental Unit .. The Environmental Unit Leader along with his technical specialists including ESA specialists... Identify the need for and obtain permits, consultations, and other authorizations, including Endangered Species Act (ESA) provisions. The ENVL is a very busy person.



Practical Example

How does ESA consultation Affect SCAT Activities? BTW, SCAT is out of the Environmental Unit too.

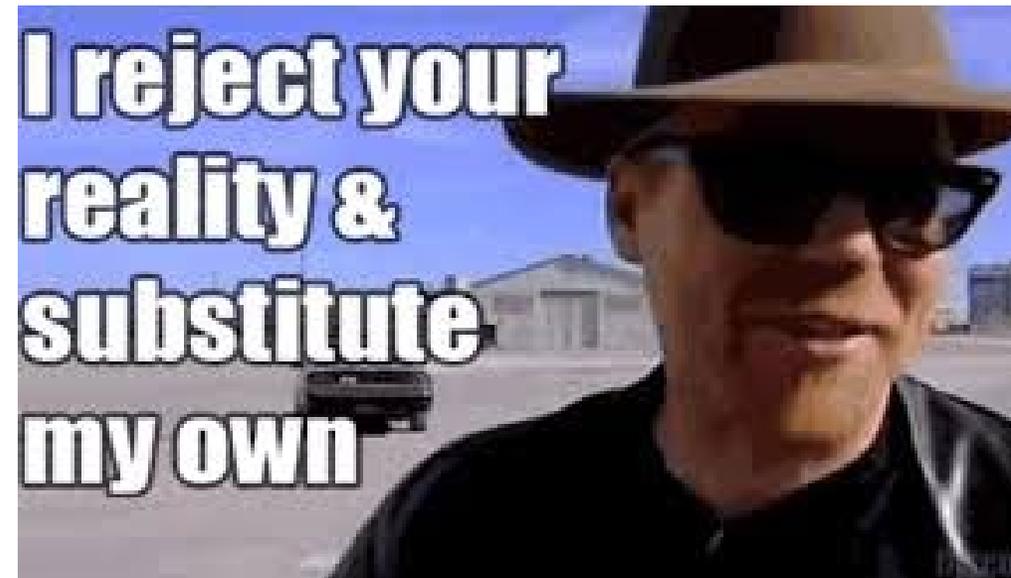
ESA concerns:

- Usually result in one or more Best Management Practices (BMPs), which affect how SCAT activities are conducted
- May drive selection of cleanup methods and endpoints
- Potential addition of a resource specialist to the SCAT team

Reality Check

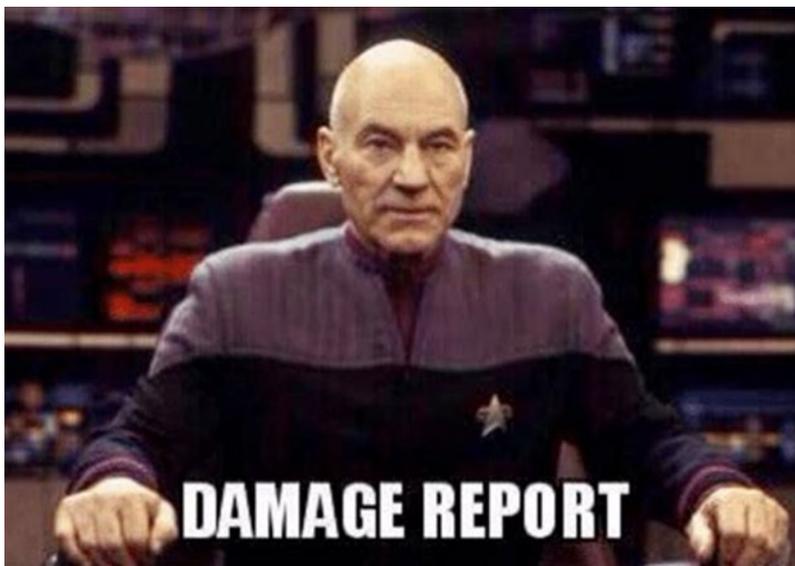
Is this the way it is working ??? How many FWS/NMFS field offices know that the MOA exists. For that matter USCG or EPA OSCs. Has anyone read it recently.

Maybe, Coast Guard and EPA when requesting for Service technical assistance or participation should start off by citing the MOA (as a reminder that there is an established agreement and process) because it is the means by which compliance with section 7(a)(2) of the Endangered Species Act is achieved for Oil and Hazmat.



But what about NRDA.....

As per the 2001 MOA, every effort shall be made to ensure that relevant information generated as part of the consultation process is made available for use in the Natural Resource Damage Assessment (NRDA) process.



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POST RESPONSE

The impacts of the response activities on listed species and critical habitat will be jointly evaluated by the FOSC and the Services. If no adverse effects (take) occurred, consultation is finalized. EPA and Coast Guard ensure that the lessons learned and BMPs are recorded for future spill response and ensure that the ACP is modified accordingly. Different from 50 CFR § 402.05 - Emergencies

Formal consultation is initiated **only** if adverse effects (take) to a species or critical habitat occurred despite incorporating any requirements developed in consultation with the Service(s) during response. The resulting after-the-fact Biological Opinion should be included in the lessons learned by the FOSC and ACP.





To Sum Up The ESA MOA

- Developed jointly with NOAA, FWS, NMFS, EPA and USCG.
- The MOA provides a framework and guidance for **cooperation and participation** among the ESA Trustees (FWS & NMFS) in **oil spill planning and response**
- It calls for **active cooperation** with FWS and NMFS in pre spill planning such as ACPs, etc
- The MOA **does not limit** the authority of the FOSC **nor is it meant to stop the response**
- Safety of human life continues to be the top priority during every response

- During a Spill, all response actions are considered emergency consultations, Service(s) document all communication with FOSC
- Although not directly stated, the Service technical specialists are to help the FOSC in making an ESA effects determination, which may require an SE Resources at Risk Specialist (RAR/SE, my invention) in the Environmental Unit.
- Formal consultation is required post emergency only if adverse effects (i.e. take, damage or adverse modification) occurred to species or designated critical habitat.
- Always remember, the term Formal Consultation has a specific meaning under the ESA, do not use it unless adverse effects (i.e. Take) have occurred.



Inter-agency Memorandum of Agreement Regarding Oil Spill Planning and Response Activities Under the Federal Water Pollution Control Act's National Oil and Hazardous Substances Pollution Contingency Plan and the Endangered Species Act

A Guidebook
Version 2002

There's Even
a Guidebook



United States Coast Guard



United States Environmental Protection Agency



Department of the Interior's Fish and Wildlife Service



National Oceanic and Atmospheric Administration's National Marine Fisheries Service



National Oceanic and Atmospheric Administration's National Ocean Service



Department of the Interior



Everyone's Got Their Own Guide

Inter-agency Memorandum of Agreement Regarding Oil Spill Planning and Response Activities Under the Federal Water Pollution Control Act's National Oil and Hazardous Substances Pollution Contingency Plan and the Endangered Species Act

A Guidebook
Version 2002



United States Coast Guard



United States Environmental Protection Agency



Department of the Interior's Fish and Wildlife Service



National Oceanic and Atmospheric Administration's National Marine Fisheries Service



National Oceanic and Atmospheric Administration's National Ocean Service



Department of the Interior



Endangered Species



Consultation Handbook

Procedures for Conducting Consultation and Conference Activities Under Section 7 of the Endangered Species Act

U.S. Fish & Wildlife Service
and
National Marine Fisheries Service



March 1998
Final



Consultation Handbook

*Procedures for Conducting
Consultation and Conference
Activities Under Section 7 of the
Endangered Species Act*

U.S. Fish & Wildlife Service
and
National Marine Fisheries Service



March 1998
Final



This one is used by the Services for Sec 7 Consultation. It covers all aspects including Emergency Consultation (chapter 8).

But it is not oil spill specific, it does not mention the 2001 MOA or the agency roles in the event of a spill.

This is the FWS and NMFS Sec 7 practitioners' book, but not practical for spills, and some of its content is dated because of changes in ESA regulations since its publication.

This is the MOA guidebook, it outlines very well how ESA consultation is carried out for oil spills under the existing MOA, the NCP and ESA.

This guide also covers where the Services fit into Spill response and planning, ICS, etc. It's a complete guide for spill related ESA consultation.

It refers back to the Sec 7 handbook as needed.

Inter-agency Memorandum of Agreement Regarding Oil Spill Planning and Response Activities Under the Federal Water Pollution Control Act's National Oil and Hazardous Substances Pollution Contingency Plan and the Endangered Species Act

**A Guidebook
Version 2002**



United States Coast Guard



United States Environmental Protection Agency



Department of the Interior's Fish and Wildlife Service



National Oceanic and Atmospheric Administration's National Marine Fisheries Service



National Oceanic and Atmospheric Administration's National Ocean Service



Department of the Interior

How Easy or Difficult Can Emergency Sec 7 Be In a Response?

Depends on how difficult the Services want to make it. In the Caribbean, we came up with a form. The form is filled out with an effects determination for the response actions and the Service(s) can concur and send it back. RRT 6 has a similar form, based off the CRRT form, RRT 4 has no form.

Species and/or Critical Habitat	CH Unit (if applicable)	Location (Sea turtles and Gulf Sturgeon only)	Determinations (see definitions below)	For “No Effect,” please select justification.
Select a species or critical habitat		Select location	Select a determination	Select most appropriate
Select a species or critical habitat		Select location	Select a determination	Select most appropriate
Select a species or critical habitat		Select location	Select a determination	Select most appropriate
Select a species or critical habitat		Select location	Select a determination	Select most appropriate
Select a species or critical habitat		Select location	Select a determination	Select most appropriate
Select a species or critical habitat		Select location	Select a determination	Select most appropriate
Select a species or critical habitat		Select location	Select a determination	Select most appropriate
Select a species or critical habitat		Select location	Select a determination	Select most appropriate

CRRT Emergency Consultation
Threatened and Endangered Species Checklist (see Appendix A for sources of information)

SPECIES	Occurs in response area	RESPONSE: Likely to Adversely Affect	RESPONSE: Not Likely to Adversely Affect	Service Response	AGENCY
Loggerhead sea turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		NMFS/USFWS*
Green sea turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		NMFS/USFWS*
Leatherback sea turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		NMFS/USFWS*
Hawksbill sea turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		NMFS/USFWS*
Nassau grouper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		NMFS
Elkhorn coral	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		NMFS
Staghorn coral	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		NMFS
Pillar coral	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		NMFS
Lobed star coral	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		NMFS
Mountainous star coral	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		NMFS

In the Pacific
NW they have
a
Programmatic
Biological
Opinion.

- Programmatic BO's are a recommended path forward in the MOA. But it can be a heavy lift in terms of writing and coordination, like the 400 page plus document Region 9 (RRT X) developed.
- However, EPA and the Coast Guard will still need FWS help in interpreting this BO and implementing its conservation measures. Do not expect EPA or USCG FOSC's to read this.
- What ever the process it is a means to an end, how to deal with listed species during spill response.

More Information on the ESA MOA Can be Found on The National Response Team Website.

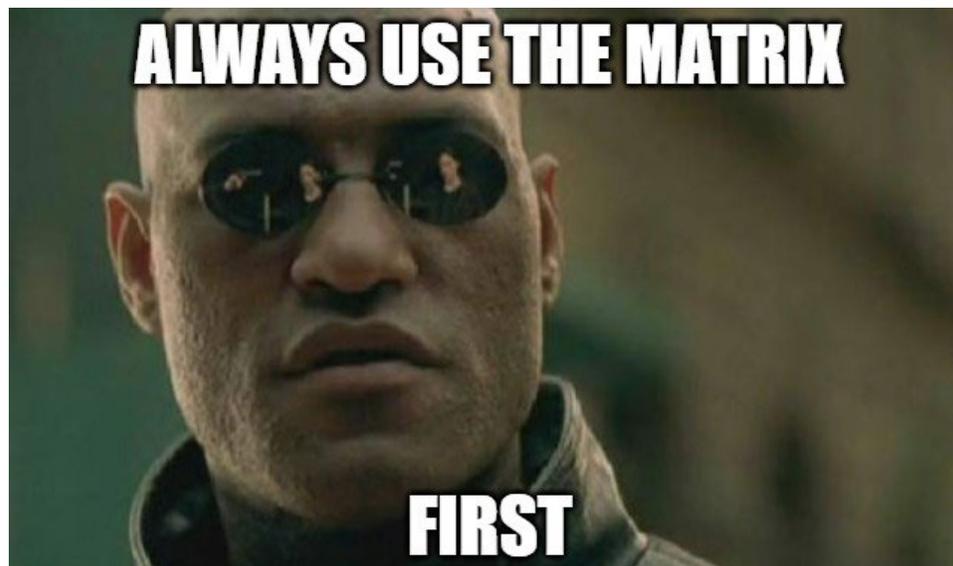


NRT.org, your site for all things oil and hazmat related, and where the MOA information resides. Including that 4 hour death by power point presentation that was initially developed, with no pictures !! But it also includes sample letters and other information, a lot of effort was put into developing these tools.





The NRT has developed the Response Action Matrix, which pairs response actions, and their potential impacts on threatened and endangered species and designated critical habitat. This was done jointly with FWS and NMFS at the NRT level, it's an excellent way to start evaluating proposed actions in Area Contingency plans and have pre-spill consultation and proposed conservation measures.



U.S. Department of the Interior

A	B	C	D	E	F	G	H	I
1 ESA Consultation on Pre-Spill Planning - Response Tool Template								
2 Version: 11 May 2017								
Spill response activity Note: This column lists the most common activities performed during spill response and recovery operations (i.e., those actions that are federally funded, authorized, or carried out). Activities listed in this column may need to be modified based on regional practices.	Definition Note: This column provides a detailed explanation of the oil spill response activity. Any pre-established conservation measures carried out with the specific spill response activity (as prescribed in Regional or Area Contingency Plans) should be included as part of the definition as applicable.	Typical locations in the action area where the response activity is implemented Note: The following locations were used: 1) Shoreline (beach/land); 2) Ports, Canals, Industrial Areas (Structures and water); 3) Coastal Nearshore (<3NM); 4) Coastal Offshore (>3NM-EEZ); 5) Rivers and Streams (Inland); 6) Bays and Estuaries; 7) Ponds and lakes (Inland); 8) Mangroves; 9) Wetlands; 10) Upland Areas.	Environmental conditions that limit where or when to use the response activity Note: This information is being used to inform 1) the species affected (column I and J) across feasibility of potential conservation measures.	Discussion questions/ Considerations Note: These are questions or discussion points that may be considered during consultation; the answers to these questions are not necessarily known in advance or required for each situation. The questions help bring to light unknowns, highly variable situations, problem situations, and assumptions or parameters of the activity or details of the use (scale, time, duration, volume, personnel, application, methods).	Potential inter-related and inter-dependent response activities Note: In a spill response, some activities are often used in conjunction with others to affect an efficient and coordinated response. The activities listed below are commonly used with the response activity listed in column A. Each of the inter-related or inter-dependent activities listed is also defined within this matrix.	Aspects of spill response activity that are in scope of consultation Note: This column denotes the specific characteristics or features of the response activity that may cause concern for TBE species.	Potential impacts considered on ESA-listed species or their habitat Note: This column describes potential direct and indirect impacts from the response activity that should be considered in an effect analysis for a TBE species. Includes physical, chemical, and/or biological exposure routes.	General groups of species that may be affected Note: The general groups of species listed below are intended to give an idea of what types of species may be affected by the response activities. Specific threatened or endangered species or their habitat will be determined and based upon the defined geographic scope of the action planning area and implementation of a Species Screening Tool developed by and completed with assistance from the Services. Individual headers refer back to Column H.
4 PRIMARY AND SUPPORT RESPONSE ACTIVITIES - activities or supporting activities used to locate, contain, and recover discharged oil and/or prevent natural resources from oil contamination								
5 Deflection and containment activities								
Booming	<p>A boom specifically designed for pollution response is a floating, physical barrier, placed on the water to contain, divert, deflect, or exclude oil. Containment is deploying a boom to contain and concentrate the oil until it can be removed. Deflection is moving oil away from sensitive areas. Diversion is moving oil toward recovery sites that have slower flow, better access, etc. Exclusion is placing boom to prevent oil from reaching sensitive areas. Booms must be properly deployed and maintained (including removing accumulated debris), and re-adjusted to changing water flow directions, water levels, and wave conditions. Proper deployment involves use of mooring systems (e.g., anchors, land lines) and skilled teams. Tidal-seal boom is a special type of boom designed to be deployed in the intertidal zone (NOAA, 2010). Boom has four basic components: flotation, skirt, tension members, and ballast. Freeboard and draft are the portions of a boom's flotation and skirt above and below the waterline, respectively.</p> <p>In terms of quantity, regulations require vessel and facility response plan holders to have a specific amount of boom available for shoreline protection purposes for maximum most probable and worst case discharges. EPA, USCG and BSEE regulations vary. For example, for skimming operations covered by USCG OSCRD guidelines, there are typically 300' of boom deployed per skimming system (USCG, 2016). The minimum boom properties include: 1) nearshore/offshore: boom height (draft plus freeboard) ≥ 42" for containment, capable of withstanding 6' waves; boom height ≥ 18" for shoreline protection; 2) rivers and canals: boom height 6-18", capable of operating in 1' wave heights; 3) inland: boom height 18-42", capable of operating in 3' wave heights; 4) Great Lakes: boom height 18-42", capable of operating in 4' wave heights (USCG, 2016).</p>	<p>Shoreline; Ports, Canals, Industrial Areas; Coastal Nearshore (<3NM); Coastal Offshore (>3NM-EEZ); Rivers and Streams (Inland); Bays and Estuaries Ponds and lakes (Inland); Mangroves; Wetlands; Upland Areas</p>	<p>Less effective in rough water. Less effective in high winds. Less effective in fast currents.</p> <p>Weather affects booming (e.g., booms begin to fail by entrainment when the effective current or towing speed exceeds 0.7 knots perpendicular to the boom). Waves, wind, debris, and ice contribute to boom failure (NOAA, 2010).</p>	<p>What type of boom will be used? (There are four basic types - internal foam flotation, self-inflating, pressure-inflatable, fence.) (Eaton Mobil, 2014). Will the boom be anchored, and if so, what is the anchoring system include? Where will the boom be anchored? How is the boom being used, i.e., for containment, deflection, or protection? How long is boom left in place? Where is oil-contaminated boom disposed of? What machinery (jessels, trucks, etc.) are used to recover boom? What size is the boom? Why might the boom fail? (There are 5 basic types of boom failure: entrainment, drainage, splash over, submergence, plugging. Eaton Mobil, 2014.) Is there netting or skirting and what is the size and material? *Note: Sorbent boom is discussed separately below.</p>	<p>Use of Vehicles Use of Vessels Use of Machinery Access by foot Use of Staging Areas Skimming Sorbents Decontamination Demobilization Waste Handling and Storage</p>	<p>Securing/Deploying/Removing boom - uses anchors, anchor chain and lines, shoreline structures.</p>	<p>Wildlife disturbance by presence of people and boom; crushing/destruction of benthic habitat/ organisms by anchors or anchor chain; entanglement in lines.</p>	<p>Wildlife disturbance from presence of people/boom at the coast - small beach and salt marsh mammals, beach insects, nesting birds, hauled out marine mammals, sea turtles, anadromous fish.</p> <p>Foot/machinery traffic on land (crushing) - coastal plants, salt marsh and beach/dune plants, nesting sea turtles, marine mammals (seals and sea lions), anadromous fish.</p> <p>Securing boom/chain/lines (habitat disturbance and entanglement) - coral, abalone, small marine mammals, larger fish, sea turtles, anadromous fish.</p>
						<p>Presence of boom and aggregation of oil.</p>	<p>Exposure of perching birds or marine mammals to oiled boom; effects on wading and surface wildlife due to aggregation of oil; risk of entanglement.</p>	<p>Exposure to aggregated oil/oiled boom - wading/perching birds, coastal fish, reptiles, surfacing marine mammals, sea turtles.</p>

Where to find Species Information

ESI Maps, yeah, remember those. Great for coastal spills, tons of info at a glance.



FWS IPaC, useful for inland spills, provides a list of known ESA species within an action area. But not all species that could potentially be impacted.

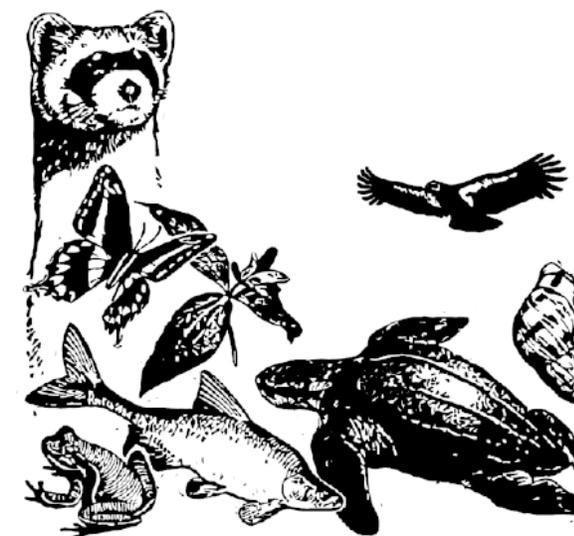
U.S. Fish & Wildlife Service

FWS Spill Class

IPaC Trust Resources Report

Generated October 24, 2016 10:51 AM MDT, IPaC v3.0.9

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.



IPaC - Information for Planning and Conservation (<https://ecos.fws.gov/ipac/>): A project planning tool to help streamline the U.S. Fish & Wildlife Service environmental review process.



U.S. Department of the Interior

FWS IPaC

Big Spill, kills everything



Resources

- This project potentially impacts 110 resources managed or regulated by the U.S. Fish and Wildlife Service.
- 15 endangered species
- 25 migratory birds
- 1 marine mammal
- Refuge and fish hatchery information is not available at this time
- Known wetlands

- Raleigh Ecological Services Field Office
- (919) 856-4520
- (919) 856-4556
- MAILING ADDRESS
- Post Office Box 33726
- Raleigh, NC 27636-3726
- PHYSICAL ADDRESS
- 551 Pylon Drive, Suite F
- Raleigh, NC 27606-1487



U.S. Department of the Interior

IPaC Spill Consultation Package Module, Work in Progress

IPaC Informa
MY PROJECTS
PROJECT HOME

Workflow

Progress

Describe activities
Purpose and type, stressors, action area

- Project purpose
- Project type and deconstruction
- Confirm project action area

Progress

Analyze species
No species marked present

Progress

Analyze critical habitat
No critical habitat to analyze

Progress

Conclude analysis
Summaries and conclusions

Progress

Wrap up
Contact and other information

Project type and deconstruction

Deconstruct the proposed action by selecting all of its activities and structures.

The selected activities and structures provide the headings under which the Effects Analysis (i.e., effects of the action) for the species and critical habitat will be organized in your final document (i.e., biological assessment or other environmental review document). Later you will describe each activity and structure in greater detail.

Contaminant spill response

The aims of oil or hazardous substance spill response are to minimize damage and reduce the time for environmental recovery.

[SELECT ALL](#) [DESELECT ALL](#)

Activities

Aerial application of dispersants	<input checked="" type="checkbox"/>
use of chemical agents (dispersants) that are applied from the air	
Biological surveys (aerial)	<input checked="" type="checkbox"/>
Biological surveys (aquatic)	<input checked="" type="checkbox"/>
Biological surveys (terrestrial)	<input checked="" type="checkbox"/>
Chemical contaminant herding	<input checked="" type="checkbox"/>
Construct supply area	<input checked="" type="checkbox"/>
Contaminant residue removal (land)	<input checked="" type="checkbox"/>

Fish & Wildlife Service
FELIX LOPEZ
OFFICE RALEIGH ESFO

Not Started

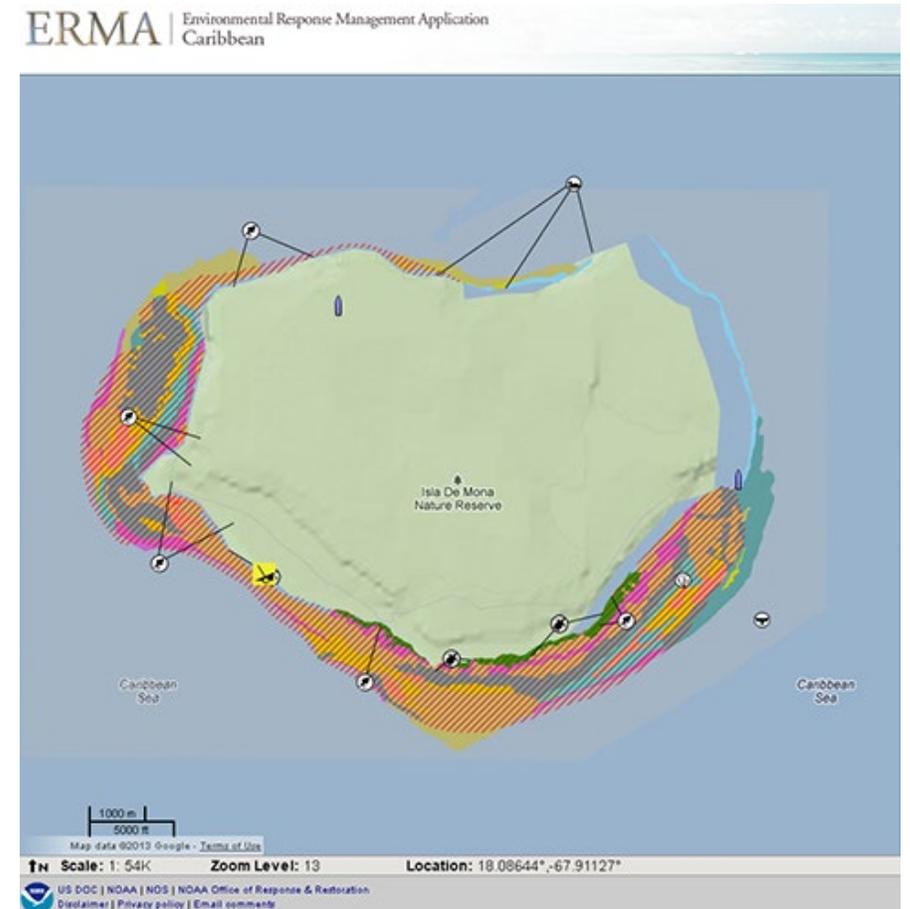
its activities and
tion, maintenance).
nd how" at an
ne species and

which the Effects
be organized in
r other
d structure in

your project, where

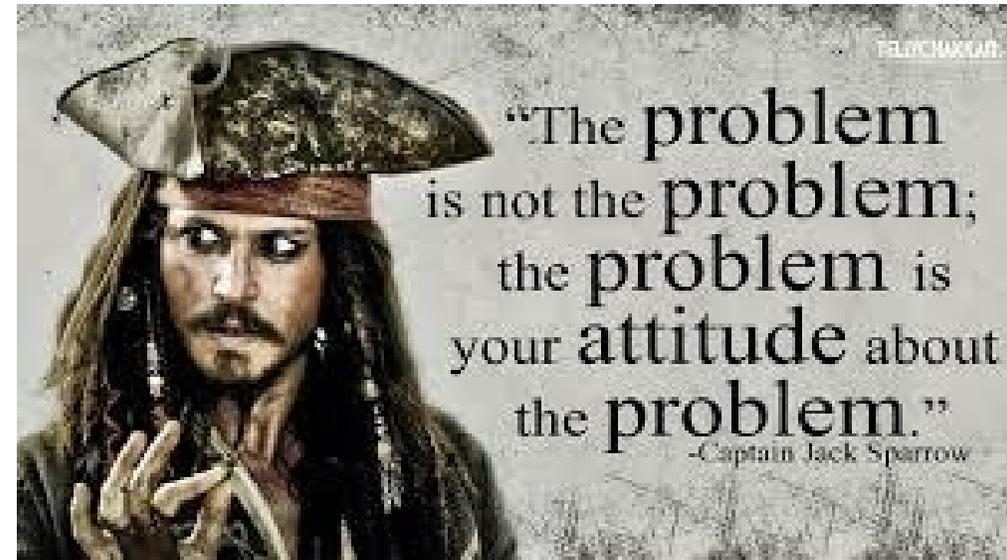
And Then There is ERMA

- The Environmental Response Management Application (ERMA®) is an online mapping tool that integrates both static and real-time data, such as Environmental Sensitivity Index (ESI) maps, ship locations, weather, and ocean currents, in a centralized, easy-to-use format for environmental responders and natural resource decision makers.
- ERMA can also pull in FWS IPaC and other data bases.



Remember....

- Sec. 7 consultation is not that complicated. There is a standing MOA to help with the process, there's even a guidebook that covers everything you want to know about spill response, Sec 7 consultation and the MOA.
- Coast Guard and EPA communication with the Services should cite the MOA as a reminder that it exists. Always use it as your frame of reference.
- Facilitate, do not impede
- Help, do not hinder



But Wait, There's More.....

This just gets you off the hook for ESA consultation, we still have to talk about COBRA, not the snake, its really CBRA and other permits that the Environmental Unit has to crank out, like Corps of Engineers Permits and obscure and arcane things like Section 106. So stayed tuned because..... You Don't Know, What You Don't Know..... (tipping hat to NOAAs webinar Series).

I am The Lorax, I speak for the trees.

