

## 2014 INTERNATIONAL OIL SPILL CONFERENCE

**Addressing the Uncertainty and Requirements for Oil Spill Response Consultations****AUTHORS:****Bradford Benggio (SSC)**

NOAA OR&R  
909 SE 1st Avenue, Suite 714  
Brickell Plaza Federal Building  
Miami, FL 33131  
[Brad.benggio@noaa.gov](mailto:Brad.benggio@noaa.gov)

**Debra Scholz**

SEA Consulting Group  
868 Robert E Lee Blvd.  
Charleston, SC 29412  
[dscholz@seaconsulting.com](mailto:dscholz@seaconsulting.com)

**Dave Anderson**

USDOI – National Park Service  
1201 Oakridge Drive  
Fort Collins, CO 80525  
[D.L.Anderson@nps.gov](mailto:D.L.Anderson@nps.gov)

**Joseph Dillon**

NOAA NMFS  
West Coast Region  
777 Sonoma Ave., Suite 325  
Santa Rosa, CA 95404  
[joseph.j.dillon@noaa.gov](mailto:joseph.j.dillon@noaa.gov)

**Greg Masson, PhD**

USFWS  
1875 Century Boulevard,  
Suite 400  
Atlanta, GA 30345  
[Greg.masson@fws.gov](mailto:Greg.masson@fws.gov)

**Lindy Nelson**

US DOI – REO  
Office of Environmental Policy &  
Compliance  
Philadelphia Region  
Custom House, Room 244  
200 Chestnut Street  
Philadelphia, PA 19106  
[Lindy.Nelson@ios.doi.gov](mailto:Lindy.Nelson@ios.doi.gov)

**Daniel Odess**

USDOI – National Park Service  
Chief, Science and Research  
1201 Eye Street, NW (2271)  
Room 736  
Washington, DC 20005  
[Daniel.Odess@nps.gov](mailto:Daniel.Odess@nps.gov)

**Elizabeth Petras**

NOAA NMFS  
West Coast Region  
501 West Ocean Blvd. Suite  
4200  
Long Beach, CA 90802  
[Elizabeth.Petras@noaa.gov](mailto:Elizabeth.Petras@noaa.gov)

**ABSTRACT 300305:**

In the United States (U.S.), oil spill response planning, preparedness, and response requirements are dictated primarily by the National Oil and Hazardous Substances Pollution Contingency Plan, a regulation that implements the Oil Pollution Act of 1990, the Clean Water Act, and the Comprehensive Environmental Response, Compensation and Liability Act. At the planning stage, these regulations require the development of national, regional, and local response capabilities and promote overall coordination among responders. During a spill, these capabilities are utilized by the Federal On-Scene Coordinator (FOSC) to analyze whether response actions are likely to impact protected resources. The consultation process required under Federal statutes, charges the FOSC to consult with Federal, state, Tribal entities, and other Federal agencies to determine potential effects of response actions during an incident and to develop strategies to avoid, minimize, and mitigate those effects (40 CFR § 300.135(j); § 300.305(e); and § 300.322(a), 1994). Consultations should continue until response operations are concluded and may continue after operations are complete.

Four key regulatory mandates that require an FOSC to initiate consultation during a response include:

## 2014 INTERNATIONAL OIL SPILL CONFERENCE

- **Endangered Species Act of 1973**, as amended requires consultation with US Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) on federally listed species and designated critical habitats;
- **Magnuson-Stevens Act** requires consultation with NMFS on any action that may affect Essential Fish Habitats;
- **National Historic Preservation Act** of 1966, as amended requires Federal agencies to consult with states, federally recognized tribes, and other stakeholders on potential impacts to historic and cultural resources; and
- Tribal Consultations under **Executive Order 13175 – Consultation and Coordination with Indian Tribal Governments** when federally recognized Indian Tribes and their interests are affected by a response.

Consultation is also required under the **Native American Graves Protection and Repatriation Act** when Native American burial sites, human remains, funerary objects, sacred objects, or items of cultural patrimony are identified on Federal or Tribal lands during a response and no pre-consultation plan of action has been developed.<sup>1</sup>

Consultation requirements are not universally understood, leading to uncertainty and inconsistencies across the response community and Trustees regarding when to initiate and how to conduct the consultations. This paper discusses the Federal consultation requirements and identifies areas of possible uncertainties in the consultation process throughout the pre-spill planning, response, and post-response phases of an incident. This paper will suggest resolutions and recommendations to further enhance the consultation process by the Federal spill response decision-makers and planning bodies.

## INTRODUCTION:

In the U.S., an oil spill response is directed by the FOSC who directs and coordinates all response efforts at the scene of a discharge or release (40 CFR § 300.120 and § 300.135, 1994); these duties are clearly specified in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The responsible party also plays a significant role in a response; however, the FOSC maintains authority (40 CFR § 300.105, 1994). The FOSC positions are pre-designated by the lead agencies—US Coast Guard (USCG) for the coastal zone and US Environmental Protection Agency (EPA) for the inland zone.<sup>2</sup> In the role of FOSC, there are several federally-mandated consultation<sup>3</sup> requirements that must be met, whether the discharge is on land, on water, or along the shoreline, including:

- **The Endangered Species Act (ESA)** Section 7 consultations on threatened and endangered species (T&E) and their designated critical habitats;
- **The Magnuson-Stevens Fishery Conservation and Management Act (MSA)** Essential

<sup>1</sup> **Please Note:** This is not a comprehensive list of all Federal statutes which may require consultation with the FOSC in charge of a response. Consultations may also be required under the Marine Mammal Protection Act or the National Marine Sanctuaries Act depending on the impacts and area of the response activities.

<sup>2</sup> DOD and DOE or other Federal agency personnel may serve as FOSC for hazardous substances, pollutants, or contaminants releases from their assets as defined in 40 CFR § 300.120(c) (1994).

<sup>3</sup> Consultation is defined as a discussion, conference, or forum in which information and advice are provided and exchanged and consists of: Communication; Public participation; Consensus building; Collaborative decision making; and Exchange of information, knowledge and ideas.

## 2014 INTERNATIONAL OIL SPILL CONFERENCE

- Fish Habitats (EFH) consultations;
- **The National Historic Preservation Act (NHPA)** Section 106 consultations for cultural resources;<sup>4</sup> and
  - The Tribal consultation requirements under the NHPA, **Executive Order (EO) 13175**, and the **Native American Graves Protection and Repatriation Act (NAGPRA)**, where applicable.

Consultations ensure that the FOSC is aware of the resources in the area which are to be protected by these various statutes and that responders work with the resource agencies to minimize impacts and address protected resources affected by the response or the response actions. The consultation mandates apply for: 1) response plans and pre-authorizations as developed by area committees (AC) and the regional response teams (RRT). In accordance with the NCP, all Subpart J pre-authorizations must obtain concurrence from affected states, EPA, and Department of the Interior (USDO I) and Department of Commerce; 2) emergency consultation requirements during response as required for actions not already specifically covered from consultations in regional or area planning; and 3) post incident formal consultations when protected species or critical habitat (ESA, see 50 CFR § 402.05, 1986) or essential fish habitat<sup>5</sup> (MSA, see 50 CFR § 600.920, 2002) have been affected in any way. These consultations are important for the following reasons: 1) they are required under Federal regulation; 2) they ensure coordinated planning efforts to provide for better protection of our resources during response; and 3) Federal regulation (33 CFR § 154.1045, 1996 and 33 CFR § 155 Section 8 of Appendix B, 2010) requires industry to provide response capabilities for dispersant use where pre-authorization exists.

Many of these consultation requirements are not understood by the FOSC or the response organizations, which results in uncertainty and inconsistencies across the response community and Trustees regarding the initiation and conduct of regulatory consultations for the safeguard of the potentially affected resources. Additionally, due to differences in regional perspectives and lack of national oversight, the Trustee/resource management agencies may have different viewpoints as to how the consultations should be conducted or what details must be included. In some instances the consultation requirements are addressed late in a response after impacts to resources have already occurred. Failure to conduct consultation may result in successful litigation against the FOSC due to violations of Federal statutes<sup>6</sup> and regulations.

Furthermore, there is variability in the ways in which the AC's and RRT's have addressed the various consultation requirements. Both informal and formal consultations were successfully completed by RRTs and ACs in the late 1990s to meet ESA consultation requirements for dispersant, in-situ burn, and other pre-authorizations; the current status of these pre-authorizations varies by region. Due to several recent legal suits, Alaska has initiated a new

---

<sup>4</sup> This includes archaeological sites, historic buildings, structures or objects, cultural landscapes, and traditional cultural properties included in or eligible for inclusion in the National Register of Historic Places.

<sup>5</sup> Consultation is required for emergency Federal actions that may adversely affect EFH, such as hazardous material clean-up, response to natural disasters, or actions to protect public safety. Federal agencies should contact NOAA Fisheries early in emergency response planning, but may consult after-the-fact if consultation on an expedited basis is not practicable before taking the actions

<sup>6</sup> Administrative Procedures Act (5 U.S.C. Subchapter II).

## 2014 INTERNATIONAL OIL SPILL CONFERENCE

consultation, California has engaged in consultation activities with the Services for ESA, and Sector New York / New Jersey was recently served with a 60 day Notice of Intent to Sue for violations of the ESA.<sup>7</sup> The status of the consultations for EFH, NHPA and Tribal issues (where applicable) vary significantly across the country, from being current to having never been addressed.

There is no consistent national guidance specific to RRT's and FOSC's that addresses how the update of these consultations should be performed as the list of protected or historic resources are updated over time. Action agencies should work with the consulting agencies and parties to update any existing consultations and/or review actions for which consultations have been completed. The current USCG MER Guidance (2013) states that the ESA and EFH updates should be conducted (at a minimum) every three years with the ACP update schedule; however, no instruction is provided for necessary changes that necessitate re-initiation of consultation within the three year cycle. Additionally, NHPA and requirements for Tribal Consultations are not addressed in this guidance.

Consultations require substantial effort and significant personnel and cost expenditures for the Trustee agencies, advisory agencies, and the FOSCs, with assistance from the RRTs and ACPs. This planning burden can be reduced by incorporating the consultation requirements into the planning cycle. Ultimately, FOSCs and RRTs need to be well versed in the mandates, Memorandum of Agreements (MOAs), programmatic agreements (PAs), and existing nationally-standardized guidance and tools that will assist FOSCs with the consultation documents under their purview.

**Table 1** summarizes the regulations that require consultation; these are particularly important for federal actions taken during an oil spill response. The FOSC should initiate the federally-mandated consultations for all incidents and must assume that the regulatory requirements are necessary until ruled out or the FOSC must document that he has made a determination of no effect from the action and therefore no consultation is necessary.

---

<sup>7</sup> Center for Biological Diversity, 60-day Notice of Intent to Sue: Violations of the Endangered Species Act Related to the New York and New Jersey Area Contingency Plan. Submitted on 17 February 2014. 21 pages. Available from: [http://www.biologicaldiversity.org/programs/public\\_lands/energy/dirty\\_energy\\_development/oil\\_and\\_gas/pdfs/NY\\_NJ%20ACP\\_NOI.pdf](http://www.biologicaldiversity.org/programs/public_lands/energy/dirty_energy_development/oil_and_gas/pdfs/NY_NJ%20ACP_NOI.pdf).

## 2014 INTERNATIONAL OIL SPILL CONFERENCE

**Table 1. Summary of the Federally-mandated Consultation Regulations.**

Consultation	Oversight Agency	Operation	Purpose
<b>Endangered Species Act</b>	USFWS & NMFS	Federal actions (including oil spill response) may affect protected (T&E) resources and their designated critical habitat	All Federal agencies are to carry out programs for the conservation of threatened and endangered plants and animals and the habitats in which they are found. Through Federal action and by encouraging the establishment of state/commonwealth programs, the 1973 ESA provided for the conservation of ecosystems upon which threatened and endangered species of fish, wildlife, and plants depend.
<b>Magnuson-Stevens Act</b> (16 U.S.C. 1801-1884) Essential Fish Habitats (EFH) (50 CFR § 600, 1996).	NMFS	Federal actions, including oil spill response, that may adversely affect EFH	To protect the capability of EFH designated under the Magnuson-Stevens Act to produce managed fishery resources. EFH is defined as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.
Cultural and Historic Resources, <b>Section 106 of the National Historic Preservation Act (NHPA)</b>	National Park Service & Advisory Council on Historic Preservation (ACHP)	Federal undertakings (including oil spill response) that affect historic properties	Federal agencies must address the likely effect an undertaking may have on historic properties (as defined in NHPA). The main purposes for the establishment of the Section 106 review process is to minimize potential harm and damage to historic properties and cultural resources, and to ensure a stakeholder voice in decisions affecting those properties. Federal undertakings are projects, actions, or programs that are funded whole or in part under direct or indirect jurisdiction of a federal agency, including funding, permits or license, or on behalf of a federal agency.
<b>Executive Order 13175 – Consultation and Coordination with Indian Tribal Governments</b>	Department of Interior Bureau of Indian Affairs	Federal policies and actions affecting federally recognized tribes.	Federal agencies must consult in a government to government fashion with tribes on actions and policies which may affect tribes, including Tribal lands or that have Tribal implications.
<b>Native American Graves Protection and Repatriation Act (NAGPRA), Section 13</b>	Department of the Interior & National Parks Service	Federal actions (including oil spill response) that affect Native American human remains, funerary objects, sacred objects and items of cultural patrimony on Federal or Tribal lands.	NAGPRA requires that Indian tribes, Alaska Native Village, or Native Hawaiian organizations be consulted whenever projects encounter, or are expected to encounter, Native American cultural items or when such items are unexpectedly discovered on Federal or Tribal lands. The law includes a “cease work” requirement unless a negotiated Plan of Action is in effect.
<b>NOTE:</b> There are other Acts that carry their own regulatory requirements such as the Marine Mammal Protection Act, and the Marine Sanctuaries Act and while they require that activities be coordinated to protect resources of those management entities, they do not specifically identify consultation mandates as do the mandates listed in the table.			

## 2014 INTERNATIONAL OIL SPILL CONFERENCE

**The Endangered Species Act, Section 7, and Incidental Take of Endangered and Threatened Species in U.S. Lands or Waters**

The ESA was designed to prevent the extinction of plants and animals and their habitats; providing for the conservation of species that are considered federally threatened or endangered (T&E)<sup>8</sup> throughout all or a significant portion of their range, and the conservation of the ecosystems on which they depend. In 2001, the USCG, EPA, USDOJ, USFWS, NOAA and NMFS signed the *Interagency Memorandum of Agreement (MOA) Regarding Oil Spill Planning and Response Activities Under the Federal Water Pollution Control Act's National Oil and Hazardous Substance Pollution Contingency Plan and the Endangered Species Act* to increase cooperation and coordination among the agencies involved in ESA compliance during a response to an oil spill. The MOA is designed to outline procedures and to streamline the ESA process before, during and after an incident (USCG et al., 2002). The key issues of the Consultation requirements in the MOA and the ESA are summarized below.

The listing of a species makes it illegal to “take.” Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to do these things (50 CFR § 3(19), 2009) any of these protected species, whether endangered or threatened<sup>9</sup> or adversely modify or destroy designated critical habitat under Section 9 – Prohibited Acts. Section 9 take prohibitions can be exempted for Federal actions via interagency consultation under Section 7 of the ESA. Non-federal actions can be granted a permit for limited take through ESA Section 10 permits. Under the ESA, the FOSC is required to consult with USFWS and NMFS if a Federal action may affect<sup>10</sup> species or their “designated critical habitat”.<sup>11</sup> The consultation is on the response actions, not the spill itself.

Depending on the type of effects on ESA listed species and type of consultation needed, the process may take 135 days or more to complete. Section 7 of the ESA addresses the need for consultations in response to emergency situations (defined as acts of God, disasters, casualties, national defense, security emergencies, etc.) that must be taken to prevent imminent loss of human life or property (50 CFR § 402.05, 1986), for which the response cannot wait for a normal consultation to be completed. Emergency response actions undertaken to limit or prevent oil discharges and/or their effects are usually addressed via the emergency consultation process (50 CFR § 402, 1986). In making determinations of effects, the action agency must make one the following three determinations: no effect; may affect, not likely to adversely affect; may affect, likely to adversely affect. Each required a different level of consultation:

- **No effect** – the proposed action will not affect listed species or critical habitat. This is the

<sup>8</sup> A species is considered endangered if it is in danger of extinction throughout all or a significant portion of its range; or threatened if it is likely to become an endangered species within the foreseeable future (16 U.S.C. 1531 *et seq.*).

<sup>9</sup> Under ESA, ‘take’ prohibitions under Section 9 are not automatic for threatened species; the USFWS and NMFS must conduct a Section 4 process to address threatened species.

<sup>10</sup> Affects may be beneficial, discountable or insignificant. If this is the determination, the action agency provides rationale and USFWS and NMFS concur. If there’s no documentation, there’s no Section 7 coverage. Adverse effects to listed species, i.e., the Federal action results in take of listed species, require formal consultation so the agency can analyze the effect of the take on the species and whether it is likely to jeopardize the species.

<sup>11</sup> Designated critical habitats are defined as specific areas within the geographical area occupied by the species at the time of listing, if they contain physical or biological features essential to conservation, and those features may require special management considerations or protection; and specific areas outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation (50 CFR § 424.02(d), 1984).

## 2014 INTERNATIONAL OIL SPILL CONFERENCE

appropriate determination if there are no listed species or critical habitats in the action area. No consultation is required.

- **May affect, is not likely to adversely affect (NLAA)** – the proposed action will result in discountable, or insignificant, or completely beneficial effects on listed species or critical habitat. In order to meet the requirements of the regulations, written documentation of the determination and concurrence are required.
- **May affect, is likely to adversely affect (LAA)** – proposed action will result in a direct or indirect adverse effect to a listed species or critical habitat; or the interrelated or interdependent actions yield results that are NOT discountable, insignificant, or wholly beneficial. This determination requires a formal Section 7 consultation.<sup>12</sup>

As described in the MOA, the Trustee/resource management agencies, the FOSC, and the RRTs should coordinate on spill planning and consultation efforts in addition to actual response efforts. In general, there are three types of ESA consultations:

1. Informal Consultation (50 CFR § 402.13, 1986) – If USFWS and NMFS concur with a NLAA determination from the action agency, the informal consultation typically occurs during the planning phase and with the development of pre-authorization documents by the action agency (USCG and/or EPA, often through teams from the RRTs and ACs) as dictated by the NCP (40 CFR § 300.210, 1994). A Biological Assessment (BA) can be prepared by the action agency to determine if the proposed action (spill response countermeasures) is likely to adversely affect listed species or critical habitat, but is not required. The USFWS & NMFS *ESA Section 7 Consultation Handbook* (1998) provides flowcharts and additional guidance on informal consultations.
2. Formal Consultations (50 CFR § 402.14, 1986) – A Formal Consultation usually is preceded by an informal consultation. If the Federal action agency determines that despite implementation of avoidance and minimization measures, “take” of listed species may occur, then a formal consultation is required.<sup>13</sup> Refer to the USFWS & NMFS *ESA Section 7 Consultation Handbook* (1998) for additional guidance on formal consultations.
3. Emergency Consultations (50 CFR § 402.05, 1986; and the Interagency MOA, 2001) – An expedited consultation process that allows Federal action agencies to address listed species and critical habitat issues and concerns during a response to an oil spill or other emergency<sup>14</sup>. Under these circumstances, the FOSC, working with the appropriate scientific support coordinator (SSC) and USDOJ representatives, may bring USFWS and NMFS staff into the response to recommend actions that prevent or minimize impacts to listed species. The details of the emergency consultation process are described in the 2001 Interagency MOA.

### Essential Fish Habitat (EFH) Consultations

Ocean fisheries are managed under Magnuson-Stevens Fishery Conservation and Management Act (MSA) of 1976, as amended (16 U.S.C. 1801-1882). MSA established procedures designed to identify, conserve, and enhance EFH. The EFH is defined as “*Those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.*”

<sup>12</sup> The requirements of the action agency and USFWS and NMFS are detailed at 50 CFR § 402.13 (1986).

<sup>13</sup> Except as noted in 50 CFR § 402.12(b) – Exceptions (1986).

<sup>14</sup> An Emergency is defined as “a situation involving an act of God, disasters, national defense or security emergencies, etc. and includes response activities that must be taken to prevent imminent loss of human life and property.”

## 2014 INTERNATIONAL OIL SPILL CONFERENCE

EFH has been described for approximately 1,100 managed species to date.

The MSA requires Federal action agencies to consult with NMFS on all actions, or proposed actions, authorized, funded, or undertaken by the agency, that may adversely affect EFH (16 U.S.C. 1855(b)(2)). As with the ESA, if a Federal agency (e.g., FOSC) determines that an action (spill response) does not adversely affect EFH, this conclusion should be documented by the action agency and no further consultation is required. Conversely, if the FOSC determines that an incident response may adversely affect EFH, then the FOSC must consult with NMFS to determine the likely effects from those actions and how to avoid, minimize, or mitigate those impacts. The EFH Regulations require that the Federal action agency provide NMFS with a written EFH Assessment for all actions that may adversely affect EFH (50 CFR § 600.920(e), 2002); the Federal agency is required to provide a detailed written response to NMFS (and the appropriate fishery management council) stating if the recommendations are accepted or alternate measures proposed by the agency for avoiding, mitigating, or offsetting the impact of the activity on EFH. Although EFH conservation recommendations are non-binding, when inconsistent with the recommendations, the Federal agency must explain in writing its reasons for not following the recommendations.

There are many potential situations where a Federal action can affect both EFH and the critical habitat designations for listed species under ESA, adversely affecting both. In these instances, consultations under both Section 7 and MSA may be required. NMFS strongly encourages streamlining efforts that coordinate the requirements of these statutes.

### **National Historic Preservation Act (NHPA) Consultations**

When Congress passed the National Historic Preservation Act (NHPA) in 1966, the Federal government was designated as a full partner and a leader in historic preservation in the U.S. The goal of NHPA is to have Federal agencies act as responsible stewards of our nation's resources when their actions affect historic properties.

#### ***Section 106***

Section 106 of the NHPA requires Federal agencies to consider the effects of their actions on historic properties and seeks to avoid unnecessary harm to these historic properties from these actions. It is triggered when Federal agencies take action, fund, or permit activity with the potential to affect historic properties (36 CFR § 800, 2000).<sup>15 16</sup>

Section 106 requires all Federal agencies to conduct consultations between the requesting Federal agency, the state, and Tribal organization officials, where applicable. The appointed State Historic Preservation Officers (SHPOs) coordinate the historic preservation program and consult with agencies for Section 106 reviews for their state. Members of the public and other interested parties also have a right to participate in the consultation and review process under Section 106. Federally-recognized Indian Tribes may officially designate a Tribal Historic

---

<sup>15</sup> **NOTE:** immediate rescue and salvage operations conducted to preserve life or property are exempt from the provisions of Section 106 (1997 Programmatic Agreement).

<sup>16</sup> This includes federal financial assistance, federal permit or licenses on behalf of a Federal agency, or those subject to a state or local regulation administered pursuant to a Federal delegation or approval.

## 2014 INTERNATIONAL OIL SPILL CONFERENCE

Preservation Officers (THPOs) akin to SHPOs, or representatives for the consultation reviews as necessary when historic properties of religious and cultural significance to the tribe may be affected by the actions. Even when Tribes have not designated and certified a THPO, they must still be consulted under Section 106.

***1997 Programmatic Agreement***

In 1997, a Programmatic Agreement (PA) was executed between the Advisory Council of Historic Preservation (ACHP), National Conference of SHPOs, EPA, USDOJ, DOT, USCG, NPS, DOC, NOAA, DOE, DOD, and USDA agencies. The PA directs Federal agency compliance with Section 106 for emergency response actions under the NCP to ensure that historic properties are taken into account during the conduct of emergency response actions. In complying with the PA, the signatory Federal agencies fulfill their requirements under Section 106 of NHPA for pre-incident planning and emergency response activities.

For an oil spill response, the FOSC: 1) is responsible for ensuring that historic properties are appropriately considered in the planning for, and during all NCP-related emergency response actions—this includes the use of all recovery and response operations; 2) is directed to make the determination on whether the actions being used for the response are excluded from further Section 106 review or if a consultation review is required under the PA, and must carefully weigh the strategic operational requirements of the response against the likely physical destruction, damage, or alteration of all or part of a historic property. The PA will remain in effect as long as the response is still in the emergency phase. Once the emergency phase is concluded, the standard Section 106 consultation processes will resume—the FOSC will make the determination as to when the emergency phase is completed.

**Tribal Consultations**

There are a number of key Federal statutes and orders that require all Federal agencies to consult or coordinate with federally-recognized Indian Tribes, including during a response to an oil or hazardous materials incident under the NCP. Tribal Consultations are required for pre-planning as well as during operational (the emergency or cleanup phase), post-incident, and for the long-term maintenance and update of the consultations.

Federally-recognized Tribes are natural resource Trustees for resources on Tribal reservations and resources protected by treaties (including ceded territories). Tribes designate contacts for notification purposes;<sup>17</sup> THPOs may be available to advise responders when response actions may impact Tribal historical or cultural resources. If impacts are likely, the response should be adjusted to protect those resources where feasible and if time is available.

***National Historic Preservation Act***

The Tribal consultation requirements of Section 106 of NHPA and the 1997 Programmatic Agreement are addressed above.

---

<sup>17</sup> FOSCs should note these may be different individuals than those shown as the contact for spill notification for other than natural resource impacts.

## 2014 INTERNATIONAL OIL SPILL CONFERENCE

***Executive Order 13175 – Consultation and Coordination with Indian Tribal Governments***

On November 6, 2000, President Clinton signed Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments) in order to “*establish regular and meaningful consultation and collaboration with Tribal officials in the development of Federal policies that have Tribal implications, to strengthen the United States government-to-government relationships with Indian Tribes, and to reduce the imposition of unfunded mandates upon Indian Tribes.*” The Order requires the U.S. Government and its Federal agencies to “*respect the rights of Indian Tribal self-government and sovereignty, honor Tribal treaty and other rights, and strive to meet the responsibilities that arise from the unique legal relationship between the Federal Government and Indian Tribal governments,*” through direct consultation with Indian Tribes concerning Federal policies and actions that may impact native communities.<sup>18</sup> Federal agencies must adhere, to the extent permitted by law, to specified criteria when formulating and implementing policies that have Tribal implications. In general, this right forms the basis for Federal policies or programs that have Tribal implications and requires regular and meaningful dialogue to ensure that these rights are reflected in Federal policies and programs. Tribal consultations cannot be delegated outside the FOSC chain of command; and must be addressed directly.

The EO was further supported on November 5, 2009 when President Obama signed the Memorandum on Tribal Consultation, pronouncing Tribal consultations as a critical component of a sound and productive Federal-Tribal relationship. The Indian Tribes and the SHPO in the state(s) of action must be included early in the planning/consultation process and provided a meaningful opportunity to participate. For example, if there is an action to take place in Mississippi, there are tribes in Oklahoma that have historical links to Mississippi and must be notified of action and provided an invitation to participate. The SHPO has established relationships with the Tribes and should be the first point of contact for the FOSC and his representatives in order to secure the Tribal input into the process. Under the terms of the 1997 PA, the FOSC may be assisted in this practice; however, the Historic Properties Specialist (HPS) may also assist with the tribal consultation piece because they are comparable.

***Native American Graves Protection and Repatriation Act (NAGPRA)***

The NAGPRA (25 U.S.C. 3001-3013, 43 CFR § 10, 2011) was passed on November 16, 1990 to resolve the disposition of Native American cultural items and human remains under the control of Federal agencies and institutions that receive Federal funding (“museums”), as well as the ownership or control of cultural items and human remains discovered on Federal or Tribal lands after November 16, 1990.

In the context of oil or hazardous substance spill response, NAGPRA’s most prominent requirement is that all work cease and tribes are notified immediately if Native American human remains or other cultural items as defined in NAGPRA (43 CFR § 10.2, 2011) are encountered. NAGPRA permits the development of a Plan of Action (POA) as part of response pre-planning efforts; this is often a very lengthy process. However, having a POA in place can ensure that spill response activities experience minimal disruption in the event that the potential for Native

---

<sup>18</sup> Native communities are defined as Native American, Alaska native tribe, band, nation, pueblo, village, and native Hawaiian communities.

## 2014 INTERNATIONAL OIL SPILL CONFERENCE

American human remains or cultural items are found during a response (43 CFR § 10.4, 1997). In many instances, the Federal land managing agency may already have negotiated a POA with the relevant tribes. Most Federal land managing agencies already have a designated point of contact for NAGPRA compliance. Section 10.4 (1997) of NAGPRA defines the process when cultural items or remains are discovered inadvertently (without a POA) on Federal and/or Tribal lands, including the protocols for discovery, ceasing activity, notifications, and consultations. A PA for a POA would be the best way to address this gap. Furthermore, SHPOs or state Tribal representatives could formally define how to address native and non-native remains found on non-federal or Tribal lands. One additional consideration would be the inclusion of a medical examiner as the remains may not be part of crime scene.

**OBSERVATIONS & RECOMMENDATIONS:**

Oil spill incidents in the U.S. present many issues that require consultation activations. The laws, regulations, and EO pertaining to consultation are not universally understood and many are not adequately addressed in the planning requirements within Regional and Area planning. In many cases, the required consultations have not been conducted—for individual spill responses or programmatically for the ACPs or RCP, where applicable. During an incident, it is the FOSC's responsibility to conduct the necessary consultations; these efforts are lessened with advanced planning and consultation with the Trustee/resource management agencies.

There are limited agency resources (people, time, expertise, and funding) to adequately address the consultation requirements in the U.S. and to maintain them. What are the realistic expectations of support from USFWS & NMFS under the existing MOA and for USDOJ relative to NHPA and Tribal consultations? National, big picture and realistic solutions are needed to address the consultation requirements for the Federal action and Trustee agencies. Evaluations and determinations by the NRT and agency level entities are needed to determine if the existing requirements are indeed the best way to address and plan for the protection of resources from response actions or is the existing process too cumbersome; being dictated by regulation that doesn't make sense in the real world? Are there better, more efficient and effective ways to meet the goals and objectives of the federally mandated consultation requirements?

The authors offer their observations and recommendations on consultations for the regulatory agencies and response community. These recommendations need to be addressed by the Federal action agencies (primarily USCG and EPA), the Trustee agencies, and the NRT, RRT, and AC decision makers. Consultation documents should be reviewed and updated on a scheduled basis or when a significant change is identified for or within the consultation mandate. The action agencies and their decision making partners must establish clear guidance and protocols for the maintenance and upkeep of the Regional and Area consultation documents. The various agency resources, personnel, and funding sources are limited for addressing the consultation mandates requirements. Without Agency-level sponsorship for these efforts, the consultation authorities and the action agencies will have limited capability to meet the consultation requirements.

**Table 2** summarizes the observations and recommendations identified by the authors. The authors are hopeful that this document will assist in developing national level strategies that will address the consultation needs of the regional, area, and agency response efforts. Additionally,

**Table 3** compiles the authors' ideas for development of customized tools for the consultation mandates that are designed to simplify and streamline the consultation process in all response stages.

In summary, there are many challenges still to be addressed relative to consultations for oil spill response. Clear instruction is needed to assist FOSCs, RRTs, and ACs on the consultation process in all of its planning and response phases—guidance on the level of detail, format, standardization, and uniformity are needed to address the regional differences; realistic timelines and identification of priorities should be provided; decision making tools (e.g., BMPs) should be developed to outline the likely potential effects of the action agency's response actions on the protected resources.

#### **DISCLAIMER:**

This paper addresses important subject matter that is currently being evaluated on local, regional and national scales. Interpretations of regulations that govern consultation mandates and best ways to apply and comply with them have been reviewed and evaluated by many different entities from the USCG, EPA, NOAA, DOI, USFWS, NMFS, NPS, and others. While there is no consensus among all regarding the best and most correct interpretations and application of the regulations, the authors of this paper endeavored to present some of the most vetted views that could be obtained from the various stakeholder agencies. While there is not agreement in all areas, and more work is needed to move forward in a consensus effort, it is the intention of this paper to assist in that process.

The views and opinions expressed in this article are individual authors opinions and perspectives, and do not necessarily reflect the views of the agency process and the U.S. Government.

## 2014 INTERNATIONAL OIL SPILL CONFERENCE

**Table 2. Observations and Recommendations Associated with the Consultation Mandates.**

Observations	Applicable Consultation Mandate — Recommendations
<b>Status of Consultations</b>	
Many consultations on response actions are likely outdated, incomplete, or never occurred. Require continuous and regular review	<b>ESA, EFH, NHPA, Tribal</b> — All existing consultations should be reviewed for adequacy and applicability to existing conditions; missing / incomplete consultations should be developed / finalized.
	<b>ESA, EFH, NHPA, Tribal</b> — Consultation agencies should review ACP/GRP as part of a pre-established review process; should also be given the opportunity to review RRT planning documents and pre-authorizations to advise the USCG & EPA on consultation requirements.
	<b>ESA, EFH, NHPA, Tribal</b> — USCG & EPA should develop a process by which the consulting agencies provide regular status updates of resource listings, critical habitat designations, and other changes relevant to the RRT's and AC's.
	<b>NHPA, Tribal</b> — Require NPS/USDOI, SHPO, and THPO technical support for development and maintenance of consultation documents at the RRT and AC level.
	<b>ESA, EFH, NHPA, Tribal</b> – Current plans and pre-authorization agreements will be considered still valid and operational with the knowledge that they are not complete. During the interim, FOSCs must use emergency consultation procedures/ processes with NMFS (habitat and protected species divisions) for ESA and EFH, USFWS for ESA, and DOI to assist in coordinating NHPA consults thru SHPO and the various recognized tribes.
Any gaps in required consultation need to be identified and addressed for NCP Subpart J Countermeasures at the RRT and/or AC levels	Required for all ACPs and for pre-authorized response actions. The pre-authorizations developed by the RRTs from a regional perspective on behalf of the ACs; need to addressed in separate consultations due to the likelihood of affects and need for detailed BAs for the consultation
	The USCG MER Directive (2013) addresses this need and refers to the existing MOA to acknowledge the consultation requirements for ESA to be met in planning documents; the directive needs to be expanded further to address EFH, SHPO, and THPO consultation requirements.
The ESA MOA should be used as a framework to conduct consultations and processes.	<b>ESA</b> — USFWS & NMFS and USCG & EPA should utilize the processes laid out in the MOA and update the MOA as needed. Request USFWS & NMFS technical support for review and update of existing consultation documents as per signed MOA to determine current consultation needs.
Need to develop clear policies and guidance for the coordination of ESA and EFH consultations.	<b>ESA, EFH</b> — Encourage the USFWS & NMFS to coordinate on a national level for the development of clear policies and guidance on coordination of ESA and EFH consultations, where applicable. Refer to the NMFS Instruction 03-201-07 -- Policy Guidance on Combined EFH and ESA Consultations available online from: <a href="http://www.nmfs.noaa.gov/op/pds/documents/03/201/03-201-07.pdf">http://www.nmfs.noaa.gov/op/pds/documents/03/201/03-201-07.pdf</a> .
<b>Pre-response Planning</b>	
Current and anticipated consultation needs in light of recent legal challenges is likely to require more engagement by agency staff.	<b>ESA, EFH, NHPA, Tribal</b> — Headquarters level support may be needed to address increasing level of consultation requirements at the national level and within regions.
	<b>ESA, EFH, NHPA, Tribal</b> — Agencies should explore options that would allow for more regular attendance and active participation of agency and Tribal personnel at the RRT and AC meetings.

## 2014 INTERNATIONAL OIL SPILL CONFERENCE

Observations	Applicable Consultation Mandate — Recommendations
<b>Pre-response Planning, Continued</b>	
The USCG is required under 33 USC § 1321b (Clean Water Act - CWA) that during an oil spill: (1) affected tribal governments are included in the ICS, (2) information is shared with affected tribes about the spill, and (3) affected tribes are involved in decision making.	<p><b>Tribal</b> — Where it has not already been done, the USCG should develop an action plan and/or technical guidance for FOSCs regarding how to include tribal governments in oil spill response as required under the CWA as well as how ACs can establish cooperative arrangements to ensure Tribal participation in contingency planning.</p> <p><b>Tribal</b> — The USCG should provide recommendations on how to establish MOAs and cooperative agreements to involve Tribes in contingency planning and fund participation as is allowed under the CWA.</p> <p><b>Tribal</b> — The FOSC can enter into agreements with tribes to facilitate and fund their participation in contingency planning.</p>
Most RRTs need to address NAGPRA in planning documents.	<p><b>Tribal</b> — Develop NAGPRA procedures as part of response pre-planning efforts for Regional and Area planning documents</p> <p><b>Tribal</b> — Inadvertent discovery of Native American remains or funerary goods can halt response actions for up to 30 days if no pre-planning procedures are in place.</p>
USCG & EPA need to establish policies on Tribal consultations, including NAGPRA, within the RCP and ACPs.	<p><b>Tribal</b> — USCG should develop an implementation policy, action plan, and associated guidance for emergency consultation procedures for Tribal consultation under EO 13175 (see EPA example at <a href="http://www.epa.gov/region04/indian/r4_policy.html">http://www.epa.gov/region04/indian/r4_policy.html</a>). Identify notification and consultation procedures within the ACPs for all federally-recognized Tribes (and other stakeholders) during a response.</p> <p><b>NHPA, Tribal</b> — USDOT to assist FOSC, RRT and ACs to identify and provide contact information for federally-recognized Tribes and other stakeholders. The National Association of Tribal Historic Preservation Officers (NATHPO) does not represent all tribes but may provide a good starting point to identify Tribal stakeholders.</p> <p><b>NHPA, Tribal</b> — EPA &amp; USCG consultation policy, planning, and guidance should be incorporated into Regional and Area planning documents. Historic Properties Specialists (HPS) normally have the appropriate subject matter expertise and should already be in contact with appropriate Tribal officials regarding historic properties concerns.</p>
There is a need for mitigation strategies (Best Management Practices – BMPs) that can be used during response.	<p><b>ESA, EFH, NHPA</b> — Encourage active participation and involvement of consulting agencies serving as technical support for the development of tools and products at the RRT and AC levels. In developing BMP's, former consultations should be made available to the USCG &amp; EPA (where appropriate) to review and use in development of area-specific BMP's to ensure consistency, to the extent possible. Develop BMPs for response strategies when these resources are affected.</p> <p><b>ESA, EFH, NHPA</b> — Encourage coordination on a national level for development of draft BMPs for protected resources, as applicable.</p> <p><b>ESA, EFH, NHPA</b> — BMP's should be integrated into response plans.</p>
Stakeholders often decline to provide appropriate resource information citing concerns of theft / vandalism.	<p><b>NHPA</b> — Encourage active participation of stakeholders, Tribes, and SHPO/THPOs at the RRT and AC levels. USDOT representative to ensure stakeholders are included in the RRT and AC invitation lists; they need to be actively engaged in pre-planning at these levels to understand the needs of response.</p>
The 1997 PA stipulates a variety of pre-response planning efforts; proper	<p><b>NHPA</b> — USCG, EPA &amp; USDOT must lead the oil spill response community and articulate clear responsibilities for consultations related to cultural resources and historic properties.</p>

## 2014 INTERNATIONAL OIL SPILL CONFERENCE

Observations	Applicable Consultation Mandate — Recommendations
implementation of these efforts will streamline any further consultations required during spill response actions.	<b>NHPA</b> — Pre-incident planning documents should be developed in consultation with Federal land-managing agencies, Tribes, SHPO, and THPO. These same entities are necessary to regularly review and maintain the planning documents as changes in NHPA resources, changes in response strategies, technology or products, or changes in regulations take place.
	<b>NHPA</b> — Develop nationwide implementation protocols and further define the FOSC responsibilities under the 1997 PA.
<b>Training Needs</b>	
Need to develop consultation training at all levels and for all agencies.	<b>ESA, EFH, NHPA, Tribal</b> — Offer regular training at the FOSC-R, RRT, and AC levels as well as with the Trustee / resource management agencies and other agencies. Some training at the NRT and RRT's has already occurred, more is likely necessary. USCG & EPA should continue to explore opportunities to provide training to improve the consultation process. This may include training for Trustee / resource management staff on spill response technologies and process.
EFH consultation is a non-regulatory advisory recommendation. The Action Agency must satisfy EFH recommendations or demonstrate why they are unable to do so.	<b>EFH</b> — Offer regular training at the FOSC-R, RRT, and AC levels as well as with the USFWS & NMFS. Some training at the NRT and RRT's has already occurred, more is likely necessary. USFWS & NMFS and USCG & EPA should continue to explore opportunities to provide training to improve the consultation process. This may include training on the mandates by the USFWS & NMFS and training for USFWS & NMFS staff on spill response technologies and process.
Need to develop clear policies and guidance for the coordination of ESA and EFH.	<b>ESA, EFH</b> — Encourage the USFWS & NMFS to coordinate on a national level for the development of clear policies and guidance on coordination of ESA and EFH consultations, where applicable.
	<b>ESA, EFH</b> — Offer regular training on the coordinated ESA and EFH consultation process at the FOSC-R, RRT, and AC level.
Tribes do not have to maintain local presence to be legitimate stakeholders	<b>NHPA, Tribal</b> — Offer regular training on EO 13175 consultation process at the FOSC-R, RRT, and AC level.
Section 106 typically employs an iterative process that is not appropriate during a response. SHPO/ THPOs (and other stakeholders) need to be actively engaged in pre-planning	<b>NHPA, Tribal</b> — USDOl representatives must work with RRT members to educate them on the need for consultation and coordination with the SHPOs and Tribes in the ACP process.
	<b>NHPA, Tribal</b> — Offer regular training on NHPA consultation process at the FOSC-R, RRT, and AC level.
The FOSC is responsible for securing the services and overseeing the activities of the HPS during a response.	<b>NHPA</b> — USDOl representatives must work with RRT members to educate them on the need for consultation and coordination with the SHPOs and Tribes for a response.

2014 INTERNATIONAL OIL SPILL CONFERENCE

**Table 3. Recommendations for Tools to be Developed to Support the Consultation Mandates.**

Recommended Tools	Details
FOSC Consultation Guidance Tools	<p>Develop an FOSC guide on the consultation mandates for planning; during a response; and Post-incident response. (<b>NOTE:</b> The 2013 USCG MER Policy clearly defines the need for additional planning efforts for ESA and EFH; however, NHPA and Tribal consultations are not addressed in this guidance document.)</p> <p>These tools should utilize checklists and guidance that provides an operationally-focused, step-by-step process for complying with the different consultation mandates. When used by the FOSC throughout a response, this tool will document the FOSC's compliance with all mitigation measures, terms and conditions, or reasonable and prudent measures from the consultation authorities for the administrative record. In the event of an incident where effects are expected or possible, Trustee agency personnel should be contacted for additional technical assistance or emergency consultation.</p> <p>Examples of current efforts underway include:</p> <ul style="list-style-type: none"> <li>• Region 10 Section 9403 – Quick Guide for FOSCs - Compliance Guide for NHPA during an Emergency Response which includes checklists and forms to document effects on protected resources.</li> <li>• Tribal consultation tracking system from EPA. <a href="http://tcots.epa.gov/oita/TConsultation.nsf/TC?OpenView">http://tcots.epa.gov/oita/TConsultation.nsf/TC?OpenView</a></li> </ul>
FOSC Guides to Likely Effects on Protected Resources	<p>Develop guidance documents for decision makers, where possible, to determine the likely effects of response actions on the protected resources.</p> <p>Examples of current efforts underway by the consultation authorities or Trustee / resource management agencies include:</p> <ul style="list-style-type: none"> <li>• NMFS is developing a national matrix tool that serves as a planning tool and guide for the USCG, EPA and other FOSC agencies on how oil spill response activities may impact listed species and habitats.</li> <li>• NPS is developing a region specific job aid / guidance document that will assist the Historical Property Specialist (HPS) in support of the FOSC during a response for NHPA Section 106 and NAGPRA consultations. This project should be expanded to address national needs.</li> </ul>
FOSC should establish an indefinite quantity contract or other procurement vehicle to obtain HPS services or archaeological consultation for a response	<p>Tension, suspicion, and concerns have been expressed during a response when cultural or archaeological services are contracted by the Responsible Party.</p>
Develop BMP Guides	<p>The consultation authorities should build upon the Trustee / resource management agencies' efforts in documenting the likely effects of the various response actions on protected resources by developing generic BMPs for response action or activities, etc., for each resource, species category, or individual species in order to prevent or minimize potential effects to the resource of concern.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>• Individual species pages or a cumulative effects page could be developed for each listed species (e.g., blue whale) or species category (e.g., baleen whale) from information already developed by USFWS &amp; NMFS.</li> <li>• A summary table should be developed on the likely direct and indirect effects from oiling and the various response actions, and recommend BMPs for the species or category by response action.</li> </ul> <p>These tools could be developed using an informal consultation with the Trustee / resource management agencies and could be quickly adapted for the individual response conditions. This would simplify the number of actions that require consultations.</p>
<p>Also development of vetted templates for regionally focused programmatic consultations for ACPs, as well as formal and informal sub-plan consultations for pre-authorized Subpart J countermeasures and emergency consultation initiation forms and processes</p>	

## 2014 INTERNATIONAL OIL SPILL CONFERENCE

**REFERENCES:**

- 36 CFR § 800 – National Historic Preservation Act of 1966 as amended; 16 U.S.C. 470.
- 40 CFR § 300 + Appendices – The Oil and Hazardous Substance Pollution Contingency Plan.
- 43 CFR § 10 – Native American Graves Protection and Reparation Regulations.
- 50 CFR § 402 – Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 *et seq*
- Federal Register (FR). 2000. Executive Order 13175 – Consultation and Coordination with Indian Tribal Governments. November 5, 2000. Federal Register Vol. 65, No. 218:67249-67252. <http://www.gpo.gov/fdsys/pkg/DCPD-200900887/pdf/DCPD-200900887.pdf>.
- Fishery Conservation and Management Act of 1976 -- Public Law 94-265, approved April 13, 1976; 16 U.S.C. 1801-1882; 90 Stat. 331; as amended by numerous subsequent public laws listed and identified in the U.S. Code. Essential Fish Habitat Section 104-297 – Emergency Actions and Interim Measures.
- Title 33 U.S.C. § 1251-1387, The Federal Water Pollution Prevention and Control Act (FWPCA), as amended by the Oil Pollution Act of 1990 (Public Law 101-380).
- Title 33 U.S.C. § 2701-2761, Oil Pollution Act of 1990 (Public Law 101-380).
- National Marine Fisheries Service (NMFS). 2004. Interagency Memorandum of Agreement (MOA) 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. NMFS Instruction 02-110-17. 22 pp. <http://www.nmfs.noaa.gov/op/pds/documents/02/110/02-110-17.pdf>.
- National Marine Fisheries Service (NMFS). 2004. Essential Fish Habitat Consultation Guidance. Version 1.1. 80 pp. [http://www.habitat.noaa.gov/pdf/efhconsultationguidancev1\\_1.pdf](http://www.habitat.noaa.gov/pdf/efhconsultationguidancev1_1.pdf).
- National Marine Fisheries Service (NMFS). 2001. NMFS Instruction 03-201-07—Policy Guidance on Combined EFH and ESA Consultations (2001, as renewed); 3 pp. <http://www.nmfs.noaa.gov/op/pds/documents/03/201/03-201-07.pdf>.
- National Oceanic and Atmospheric Administration (NOAA). 2010. An FOSC's Guide to NOAA Scientific Support. 72 pp. [http://response.restoration.noaa.gov/sites/default/files/FOSC\\_Guide.pdf](http://response.restoration.noaa.gov/sites/default/files/FOSC_Guide.pdf).
- 1997 Programmatic Agreement on Protection of Historic Properties during Emergency Response under the National Oil and Hazardous Substances Pollution Contingency Plan. <http://www.achp.gov/NCP-PA.html>.
- U.S. Coast Guard (USCG) MER Policy letter 01-14: Endangered Species Act (ESA) Section 7 and Essential Fish Habitat (EFH) Consultation Process Guidance. Dated October 17, 2013. 6 pp.
- U.S. Coast Guard (USCG), US EPA, DOI USFWS, NOAA NMFS, NOAA NOS, and DOI. 2002. 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

2014 INTERNATIONAL OIL SPILL CONFERENCE

Guidebook, Version 2002. 67 pp.

[http://www.epaosc.org/sites/2037/files/MOA\\_IAG\\_ESA\\_Guide\\_2002.pdf](http://www.epaosc.org/sites/2037/files/MOA_IAG_ESA_Guide_2002.pdf).

U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS). 1998. Endangered Species Consultation Handbook: Procedures for Conducting Consultations and Conference Activities of the Endangered Species Act. March 1998. 315 pp.

[http://www.nmfs.noaa.gov/pr/pdfs/laws/esa\\_section7\\_handbook.pdf](http://www.nmfs.noaa.gov/pr/pdfs/laws/esa_section7_handbook.pdf).