
HYDROPOWER LICENSING AND ENDANGERED SPECIES

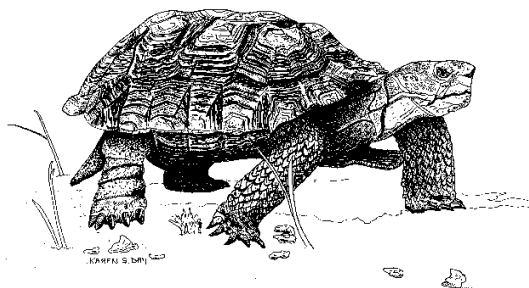
A Guide for Applicants, Contractors, and Staff



Federal Energy Regulatory Commission
Office of Energy Projects
Washington, DC
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Important Web Sites

- **Federal Energy Regulatory Commission**
<http://www.ferc.gov>
- **Environmental Protection Agency** (Federal Register endangered species notices archive)
<http://www.epa.gov/fedrgstr/EPA-SPECIES/>
- **National Marine Fisheries Service (Office of Protected Resources)**
http://www.nmfs.noaa.gov/prot_res/overview/es.html
- **National Marine Fisheries Service (Pacific Northwest region)**
<http://www.nwr.noaa.gov/1salmon/salmesa/index.htm>
- **Natural Heritage Programs**
http://www.abi.org/nhp/us_programs.htm
- **U.S. Fish and Wildlife Service Endangered Species**
<http://endangered.fws.gov>



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LIST OF ACRONYMS

AIR	Additional information request
ALP	Alternative licensing process
ASR	Additional study request
BA	Biological assessment
BE	Biological evaluation
BO	Biological opinion
CFR	Code of Federal Regulations
Commission	Federal Energy Regulatory Commission
Consultation Handbook	Service's Section 7 Consultation Handbook
DEA	Draft environmental assessment
DEIS	Draft environmental impact statement
EA	Environmental assessment
EIS	Environmental impact statement
ESA	Endangered Species Act
FEA	Final environmental assessment
FEIS	Final environmental impact statement
FPA	Federal Power Act
FERC	Federal Energy Regulatory Commission
FWS	U.S. Fish and Wildlife Service
HCP	Habitat conservation plan
ITF	Interagency Task Force
ITF Report	ITF Report on Endangered Species
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
RPA	Reasonable and prudent alternatives
Service	FWS or NMFS or both
Staff	FERC staff
T&E	Threatened and endangered
we	FERC staff



HYDROPOWER LICENSING AND ENDANGERED SPECIES

A Guide for Applicants, Contractors, and Staff

1

Introduction

The Endangered Species Act (ESA)¹ is one of the most powerful environmental laws--designed to prevent the extinction of plants and animals and their habitats. The Supreme Court concluded that Congress intended "to halt and reverse the trend toward species extinction, whatever the cost" and gave "endangered species priority over the 'primary missions' of federal agencies."²

Compliance with provisions of the ESA can result in processing delays, frustration, higher costs, and additional complexity in the hydropower licensing process.³ The licensing process, however, has substantially contributed to the protection and recovery of many listed species.

As more species and stocks become listed, especially species with extensive ranges, the potential conflicts between endangered species and hydroelectric development will increase. Recently issued salmon listings in particular have great potential to significantly affect future relicensing throughout California and the Pacific Northwest (figure 1). The number of formal consultations has grown in response to these listings. From 1973 to 1998, the Commission initiated only 31 formal consultations related to

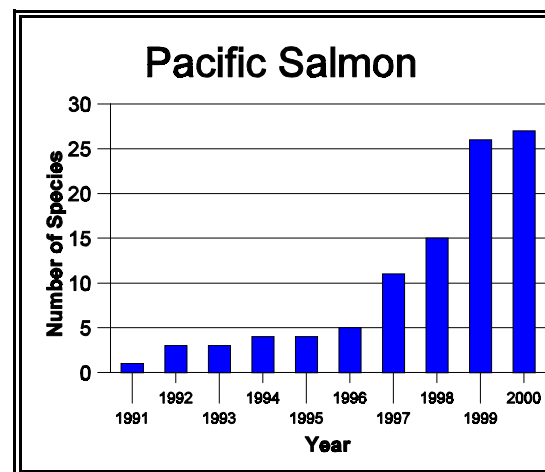


Figure 1. Trends in Pacific salmon listings.

¹ 16 U.S.C. § 1531-1543 (1988), as amended (<http://endangered.fws.gov/esa.html>).

² TVA v. Hill, 437 US 153 (1978).

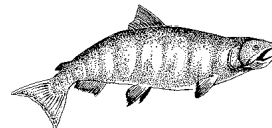
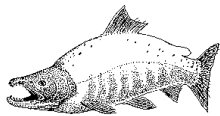
³ Details on the licensing process can be found in the Hydroelectric Licensing Handbook, FERC, April 2001 (http://www.ferc.gov/hydro/docs/licensing_handbook.pdf).

hydropower projects. However, from January 1, 1999, to November 30, 2001, the Commission has initiated 29 formal consultations.

This document provides guidance for staff of the Federal Energy Regulatory Commission (FERC or Commission) (staff) and its contractors to effectively comply with the procedural requirements of interagency consultation during the licensing process and for applicants to fully understand their role and opportunities in the consultation process. It will help applicants identify endangered species issues early in the application process and ensure that sufficient information is developed to prevent delays in the processing of applications.

This document incorporates the procedures developed by the Interagency Task Force's (ITF) Work Group on the Coordination of Federal Mandates⁴ (ITF Report) to better integrate and coordinate the procedural steps of the licensing and post-licensing processes and the interagency consultation process ([appendix A](#)).⁵ The procedures will help ensure that ESA issues are considered early in the process and are evaluated alongside other issues. These procedures largely use existing steps in the Commission's licensing process. Although designed for the Commission's traditional licensing process, they may be adapted to the alternative licensing process (ALP)⁶ ([section 3.7](#)) and license amendment process ([section 5.1](#)) as well.

The ITF Report also considered off-the-record communications, adequacy of information, economic feasibility, settlement agreements, information from the Service,⁷ and scope of effects ([appendix A](#)).



⁴ This work group included FERC, the Departments of Commerce, Interior, and Agriculture, the Environmental Protection Agency, and the Advisory Council on Historic Preservation.

⁵ Work Group on the Coordination of Federal Mandates. 2000. Interagency Task Force Report on Improving Coordination of ESA Section 7 Consultation with the FERC Licensing Process. December 12, 2000 (http://www.ferc.gov/hydro/docs/esa_final.pdf and www.ferc.gov/hydro/docs/esafigs_final.pdf).

⁶ The alternative licensing process combines pre-application consultation and parts of the environmental review process (scoping and draft environmental document preparation).

⁷ The U.S. Fish and Wildlife Service (FWS) and/or National Marine Fisheries Service (NMFS) are referred to here as the Service.

2

The Endangered Species Act

Key provisions of the Endangered Species Act

- Provisions for identifying species as threatened or endangered, designating critical habitat, and preparing recovery plans (section 4)
- Interagency cooperation (section 7)—*the primary focus of this report*
- Restrictions on the direct and indirect takings of listed species (section 9)
- Permits to take species (section 10)
- Citizen lawsuits and penalties (section 11)

2.1 Section 4—Listings

Threatened and endangered (T&E) species--The Service may list species⁸ as either threatened⁹ or endangered.¹⁰ The ESA authorizes the listing of distinct population segments. Distinct population segments are a portion of the overall population of a species that is both a discrete and significant part of the population.¹¹

⁸ Species--includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature (section 3 of the ESA--definitions).

⁹ Threatened species--any species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range (section 3 of the ESA--definitions).

Threatened species are listed in 50 CFR § 17.11 (wildlife) and § 17.12 (plants).

¹⁰ Endangered species--any species that is in danger of extinction throughout all or a significant portion of its range (section 3 of the ESA--definitions).

Endangered species are listed in 50 CFR § 17.11 (wildlife) and § 17.12 (plants).

¹¹ Policy Regarding the Recognition of Distinct Vertebrate Population Segments Under the
(continued...)

For Pacific salmon, the NMFS has identified distinct population segments, called evolutionarily significant units or ESUs, based on salmon genetics.¹² These are populations that are substantially isolated reproductively and represent an important component in the evolutionary legacy of the species.

Critical habitat--The Service also must propose designation of "critical habitat"¹³ or find that the habitat designation is not prudent or determinable. Critical habitat is a specific geographic area(s) that is essential for the conservation of listed species.

Protective regulations--Under section 4(d) of the ESA, the Service "shall issue such regulations as [deemed] necessary and advisable to provide for the conservation of [threatened] species." A "4(d) rule" can provide incidental take (section 2.4) protection for certain specified activities as long as those activities are conducted in compliance with the terms and conditions in the rule.

Certain project-related activities performed by licensees may be authorized under a 4(d) rule. These limits on the take prohibitions, however, are independent of federal agencies' responsibility under section 7 of the ESA to consult with the Service if actions they fund, authorize, or carry out may affect listed species. To the extent that actions subject to section 7 consultation are consistent with a circumstance for which the Service has limited the take prohibitions, a letter of concurrence from the Service will greatly simplify the consultation process, provided the program is still consistent with the terms of the limit.

¹¹(...continued)

Endangered Species Act, Federal Register, Vol. 61, No. 26, p. 4722, February 7, 1996 (<http://www.nwr.noaa.gov/1salmon/salmesa/pubs/dpspolicy.pdf>).

¹² NOAA Technical Memorandum, NMFS F/NWC-194, March 1991, Definition of "Species" Under the Endangered Species Act: Application to Pacific Salmon (<http://www.nwfsc.noaa.gov/pubs/tm/tm194/waples.htm>).

¹³ Critical habitat--areas that are essential to the conservation of the listed species and that may require special management considerations or protection (section 3 of the ESA--definitions). Critical habitat may include areas that are not currently occupied by the species but that will be needed for its recovery.

Critical habitat designations are based on "the best scientific data available and after taking into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat [section 4(b)(2) of the ESA]. Critical habitat is to be designated at the same time as the species listing, unless it is not considered prudent or determinable at that time--delaying a determination by up to 1 year (50 CFR § 424.12 and 424.17). Critical habitat designations are found in 50 CFR § 17.95 (fish and wildlife) and 17.96 (plants).

Similarity of appearance--Section 4(e) authorizes the Secretary to list a species based on similarity of appearance with a listed species. FWS has indicated that there is no requirement to consult under section 7 (FWS listing manual, 1994), but a take permit may be necessary (see [section 2.4](#) of this report).

Recovery plans--Section 4(f) requires the Service to develop and implement recovery plans for the conservation and survival of listed species, unless such a plan will not promote the conservation of the species. Recovery plans are documents prepared for listed species that detail the specific tasks needed to recover those species. They provide a blueprint for private, federal, and state cooperation in the conservation of threatened and endangered species and their ecosystems.

2.2 Section 7--Interagency Consultation

Section 7 ([appendix B](#)) is most applicable to the licensing of hydropower projects and is the primary focus of this document. This section requires federal agencies to:

- Consult with the Service to ensure that their actions are not likely to jeopardize the continued existence¹⁴ of federally listed threatened and endangered species, or result in the destruction or adverse modification¹⁵ of designated critical habitat [section 7(a)(2) of the ESA]
- Develop and carry out programs to conserve¹⁶ threatened and endangered species [section 7(a)(1) of the ESA]

FWS is responsible for freshwater and terrestrial species and the NMFS is responsible for marine and anadromous species. FWS and NMFS jointly issued the final rule establishing procedures for consultation (50 CFR § 402) ([appendix C](#)). More

¹⁴ Jeopardize the continued existence--to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR § 402.02).

¹⁵ Destruction or adverse modification--a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species (50 CFR § 402.02).

¹⁶ Conserve--to use all methods and procedures that are necessary to bring any endangered or threatened species to the point at which the measures provided pursuant to the ESA are no longer necessary. The methods and procedures include, but are not limited to, activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation (section 3 of the ESA--definitions).

information on the section 7 process can be found in the Services' consultation handbook¹⁷ (Consultation Handbook).

The ESA requires consultation for federally listed and proposed threatened and endangered species and their designated or proposed critical habitat. The process by which federal agencies consult on listed species or designated critical habitat is different as compared to proposed species and proposed critical habitat, as discussed below. The consultation procedures for threatened species are the same as for endangered species.

Section 7 consultation can take several forms:

Informal Consultation

Informal consultation¹⁸ is an optional process without specific time frames that includes all interactions with the Service prior to the initiation of formal consultation. Informal consultation is used to:

- Assist in identifying whether the proposed action area includes listed or proposed species, and designated or proposed critical habitat
- Determine what effect the proposed action may have on the identified species or critical habitat
- Study alternatives to modify the action to reduce or remove adverse effects to the species or critical habitats
- Identify information gaps
- Determine whether formal consultation is required

¹⁷ U.S. Fish and Wildlife Service and National Marine Fisheries Service. 1998. Final Consultation Handbook--Procedures for Conducting Consultation and Conference Activities Under Section 7 of the Endangered Species Act. March 1998. (<http://endangered.fws.gov/section7/section7.htm>)

¹⁸ **Informal consultation**--an optional process that includes all discussions and correspondence between the federal agency and the Service, designed to assist the federal agency in determining whether formal consultation is needed (50 CFR § 402.02).

Formal Consultation

If a proposed licensing action may affect a listed species or designated critical habitat, the Commission must initiate consultation with the Service. However, if the Commission and the Service agree that the proposed action is "not likely to adversely affect" listed species or critical habitat, formal consultation¹⁹ is not required. This is discussed in detail in [section 4.4](#).

Informal/Formal Conferences

A separate process is used for conferencing²⁰ on proposed species or proposed critical habitat. This is discussed in detail in [section 4.5](#).

Early Consultation

Early consultation²¹ is a form of "formal consultation" that is carried out before a license application is filed (18 CFR § 402.11). The process parallels the formal consultation process. The Service issues a preliminary biological opinion. After an application is filed, the preliminary opinion may become the final opinion if the Service finds that there have been no significant changes in the proposal. To date, early consultation has not been used for non-federal hydropower projects. It may be useful in cases where few or no changes to an applicant's proposal affecting the listed species are anticipated after an application is filed, such as with a settlement.

Emergency Consultation

Emergency consultations are held when an agency must respond quickly to a natural disaster or other calamity (50 CFR § 402.05). When an emergency action is required that may affect listed species or critical habitat, the agency would contact the Service for advice on minimizing effects of the response. After the response, the

¹⁹ Formal consultation--process between the Service and the federal agency that commences with the request for consultation under section 7(a)(2) of the ESA and concludes with the issuance of the biological opinion by the Service under section 7(b)(3) of the ESA (50 CFR § 402.02).

²⁰ Conference is a process which involves informal discussions between a federal agency and the Service under section 7(a)(4) of the ESA regarding the impact of an action on proposed species or proposed critical habitat and recommendations to minimize or avoid the adverse effects (50 CFR § 402.02).

²¹ Early consultation--a process requested by a federal agency on behalf of a prospective applicant under section 7(a)(3) of the ESA (50 CFR § 402.02).

agency would initiate formal consultation with the Service and the Service would issue an after-the-fact biological opinion documenting the effects of the emergency on listed species and critical habitat.

2.3 Section 9–Prohibition of Take

Section 9(a)(1) makes it illegal to take²² an endangered species of fish or wildlife. The take prohibition has been applied to most threatened species by regulation.

The ESA applies a different take standard to plant species [(section 9(a)(2)]. Take generally does not apply to endangered plant species unless they are removed from or destroyed on federal lands or taken in knowing violation of state laws or regulations. Take prohibitions more narrowly apply to threatened plant species (see 50 CFR 17.71).

2.4 Section 10– Permits to Take

Scientific and Conservation Permits

A section 10(a)(1)(A) permit may be required if an activity designed to further the conservation of a listed species will result in the direct take, result in the capture or handling, or significantly modify the behavior of a listed species. These activities can include surveys to determine species distribution, nest monitoring, hatchery operation, capture and release of listed species, etc. Applicants should contact the Service to determine if a permit is needed for their activities.

²² Take--to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct (section 3 of the ESA--definitions). Harm means an act that actually kills or injures wildlife, and may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering (50 CFR § 17.3, § 222.102).

Also see Final Rule: Endangered and Threatened Wildlife and Plants; Definition of "Harm," Federal Register, Vol. 64, No. 215, p. 60727, November 8, 1999 (<http://www.nwr.noaa.gov/1salmon/salmesa/pubs/harmrule.pdf>).

Incidental Take Permits

An incidental take²³ permit issued under section 10(a)(1)(B) authorizes take of listed species incidental to the purpose of the action. Similar take protection can also be granted through section 4(d) and section 7. A habitat conservation plan (HCP) that, among other things, ensures that the effects of the incidental take are minimized and mitigated to the extent practicable is prepared to support the application. If not categorically excluded, the Service must issue an environmental assessment (EA) or environmental impact statement (EIS) and conduct intra-Service endangered species consultation before deciding on issuance of the permit.

Section 10 permits have rarely been applied to hydropower licensing actions because the federal nexus invokes the section 7 process instead. HCPs, however, have been developed for hydropower projects in a few cases.²⁴ HCPs may allow licensees more flexibility to craft innovative solutions, provide greater certainty, and provide for greater stakeholder involvement. The HCP can also cover species not yet listed, providing licensees protection in the event new species do become listed. Applicants may wish to consult with the Service and the Commission staff to determine the appropriateness of HCPs for their actions, including the conducting of pre-filing studies. Additional information on HCPs can be found in the Services' HCP handbook.²⁵ The future of HCPs in hydropower licensing is uncertain, and is not discussed further in this report.

Experimental Populations

An experimental population is a geographically described group of reintroduced plants or animals that is isolated from other existing populations of the species [section 10(j) of the ESA]. Members of the experimental population are considered to be threatened under the ESA, and thus, can have special regulations written for them under section 4(d). In addition, if the experimental population is determined to be "nonessential" to the survival of the species, for some activities the experimental population is treated like a species that is proposed for listing as threatened or

²³ Incidental take--refers to takings that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by a federal agency or applicant (50 CFR § 402.02).

²⁴ See Rock Island (FERC Project No. 943), Rocky Reach (FERC Project No. 2145), and Wells (FERC Project No. 2149) Projects.

²⁵ U.S. Fish and Wildlife Service and National Marine Fisheries Service. 1996. Habitat Conservation Planning Handbook. November 1996. (<http://endangered.fws.gov/hcp/hcpbook.htm>); Final HCP Handbook Addendum (http://endangered.fws.gov/hcp/final_notice.pdf).

endangered. In other words, the nonessential experimental population is not given the full protection of the ESA.

2.5 Section 11–Citizen Lawsuits

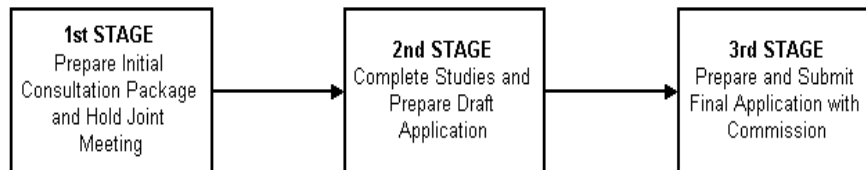
Any person (plaintiff) may file a citizen suit to compel another person, company, or governmental entity (defendant) to comply with the ESA. The plaintiff must give the defendant 60 days notice (notice of intent to sue) to allow the defendant an opportunity to take corrective actions if needed.

Section 11 also provides for the civil and criminal penalties for knowing violations of the ESA.



3

Pre-filing Consultation



The Commission's pre-filing consultation process (18 CFR § 4.38 for licenses; 18 CFR § 16.8 for relicenses) is used by applicants and licensees to develop information necessary to develop a complete license application, based on the input from agencies, tribes, non-governmental organizations, and the public. The major steps performed by an applicant include preparing an initial consultation document, holding a joint meeting and site visit, conducting studies, and preparing draft and final license applications.

It is important to note the distinction between the Commission's consultation regulations and endangered species consultation requirements. The Commission requires applicants to consult with the Service and other resource agencies during preparation of the application and during development of information required by additional information requests and license articles. Although the Service provides applicants with technical advice and review on endangered species issues, the process is distinct from the endangered species formal consultation process. Under section 7 of the ESA, it is the Commission's responsibility to consult with the Service. As discussed in [section 3.2](#), the Commission can designate an applicant to conduct informal consultation, but only the Commission can enter into formal consultation with the Service. The ITF procedures attempt to better coordinate the FPA pre-filing consultation process with the section 7 consultation process.

The Commission's pre-filing consultation process provides an opportunity for applicants and the Service to identify listed species issues early in the process. During this phase, applicants should consult with the Service to determine: (1) if any listed or proposed species are found in the project area; (2) the need for surveys or studies on the effects of the project on known species; and (3) if any measures to protect or enhance the species are needed. It is wise for applicants to consider proposed species as well as listed species to avoid delays if the species should become listed.

Early identification of issues can increase the likelihood of finding an option that satisfies both species protection and project purposes. Further, providing good information on the distribution of listed species prevents delays later in the process and provides better information to be used during section 7 consultation, resulting in more specific recommendations. The ultimate goal should be to resolve issues, to the extent possible, to simplify any section 7 consultation that the Commission conducts after the application is filed.

The pre-filing process has not always resulted in sufficient information to address ESA issues, resulting in delay. Endangered species issues were not always evaluated in the context of the entire project. The voluntary process developed by the ITF is specifically designed to use the informal ESA consultation process and the existing steps of the pre-filing FPA consultation process to identify and avoid potential conflicts with the needs of federally listed species early in the licensing process, as well as to provide an opportunity for early coordination among involved parties. The goal is to reduce potential effects to listed species and designated critical habitat to the point where adverse effects are not likely, thus eliminating the need to complete formal consultation, or to develop a project design and effects analysis that can undergo formal consultation more efficiently.

Detailed information on the coordination of the steps of the FPA pre-filing process with the endangered species process is found in [figure 2](#) and accompanying text.

3.1 Coordination Meeting

A coordination meeting is an early meeting with the Service to discuss expectations and schedules, availability of existing information and need for additional information, and potential impacts and protective measures. Applicants are strongly encouraged to schedule such a meeting with the Service.

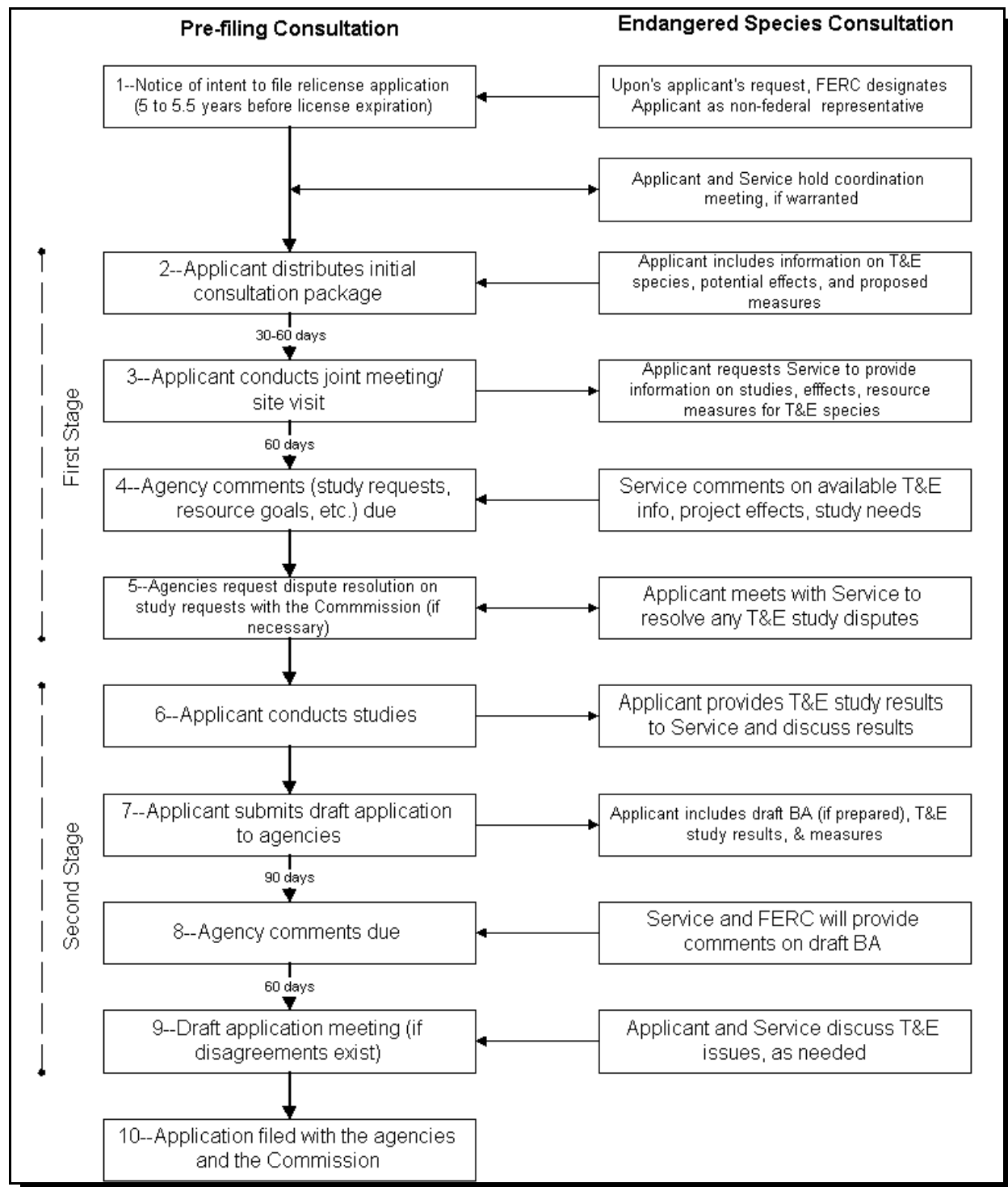


Figure 2. Coordination of FERC pre-filing consultation and endangered species consultation (Source: ITF Report, appendix I, figure 1).

Pre-filing Consultation

The steps described below refer to the stages represented by each box in [Figure 2](#), "Coordination of FERC Pre-Filing Consultation Process and Endangered Species Consultation" (Source ITF Report, appendix I).

BOX 1--Upon request of the applicant, and if the Federal Energy Regulatory Commission (FERC) determines that the following process is appropriate, FERC will provide the Service and the applicant with a letter designating the applicant as a non-federal representative to respond to ESA section 7 consultation matters on behalf of FERC. This letter will describe the roles and responsibilities of the non-federal representative, which include conducting studies, developing and supplying information, attending meetings, ensuring that pertinent ESA information is maintained in a project file, developing a draft Biological Assessment (BA), participating in informal consultation with the Service, and keeping FERC apprised of its actions. Additionally, the letter will establish a point of contact within FERC who will guide the non-federal representative and review and evaluate information prepared by the non-federal representative, as appropriate.

If appropriate, the Service should establish a FERC Team – including staff who work on the FERC hydropower project and staff who address endangered and threatened species and ESA compliance – to coordinate activities throughout the pre-filing and post-filing licensing process.

The non-federal representative should contact the Service to schedule a coordination meeting to identify the expectations of each party and coordinate the information needed for the hydro licensing and ESA consultation processes. At this stage (or earlier), the non-federal representative should request from the Service a list of any listed or proposed species, or designated or proposed critical habitat that may be in the area affected by the proposed project, as well as any candidate species that are likely to become listed during the licensing process. Modifications to this list (delisting/added species, etc.) may be made, as needed, throughout the licensing proceedings.

If a coordination meeting is warranted it should be held as early as possible. During this meeting, participants also will begin identifying information that will be needed for section 7 consultation which may include, among other things: (a) a description of the project, including location maps and project drawings; (b) a description of listed species that may be affected in the project's action area; (c) information related to the ESA baseline; (d) a list of existing scientific information/studies; (e) identification of needed scientific information/studies; (f) identification of activities that may be interrelated or interdependent with the proposed project; (g) identification of effects of the project on listed and proposed species, including direct and indirect effects of the project, any interrelated or interdependent actions, as well as any cumulative effects; (h) potential conservation actions and operational criteria that can be incorporated into the project to avoid or minimize effects on listed and proposed species; and (i) information on the legal, economic, and technical feasibility of such actions and criteria. Because there are sometimes disagreements about what information is needed, parties are encouraged to initiate a dialogue on these issues early in the consultation process.

BOX 1A--In its FPA initial consultation package [18 CFR 4.38(b)(1) or 16.8(b)(1)], a prospective

license applicant (hereafter referred to as the “non-federal representative”) should include, as appropriate, information on threatened, endangered, proposed, and candidate species and any designated, or proposed critical habitat (“T&E species”), potential effects of the project on T&E species, and proposed resource measures for T&E species.

Although not required, applicants are encouraged to include consideration of proposed species and proposed critical habitat, as well as any candidate species that are likely to become listed during the licensing process, together with listed species and designated critical habitat.

BOX 1B--At the joint meeting during the first stage of pre-filing FPA consultation, the non-federal representative should request the Service, tribes, non-governmental organizations, and others to identify any concerns about studies, project effects, and proposed resource measures related to T&E species. In addition, applicants are encouraged to coordinate with agencies and other stakeholders involved in other federal and non-federal activities – including FERC licensing activities – within the same watershed.

BOX 1C--After reviewing the non-federal representative's initial consultation package and after the joint meeting, the Service should provide the non-federal representative with any pertinent information it has on T&E species in the action area, or where to get it. The Service also shall: (a) discuss its understanding of the resource issues related to T&E species; (b) identify potential project effects, including direct, indirect or cumulative effects; (c) recommend studies necessary to comply with the ESA; (d) provide technical assistance on needed study plans, checkpoints, and appropriate methodologies; and (e) provide guidance on ways to improve treatment of those issues in the package as appropriate.

BOX 1D--If the non-federal representative elects not to conduct studies that were recommended by the Service, it should meet with the Service to attempt to resolve any dispute.

BOX 1E--As the studies are completed, the non-federal representative should provide and discuss the information obtained by the studies with the Service. FERC also should be supplied with this information and provided the opportunity to participate in any discussions.

BOX 1F--When the non-federal representative submits its draft license application to the resource agencies and FERC, the non-federal representative may include its draft Biological Assessment prepared during informal consultation. All study results gathered to date should be included in the draft application and/or draft BA, along with any proposed conservation, protection, or enhancement measures.

BOX 1G--If a draft BA is included with the draft license application, the Service will provide its comments on whether the draft BA satisfies requirements of the ESA and ESA regulations. FERC will provide comments as appropriate. The non-federal representative is encouraged to consider the Service's and FERC's comments when revising the draft BA.

BOX 1H--If the non-federal representative holds a meeting to discuss the draft license application, the non-federal representative will include discussion of ESA issues, as appropriate. If needed, the Service will offer additional informal ESA consultation assistance at this time.

3.2 Designation of Non-federal Representative

A very important step is for applicants to request the Commission to designate them as a non-federal representative²⁶ for the purpose of conducting informal consultation (see 50 CFR 402.08) ([exhibit 1](#)). This will help ensure full participation by Service endangered species staff during FPA pre-filing consultation. Upon written request, the Commission will issue a letter to the Service designating the applicant ([exhibit 1](#)) and designating a Commission contact.

3.3 Endangered Species Surveys

Need for Surveys--Surveys are often, but not always, needed to identify the presence of listed, proposed, or candidate species and determine the effects, if any, of project construction and operation on the species. Surveys may not be needed if no species, habitat, or biotic communities of concern were identified in a literature search or after consultation with the Service; no suitable habitat for suspected species exists; the location of biological resources of concern are already known; a species potentially occurs nearby but the action is designed to avoid impacts; or habitat would not be affected in any way by construction, operation, maintenance, or recreational use. Consult with the Service about the need for surveys.

Developing a study plan prior to fieldwork is useful. Surveys should be consistent with approved survey protocols where they exist and must be conducted by qualified biologists. Applicants should consult with the Service prior to conducting the surveys and/or study plan. A poorly executed survey for a species may result in the need for another survey the following year. Applicants should also get Service comments on the survey results.

Permits--As previously discussed in [section 2.4](#), surveys for federally listed species may require a section 10 collection permit. Check with the Service. States may also require permits.

Timing--Surveys must be conducted when target species will be potentially present (e.g., migratory species) and identifiable (e.g., certain plant species) or during

²⁶ Designated non-federal representative--a person designated by the federal agency as its representative to conduct informal consultation and/or to prepare any biological assessment (50 CFR § 402.02).

Exhibit 1. Sample letters for designation of non-federal representative.**Suggested Language for Letter Requesting Designation as Non-federal Representative**

ABC, licensee for the DCF Project, is preparing an application to relicense the project. The project may potentially affect listed species and designated critical habitat.

[include background as necessary]

Therefore, ABC requests that the Commission designate ABC as the Commission's non-federal representative for the purpose of initiating informal consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service with regard to preparation of the relicense application.

For more information, please contact Mr. Robert Jones at 503-111-0101.

Suggested Language for Letter to Service Granting Request

In a letter of December 7, 2000, Hydro Inc. (Hydro) asked the Federal Energy Regulatory Commission (Commission) to designate it as the non-federal representative for the purpose of informal consultation with the U.S. Fish & Wildlife Service pursuant to section 7 of the Endangered Species Act for the above projects. By this letter, the Commission designates Hydro as the Commission's non-federal representative to conduct informal consultation with your agency.

The role of the non-federal representative includes conducting studies, developing and supplying information, attending meetings, ensuring that pertinent endangered species information is maintained in a project file, developing a draft biological assessment, participating in informal consultation with the Service, and keeping FERC apprised of its actions. We recommend that Hydro set up a meeting with your office to discuss how the informal consultation will be conducted.

The FERC contact will be James Brown. If you have any questions please contact Mr. Brown at (202) 219-2222; james.brown@ferc.fed.us.

CC: Applicant

the period when impacts are expected to occur (e.g., seasonal construction activities). Fieldwork to evaluate habitat and potential for species occurrence can be conducted throughout most of the year. If potential habitat is identified then follow-up surveys may be necessary. Some species surveys may need to be conducted during more than one season or more than one year.

Survey Methodology--Description of methodology should include: citation(s) of formal survey protocol; any deviation from protocol, and rationale; methodology used if no protocol exists; total effort (e.g., person hours or days); and spatial extent of survey (should be large enough to cover areas potentially affected by the project's construction, operation, and maintenance). Survey methodology should be coordinated with the Service.

Survey Results--The survey report should include: survey dates; qualifications of the surveyors; detailed description of survey methodology (see above); detailed maps and specific location data for each finding (number, life stage, behavior, etc.). Locations for certain species may be sensitive; this information should not be mapped in a report that will become a public document. In this situation send maps, under separate cover, to the reviewing agency (and FERC staff as appropriate). For these species, location information in public documents should be general (e.g., "A bald eagle nest occurs close enough to the project to be potentially affected by blasting.").

3.4 Studies

Applicants are required to conduct all reasonable studies and obtain all reasonable information requested by resource agencies and tribes that are necessary for the Commission to make an informed decision regarding the merits of the application. Applicants must conduct studies before filing of the application [18 CFR § 4.38(c)(1) for licenses; 16.8 CFR § (c)(1) for relicenses], if the results:

- would influence the financial or technical feasibility of the project
- are needed to determine: the design or location of project features; reasonable alternatives to the project; project impacts on important natural resources (e.g., resource surveys); or suitable mitigation or enhancement measures
- are needed to minimize impact on significant resources (e.g., listed species)

Some studies may have the potential to result in the incidental take of listed species. Applicants should work with the Service to design a study that would avoid potential adverse effects or obtain a section 10 permit if necessary.

3.5 Preparation of a Biological Assessment

Preparation of a draft biological assessment (BA)²⁷ by the non-federal representative can be an important step in the licensing process. Although not mandatory, except where major new construction is proposed, a BA is highly recommended where listed species may be affected by the licensing action because the BA helps identify and resolve issues early. See [section 4.3](#) and [appendix D](#) for guidance on preparing a BA. If a BA is not prepared, then the endangered species information is included in the applicant's environmental report, applicant-prepared environmental assessment, or third-party contract EIS, and supporting documents.

3.6 Summary of Participants' Roles

Applicant's Role--Under designation as a non-federal representative, applicants are responsible for conducting studies, developing and supplying information, attending meetings, ensuring that pertinent ESA information is maintained in a project file, preparing a draft biological assessment (optional), participating in informal consultation with the Service, and keeping the Commission staff apprised of their actions.

Service's Role--The Service will work with the applicant by: identifying existing information; identifying information that will be needed for section 7 consultation; recommending studies; providing technical assistance on study plans and methodologies, etc.; issuing necessary permits; identifying concerns about studies, project effects, and proposed resource measures; discussing the results of studies; providing comments on draft and final applications and draft biological assessments (if prepared); and participating in settlement discussions. The Service will coordinate hydropower and ESA reviews.

FERC Staff Role--During pre-filing consultation, staff will provide guidance and supervision to the non-federal representative, as needed, participate in meetings and discussions (such as dispute resolution meetings), as appropriate, answer questions, and review and provide comments on any draft BA, if prepared. Staff should also receive copies of ESA-related information (correspondence, study plans, study results,

²⁷ Biological assessment--evaluates the potential impacts of the action on listed or proposed species or designated or proposed critical habitat and concludes whether such species or habitat are likely to be adversely affected by the action.

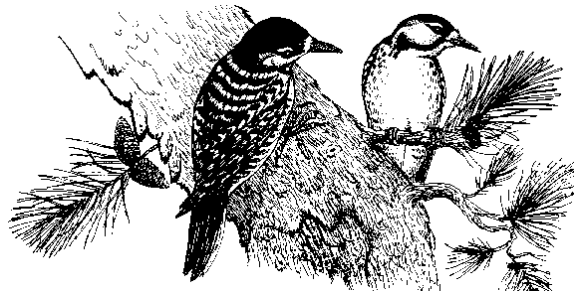
etc.). The Commission's off-the-record communications rule is not in effect during the pre-filing process (18 CFR § 2201).

3.7 Alternative Licensing Process

The ALP²⁸ utilizes a more collaborative approach than required by the traditional pre-filing process to facilitate greater participation by, and improve communication among, the prospective applicant, resource agencies, non-governmental organizations, Indian tribes, the public, and Commission staff. It attempts to combine the pre-filing consultation process, the environmental assessment, other federal and state statutory reviews (including ESA), and, where desired, settlement negotiations. The collaborative aspects of the ALP can be applied to the traditional process as well.

The ALP, although more flexible, generally requires the same steps as the traditional process, though the timing is altered. For example, scoping is conducted pre-filing, opportunities for additional study requests are provided pre-filing, and an applicant-prepared EA or third-party contract EIS replaces the exhibit E (environmental report). FERC staff is more involved than under the traditional process.

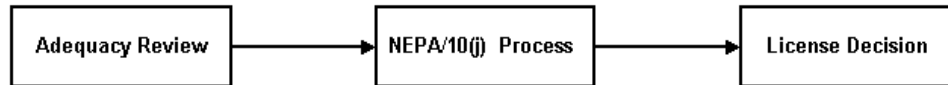
ESA consultation should be integrated into the structure of the alternative process (studies, development of protection measures, etc.) so that endangered species issues are considered early in the process and in the context of other issues and resources, and all participants are aware of the Service's statutory responsibilities and potential conflicts and constraints.



²⁸ See the Commission's regulations [18 CFR § 4.34(i) and Order no. 596].

4

Post-filing Process



The major steps of the post-filing process include adequacy review of the application, scoping (traditional process only), preparation of draft and final environmental documents, the section 10(j) conflict resolution process, and issuance of the license decision. The Service will use existing opportunities in the licensing process to advise the Commission on the adequacy of information, scope of effects, expected impacts, and needed protection measures. A look at the steps in the process and how ESA issues are integrated are outlined in [figure 3](#) and accompanying text.²⁹

4.1 Reviewing the License Application

The Commission's regulations³⁰ require all license or exemption applicants to consult with the Service, state whether threatened and endangered species are found in the project area, and discuss: (1) the project's impacts on the species, (2) protective measures recommended by the agencies, and (3) protective measures proposed by the applicant. We (FERC staff) must make sure any lists of species in the application are current and the applicant has consulted the Service about the accuracy of the list.

Most importantly, we must ensure that there is enough information to independently analyze whether the proposed project may affect any threatened and endangered species and, if there are effects, what the effects would be and what protective measures are needed. Give careful attention to the Service's comments on the draft license application. Make sure that any surveys and studies were filed with the application.

²⁹ In some cases, a single EA may be prepared instead of a separate draft EA (DEA) and final EA (FEA). Comments received in response to the EA will be addressed in the license order. Further, a revised scoping document (scoping document 2) may not always be prepared.

³⁰ 18 CFR §§ 4.41(f), 4.51(f), 4.61(d), 4.92(e), and 4.107(e).

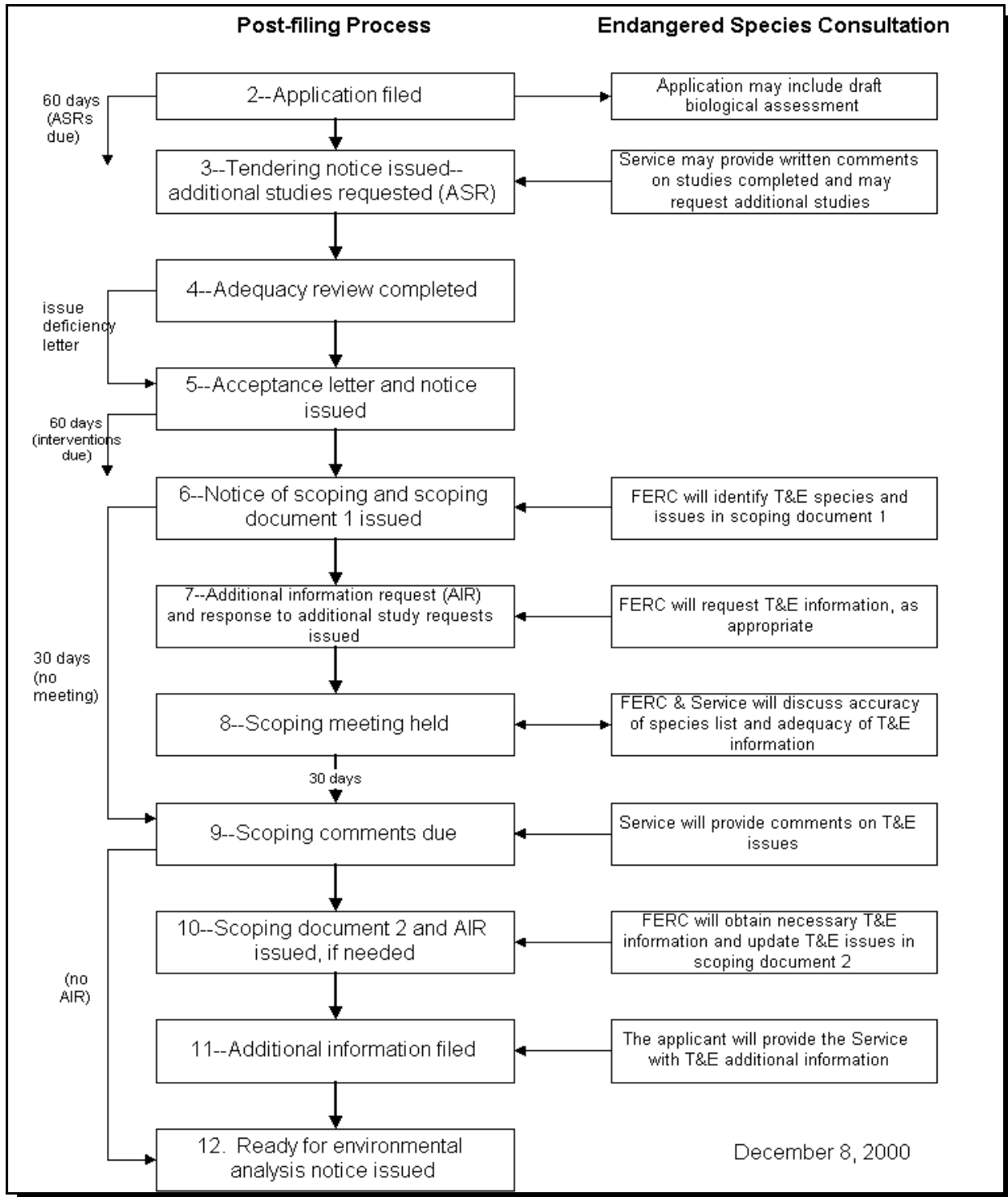


Figure 3. Coordination of FERC post-filing process and endangered species consultation (page 1 of 2) (Source: ITF Report, appendix I, figure 2).

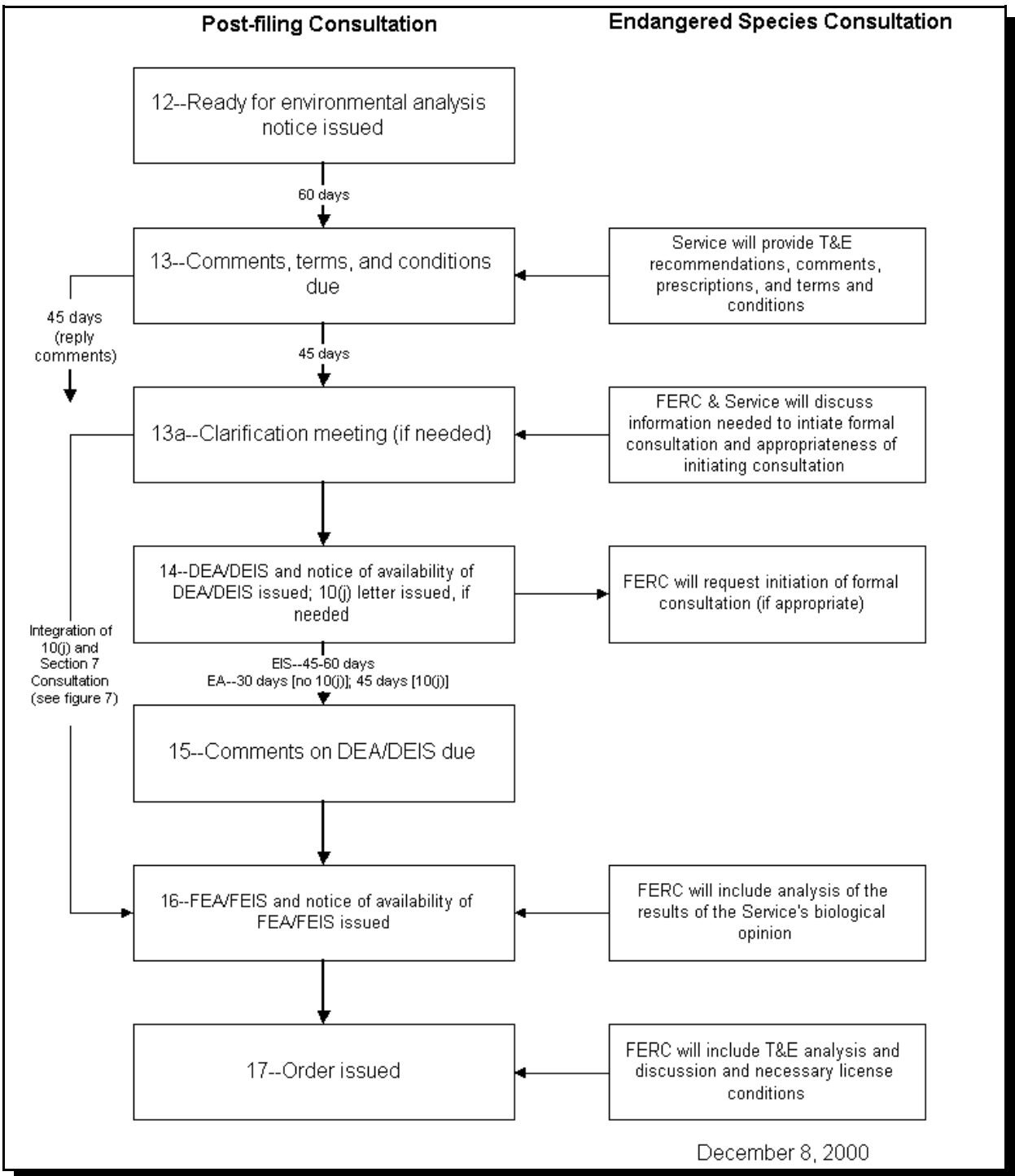


Figure 3 (cont.). Coordination of FERC post-filing process and endangered species consultation (page 2 of 2) (Source: ITF Report, appendix I, figure 2).

Post-filing Process

The steps described below refer to the stages represented by each box in "Figure 3, Coordination of FERC Post-Filing Process and Endangered Species Consultation" (Source: ITF Report, appendix I).

If a draft BA is filed with the license application and FERC and the Service conclude that the draft BA is satisfactory, it ordinarily should not be necessary to address ESA issues in Boxes 2 through 13 below although they will be addressed in subsequent stages of FPA and National Environmental Policy Act (NEPA) analysis. However, if the pre-filing ESA consultation process is not used, or if additional information is needed, Boxes 2 through 13 should be used.

BOX 2-The license application filed with FERC and served on the agencies may be accompanied by a revised draft Biological Assessment of the preferred alternative, including all relevant components of the applicant's proposal and any associated settlement agreement. This revised draft Biological Assessment will include the results of studies and information gathered during the pre-filing process.

BOX 3-In response to FERC's tendering notice, the Service may provide FERC formal written comments on the studies completed and may request any additional studies they believe are needed for section 7 consultation, including an explanation of why the information is presently needed, why the available information does not satisfy that need, and why any additional studies were not requested earlier.

BOX 6-In NEPA Scoping Document 1, FERC will identify what T&E species may be present and what the issues are regarding those species.

BOX 7-In response to any additional information or studies requested by the Service, FERC will review such requests and solicit additional information from the non-federal representative, as appropriate. [See Adequacy of Information section of the ITF Report ([appendix A](#))] FERC response may be deferred to BOX 10, as appropriate.

BOX 8--At the agency scoping meeting, FERC and the Service will discuss whether the species list is accurate and whether there is sufficient information to analyze project effects on T&E species. FERC and the Service will also discuss any additional information that may be needed and any recommended measures for T&E species. To assist FERC in meeting its ESA responsibilities, the Service will bring to FERC's attention any information it has regarding the scope of effects of the proposed action, including any direct, indirect, and cumulative effects that it believes should be analyzed, as well as any interrelated or interdependent actions that it believes should be considered. [See Adequacy of Information section of the ITF Report ([appendix A](#))].

BOX 9--In response to the FERC scoping notice, the Service will provide comments on, among other topics: (a) information gathered to date and any remaining information and/or additional studies that still may be required to satisfy section 7 consultation requirements; (b) alternatives to be considered in the biological assessment/evaluation; (c) impacts to be evaluated; (d) any conservation measures

to be evaluated, and, (e) the accuracy of the species list. In providing these comments, the Service will be as specific as possible, particularly when identifying potential impacts (i.e., direct, indirect or cumulative effects).

BOX 10--FERC will review Service comments and obtain information requested by the Service, as appropriate. [See Adequacy of Information section of the ITF Report ([appendix A](#))]. In Scoping Document 2, FERC will update the issues section of the document, as appropriate, to reflect any comments on T&E species. If the second Scoping Document and/or the draft BA (if prepared) do not satisfy the Service's concerns regarding section 7 consultation or information gathering, the Service will provide FERC with a letter clearly, and as specifically as possible, explaining its ESA-related concerns and recommending ways to address these concerns.

BOX 11--The applicant will provide the Service with copies of any additional information filed with FERC pertaining to listed species, as required by 18 C.F.R. section 4.34(b).

BOX 13--In response to FERC's Ready for Environmental Analysis Notice, the Service will provide its recommendations, comments, prescriptions, and terms and conditions pursuant to sections 4(e), 10(a), 10(j), and 18 of the FPA. Section 7 consultation may result in additional or different measures.

BOX 13a--If a NEPA clarification meeting is held (as described in the Interagency Task Force NEPA Report)--FERC and the Service will use this meeting to discuss the information needed to initiate consultation and the appropriateness of initiating formal ESA consultation at that time. Among other things, FERC and the Service will discuss whether there are any outstanding issues regarding the specific geographic area that may be affected or the scope of effects of the proposed action on listed species and their critical habitat. Such issues could also include, where applicable, direct and indirect effects of the proposed action, cumulative effects, and the effects of any interrelated or independent actions.

BOX 14--If formal consultation is appropriate, FERC will request initiation of formal consultation with the Service at the time it issues its notice of availability of the draft EA/EIS. In most cases, FERC will use the draft EA/EIS as its BA, as specified below. If the draft EA/EIS does not include a discussion of ESA issues (e.g., because of a new ESA listing), FERC will prepare a separate Biological Assessment.

Section 7 regulations distinguish the information required to initiate formal consultation under 50 CFR section 402.14(c) (the "initiation package") from the Biological Assessment. FERC prefers to combine these two items in its draft EA/EIS. Therefore, to assist the Service in evaluating the completeness of FERC's initiation package, FERC will provide a cover letter summarizing its findings and providing specific page references to the chapters, sections, or pages of the draft EA/EIS that contain the information required to initiate formal consultation. The intent of this letter is to streamline the section 7 formal consultation by providing Service staff with the exact location and precise page numbers within the NEPA documents where the specific information required for consultation may be found. It is important that these references provide the Service an accurate location of elements relevant to ESA compliance to help ensure that the Service and Commission

can complete formal consultation within the time frames provided by the ESA regulations. With this in mind, the cover letter should cite pages that contain information regarding the following: (1) the action to be considered (generally, this will be the preferred alternative); (2) the specific area that may be affected by the action; (3) any listed species or critical habitat that may be affected by the action; (4) the manner in which the action may affect listed species or critical habitat, including any direct, indirect, or cumulative effects; (5) relevant reports, including any EA, EIS, or biological assessment (generally, this will be a list, because the reports will either be publicly available or will already be part of the administrative record of the proceeding); and (6) any other relevant available information on the action, affected species, or critical habitat.

If a draft EA or EIS is prepared, FERC will include a separate section on ESA issues in the document.

The Service will review FERC's initiation package and will inform FERC, within 30 days, whether it contains sufficient information to initiate consultation. If the Service determines that sufficient information is available or can be obtained during consultation, FERC and the Service will use the ESA/10(j) integration process (see next section below) for consideration of ESA issues concurrently with the FPA section 10(j) process. (See [figure 7](#).) If the Service determines that the section 7 initiation package is not sufficient to initiate consultation, it will provide FERC with a written explanation, including a description of the specific information lacking and make recommendations regarding the manner by which such information might be obtained and presented. Upon mutual agreement of the adequacy of the initiation package, the Service shall confirm immediate initiation of formal consultation. If FERC and the Service are unable to agree, they will seek to resolve the issue at a higher level within their respective agencies.

BOX 16--FERC will include its analysis of the results of the Service's Biological Opinion in its final EA/EIS [*or license order if BO is prepared after the final EA/EIS is issued*].

BOX 17--FERC will include its analysis and discussion of ESA issues and any necessary license conditions for the protection of listed species and their critical habitat in its license order.

Additional Study Requests

Additional study requests are due within 60 days from filing of the license application with the Commission. The Service may request additional studies they believe are needed for section 7 consultation. Staff should take these requests into consideration when developing additional information requests for the project (see additional information requests section below).

Scoping

The scoping document should list the listed, proposed, and candidate species and designated and proposed critical habitats that will be considered in the environmental analysis and a list of issues associated with those species or habitats.

The Service will provide comments on, among other topics: (a) information gathered to date and any remaining information and/or additional studies that still may be required to satisfy section 7 consultation requirements; (b) alternatives to be considered in the biological assessment/evaluation; (c) impacts to be evaluated; (d) any conservation measures to be evaluated, and (e) the accuracy of the species list.

Scoping Document Input

Be as specific as possible.

- "Effects of reduced flows in the bypassed reach on pools used by breeding red-legged frogs and measures needed to protect the frog"

instead of

- "Effects of project operation on red-legged frogs"

Additional Information Requests

Staff should ask the applicant to provide us any information we will need to do our analysis and to carry out our section 7 responsibilities, including any necessary surveys ([exhibit 2](#)). Ultimately, we must ensure that we have the best scientific and commercial data available. We should have at least conceptual information for any measures or plans that might have the potential to affect species (e.g., recreational development plans) or plans to protect listed species and their habitat (e.g., erosion control plans, bald eagle management plan). We should also ensure that we have adequate information on proposed and candidate species.

We can designate applicants to be non-federal representatives post-filing to conduct informal consultation and prepare a BA, as previously discussed for pre-filing consultation (see [section 3.2](#)).

If a species becomes proposed or listed after our initial review of the application, we must request the necessary information as soon after the listing as possible to avoid delays in the licensing process.

Handling Confidential Information

When we need additional information, but don't want to disclose the location of threatened and endangered species to the general public because of the possibility of disturbance, add to the additional information request the following paragraph:

"The agencies may regard the specific locations of (*list species*) as sensitive information.

If they do, when you file your report you should file only five copies of the maps we ask for in item ().

Exhibit 2. Endangered species surveys information request.

Under section 7 of the Endangered Species Act, we must evaluate any potential impacts on federally listed species before we decide on your license application.

After consulting with the *U.S. Fish and Wildlife Service (FWS) or National Marine Fisheries Service (NMFS)* and the *(state fish and wildlife agency)* for guidance on survey methods, you must conduct a survey of the project area for the presence of *(list species)*. Your survey, which must be conducted by a qualified *(appropriate field)* biologist, should include all areas of suitable habitat within the project boundary and areas directly or indirectly affected by your project's construction and operation.

After consulting with *(FWS or NMFS)* and the *(state fish and wildlife agency)*, give us the following information:

- (a) documentation that you consulted with the agencies before conducting the survey;
- (b) a description of the methods, including a map showing the survey area and the dates and time(s) of the surveys;
- (c) the results of your survey of the areas affected by the construction and operation of the proposed project for the presence of *(list species)*, including the date, time, activity, and location of any sightings;
- (d) a description of the effect of project construction and operation on any *(list species)* found in the project area, specifically addressing *(list primary effects)*;
- (e) a detailed plan to protect or enhance the *(list species)*, if found in the project area; and
- (f) comments and recommendations received from *FWS or NMFS* and the *(state fish and wildlife agency)* on items b through e.

File the five copies this way:

- Submit the sensitive information directly to *(name, title, mail stop)*, Federal Energy Regulatory Commission, Division of Environmental and Engineering Review, Office of Energy Projects, Washington, D.C. 20426.'
- Explain in your cover letter to the Secretary of the Commission that sensitive endangered species information was filed directly with Commission staff, and briefly describe the information without reference to the sensitive information."

Requesting the Species List

The list of species the applicant and agencies developed during pre-filing consultation or lists we develop through additional information requests may be outdated by new listings or by new information on the distribution of species. When we are ready to issue the notice that the application is ready for environmental analysis, we should make sure the list is up-to-date.³¹

If the species list is more than 6 months old, we should ask for a revised list from the Service or prepare a list and ask the Service to agree ([exhibit 3](#)) The Service has 30 days to respond. Some Service field offices will provide a revised list over the telephone. When they do, ask for a confirming letter. Many FWS field offices have species lists by county on their internet sites. Although they are for information purposes, they are useful to update official lists.

4.2 Meetings

Meetings or teleconferences with the Service and/or the applicant to discuss information needs, protection options, or alternatives, are often important to ensure that consultation can occur without delay. Other than for strictly procedural matters, all meetings must be consistent with the Commission's off-the-record communications rule (18 CFR § 385.2201).³² Intervenors must be invited to attend and should be given at least 15-days advance notice. Interested parties should be permitted to provide relevant information, consistent with the limited purpose of the meeting or teleconference. Summarize the results of the meeting, as appropriate.

4.3 Preparing The Biological Assessment

As discussed above, the BA³³ is our analysis of the effects of the proposed project on listed species and critical habitat. In most cases, the BA will be included in the draft EA or EIS. We can also issue the biological assessment as a separate, stand-alone document. We would do that if a species is listed after we've prepared the

³¹ Even though the species list requirement applies only to major construction projects (50 CFR § 402.12), it should be routinely done for all projects.

³² Also see the section of ITF Report on off-the-record communications ([appendix A](#)).

³³ A "biological assessment" is only required for a major construction activity [an activity that involves construction and is a major federal action significantly affecting the quality of the human environment (i.e., typically an EIS project)]. In practice, however, we typically prepare the equivalent of a biological assessment for non-EIS projects (to satisfy the requirements of NEPA and FPA).

Exhibit 3. Suggested language for letter requesting species list.

We're reviewing the effects of this proposed project on threatened or endangered species and their critical habitats.

As shown on the enclosed map, this project would be located on the _____ River, in _____ County, (*state*).

Please tell us if any of the following may be found in the project area:

- Federally listed threatened or endangered species
- Species proposed for listing as threatened or endangered
- Designated critical habitat
- Proposed critical habitat
- Candidate species

Please file your response (an original and eight copies) with _____, Secretary, Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426. Please put the docket number, P-_____-_____, on the first page of your response. If you have any questions, please call _____ at (202) 219-_____.

environmental document; if the applicant prepared a biological assessment; if a more in-depth analysis was needed to improve understanding of the issues; or when an environmental document is not necessary.

In cases where we prepare a separate BA along with a draft environmental document, the write-up in the EA or EIS should summarize the information in the BA, referencing the BA as appropriate. The BA can be attached to the EA or EIS.

If an applicant files a draft biological assessment either as part of the application or as additional information, we can either take the information and incorporate it into the environmental document, make any necessary modifications to the BA and issue it, or adopt it and supplement it as necessary. In any case, we need to verify the information and conclusions contained in the BA.

Biological Assessment Format

The format of a BA is at our discretion. Our assessment may include any or all of the following (50 CFR § 402.12):

- The results of on-site surveys
- The views of recognized experts
- A review of the literature and existing studies
- An analysis of the effects³⁴ of the action on the species and habitat, including any cumulative effects³⁵
- Measures to minimize or avoid any potential impacts
- Opportunities for enhancing the species
- An analysis of any alternatives

Since the BA also serves as the initiation package for formal consultation (see [section 4.4](#)), it generally will include the following information [50 CFR § 402.14(c)]:

- A description of the action
- A description of the area that may be affected by the proposed action
- A description of any listed species or critical habitat that may be affected by the proposed action

³⁴ Effects of the action—refers to the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline. The environmental baseline includes the past and present impacts of all federal, state, or private actions and other human activities in the action area, the anticipated impacts of all proposed federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of state or private actions which are contemporaneous with the consultation in process. *Indirect effects* are those that are caused by the proposed action and are later in time, but still are reasonably certain to occur. *Interrelated actions* are those that are part of a larger action and depend on the larger action for their justification. *Interdependent actions* are those that have no independent utility apart from the action under consideration (50 CFR § 402.02).

³⁵ Cumulative effects--those effects of future state or private activities, not involving federal activities, that are reasonably certain to occur within the area directly or indirectly affected by the proposed action (50 CFR § 402.02).

This definition differs from the Council on Environmental Quality definition in that it excludes other future federal actions since they will be the subject of section 7 consultations when they are proposed.

- A description of how the proposed action may affect any listed species or critical habitat
- An analysis of cumulative effects
- Relevant reports, including any EAs, EISs, or biological assessments
- Any other available relevant information

Incorporating the BA into the Environmental Document

The analysis of the effects of the project on endangered species in the DEA or draft EIS (DEIS) is included in a separate *Threatened and Endangered Species* section. [Appendix D](#) includes specific guidance on what should be included in a stand-alone BA. This information is applicable to a BA that's incorporated into an environmental document, as well. If no species are present in the project area, say so and cite the Service's letter(s)--no additional input is needed.

The EA ("Endangered Species Act" section of the Consultation and Compliance section) and EIS ("Relationship to Laws and Policies") should include a section that briefly describes the consultation process used to address project effects on federally listed or proposed species in the project vicinity ([exhibit 4](#)). It can reference the analysis section of the EA or EIS, summarize the determination of effect for each listed or proposed species, summarize any recommended measures, and detail the status of consultation under the ESA.

Exhibit 4. Example of Endangered Species Act section in EA or EIS.

Endangered Species Act

Section 7 of the Endangered Species Act (ESA) requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of the critical habitat of such species. The federally-listed threatened bald eagle (*Haliaeetus leucocephalus*) is known to occur in the project area. We conclude that project operation, with staff-recommended measures, is not likely to adversely affect the bald eagle or its habitat. Our analysis of project-related effects on the bald eagle and its habitat is discussed in section V.C.4. We will request concurrence by the U.S. Fish and Wildlife Service with our determination.

Preparing a Stand-alone Biological Assessment

See [appendix D](#) for guidance on the contents of a stand-alone BA.

What Do We Consider in our Biological Assessment?

The BA should address the following elements:

Listed and Proposed Species

The BA should address all listed and proposed species included in a species list received from the Service.³⁶

Candidate Species

Candidate species are plants and animals for which FWS has sufficient information on their biological status and threats to list but development of a proposed listing is precluded by higher priority listing activities. NMFS defines candidate species to include species whose status is of concern but more information is needed before they can be proposed for listing.³⁷

Candidate species receive no protection under the ESA. The ESA doesn't require consultation for candidate species until they are proposed for listing, although these are species that may warrant protection under the FPA or other laws. Federal agencies are encouraged to consider the effects of their actions on candidate species because the agencies must protect the species and the species' habitat if they are listed.

³⁶ Up-to-date information on which species are listed can be found at <http://ecos.fws.gov/webpage/> and <http://www.nwr.noaa.gov/1salmon/salmesa/index.htm>. For some states, county lists are available from Natural Heritage Programs (http://www.abi.org/nhp/us_programs.htm) or at FWS Regional Office web pages.

³⁷ The FWS and NMFS each periodically publish a list of candidate species in the Federal Register. Also see <http://ecos.fws.gov/webpage/> and http://www.nmfs.noaa.gov/prot_res/PR3/candidates/candidate.html.

Species of Concern

Species of concern³⁸ receive no legal protection and the species may never be proposed for listing as a threatened or endangered species. Nonetheless, we should evaluate effects on species of concern if they are known to occur in the project area.

Critical Habitat

Our findings dealing with critical habitat are made independent of the effect on known individuals. Whether or not the critical habitat is occupied by the species is not a factor in determining effect.

Our analysis should consider the effects of the action on the principal biological or physical constituent elements, within the defined area, that are essential to the conservation of the species ("primary constituent elements"). These elements may include roost sites, nesting grounds, spawning sites, feeding sites, seasonal wetlands or drylands, water quality or quantity, host species or plant pollinator species, geological formations, vegetation type, tide, and specific soil types (50 CFR § 424.12). The primary elements are usually specified in the final rule designating the critical habitat. We also must look at the indirect effects of the proposed action on critical habitat located adjacent to the project area.

The critical habitat listings also could include examples of proposed actions that could adversely modify critical habitat.³⁹

Recovery Plans

If a recovery plan⁴⁰ or other species management plan (e.g., the Forest Service's spotted owl plan) has been prepared for a listed species, we should verify and document consistency of the proposed action with the plan(s). We should also review

³⁸ Species of concern--an informal term that refers to those species which the FWS believes might be in need of concentrated conservation actions. Such conservation actions vary depending on the health of the populations, as well as the degree and types of threats. At one extreme, there may only need to be periodic monitoring of populations and threats to the species and its habitat. At the other extreme, a species may need to be listed as a threatened or endangered species (FWS, Region 3).

³⁹ Critical habitat listings can be accessed at <http://ecos.fws.gov/webpage/> and <http://www.nwr.noaa.gov/1salmon/salmesa/index.htm>.

⁴⁰ Many recovery plans can be found at <http://endangered.fws.gov/recovery/recplans/index.htm> and http://www.nmfs.noaa.gov/prot_res/PR3/recovery.html.

the plan(s) to determine if there are any measures that could be implemented by the applicant to help conserve the species. Recovery plans may also include measures that are the Commission's responsibility, such as "FERC should be encouraged ... to promote activities to conserve *Trillium persistens* within project boundaries in the Tallulah Gorge."

Habitat Conservation Plans

A proposed project could affect lands or measures included in an existing or proposed HCP. The BA should evaluate consistency with the HCP.

Determining a Project's "Effect" on Species or Critical Habitat

In the DEA or DEIS or separate BA, we should clearly reach and support a conclusion regarding the project's effects on listed and proposed species or designated or proposed critical habitat in the context of the ESA. This would determine whether or not we would need to enter into formal consultation or hold a conference with the Service.

We will ordinarily consult with the Service on the preferred alternative that we identify in the environmental document.

Listed species or designated critical habitat (figure 4)

For listed species or designated critical habitat, we reach one of these conclusions:

No effect--No effect means that no positive or negative effects are expected.

For proposed actions not involving major construction activities,⁴¹ a no-effect finding by us ends our responsibilities under the ESA, although we can ask for concurrence. For major construction activities, the Service has 30 days to respond to our no effect finding, and can request that we initiate formal consultation if it disagrees.

⁴¹ **Major construction activity**--a construction project (or other undertaking having similar physical impacts) which is a major Federal action significantly affecting the quality of the human environment as referred to in the National Environmental Policy Act (50 CFR § 402.02). This definition appears to equate major construction activities with those requiring an EIS; however, not all projects requiring an EIS would involve major construction activities.

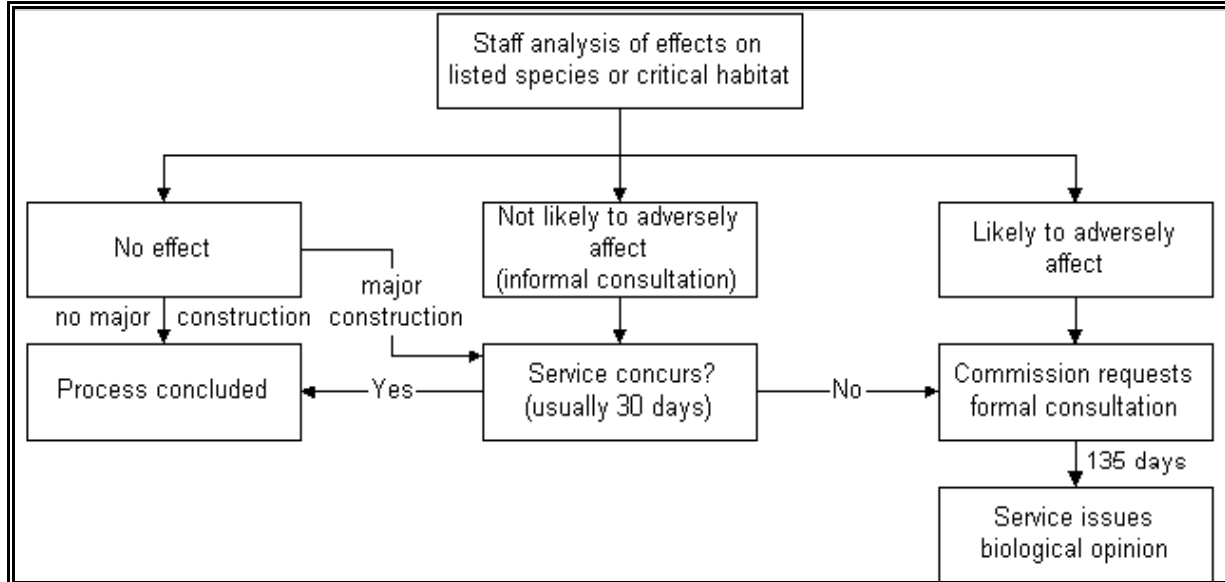


Figure 4. Overview of section 7 process for listed species and designated critical habitat.

Not likely to adversely affect--A "not likely to adversely affect" finding means that all effects are either beneficial,⁴² discountable,⁴³ or insignificant⁴⁴ effects.

With the written concurrence of the Service, this finding ends our responsibilities under the ESA for both major construction projects (as part of the biological assessment process) and non-major construction projects (as part of informal consultation) ([exhibit 5](#)). The Service usually responds within 30 days. Send the request by overnight mail and check to confirm receipt by the Service.

After 30 days, contact the Service about the status of the request. A meeting may be valuable to determine whether we should proceed to formal consultation (see [section 4.4](#)).

⁴² **Beneficial Effects**--contemporaneous positive effects without any adverse effects to the species or critical habitat (Consultation Handbook).

⁴³ **Discountable Effects**--effects that are extremely unlikely to occur and would not be expected to occur (Consultation Handbook).

⁴⁴ **Insignificant Effects**--Insignificant effects relate to the size of the impact and would not be able to be meaningfully measured, detected, or evaluated (Consultation Handbook).

Exhibit 5. Suggested language for request for concurrence letter .

[send by overnight mail]

The _____ Project is located on the _____ River in _____ County, (state). We address the project's effects on threatened or endangered species and/or critical habitat in the enclosed (*draft environmental assessment, draft environmental impact statement, or biological assessment, as appropriate*). **For a DEA or DEIS, add:** The preferred alternative (*identify alternative*) is described on pages ____ (Sections ____, figure ____), a description of endangered species potentially affected by the project is found on pages ____ (Section ____), and a discussion of impacts and determinations of effect are found on pages ____ (Section ____). **--or for longer discussions--** The location of the endangered species information is provided in the attachment. [NOTE: an example of the attachment is found in [Exhibit 6](#).]

We conclude that (*describe type of proposed action*) the project, with our recommended measures, is "not likely to adversely affect" the (*list species and critical habitat, as appropriate*) and would have no effect on (*list species and critical habitat, as appropriate*). Therefore, we do not believe that formal consultation is required. Please tell us in writing within 30 days from the date of receipt of this letter if you do or do not agree with our assessment. Should you need to informally discuss concerns before making your determination, please contact _____ at (202) 219- ____ to indicate your interest in initiating a teleconference with all parties on this issue.

Please file your response (an original and eight copies) with _____, Secretary, Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426. Please put the docket number, P- _____ - _____, on the first page of your response. If you have any questions, please contact _____.

If the Service doesn't agree, it may suggest modifications to the action that would avoid the likelihood of an adverse effect, request additional information, or it may request us to enter into formal consultation. If we adopt their suggested measures, we don't have to enter into formal consultation. We can also provide additional information to better support our conclusions. Otherwise, we must enter into formal consultation (see [section 4.4](#)).

Likely to adversely affect--Likely to adversely affect means that all adverse effects can't be avoided (even if minor or minimal) or incidental take is anticipated to occur. In cases where the overall effects would be beneficial, but some adverse effects would still result, the proper determination would be "likely to adversely affect."

If we conclude in the EA or EIS that the proposed project would adversely affect a listed species or critical habitat, then we must enter into formal consultation with the Service (see [section 4.4](#)).

Proposed species or critical habitat (figure 5)

For proposed species or proposed critical habitat, we reach one of these conclusions:

Likely to jeopardize the continued existence of proposed species or destroy or adversely modify proposed critical habitat--We must initiate a conference with the Service to identify alternative actions or measures that would avoid or minimize adverse effects to proposed species or proposed critical habitat (see [section 4.5](#)).

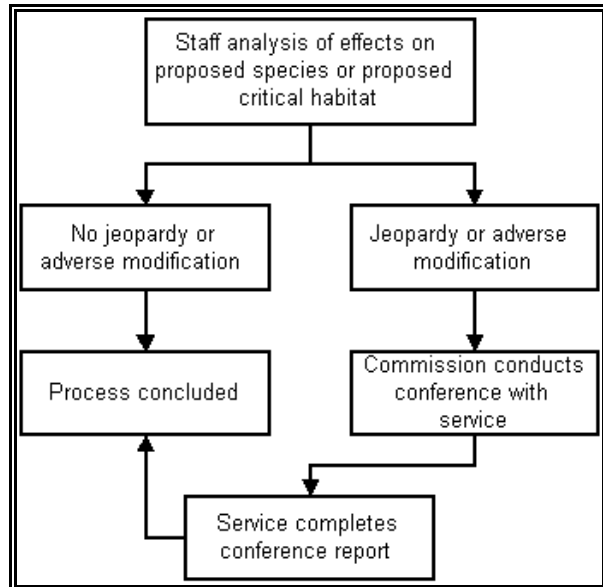


Figure 5. Overview of section 7 process for proposed species and proposed critical habitat.

4.4 Formal Consultation

The steps of the formal consultation process are outlined in [figure 6](#) and discussed below.

Sufficiency of Information to Initiate Consultation

If we and the Service disagree about what constitutes the best scientific and commercial data available for the purposes of initiating consultation, we will schedule a meeting with the Service, or use NEPA clarification meeting to discuss what information is available and needed to initiate consultation [see adequacy of information section of ITF Report ([appendix A](#))].

Initiation Package

When we determine that a listed species or designated critical habitat is likely to be adversely affected and we and the Service agree that information is sufficient to initiate consultation, we send the Service a copy of our analysis [either included in a draft environmental document (DEA or DEIS) or a separate biological assessment] by overnight mail, ask it to enter into formal consultation, and ask for its "biological

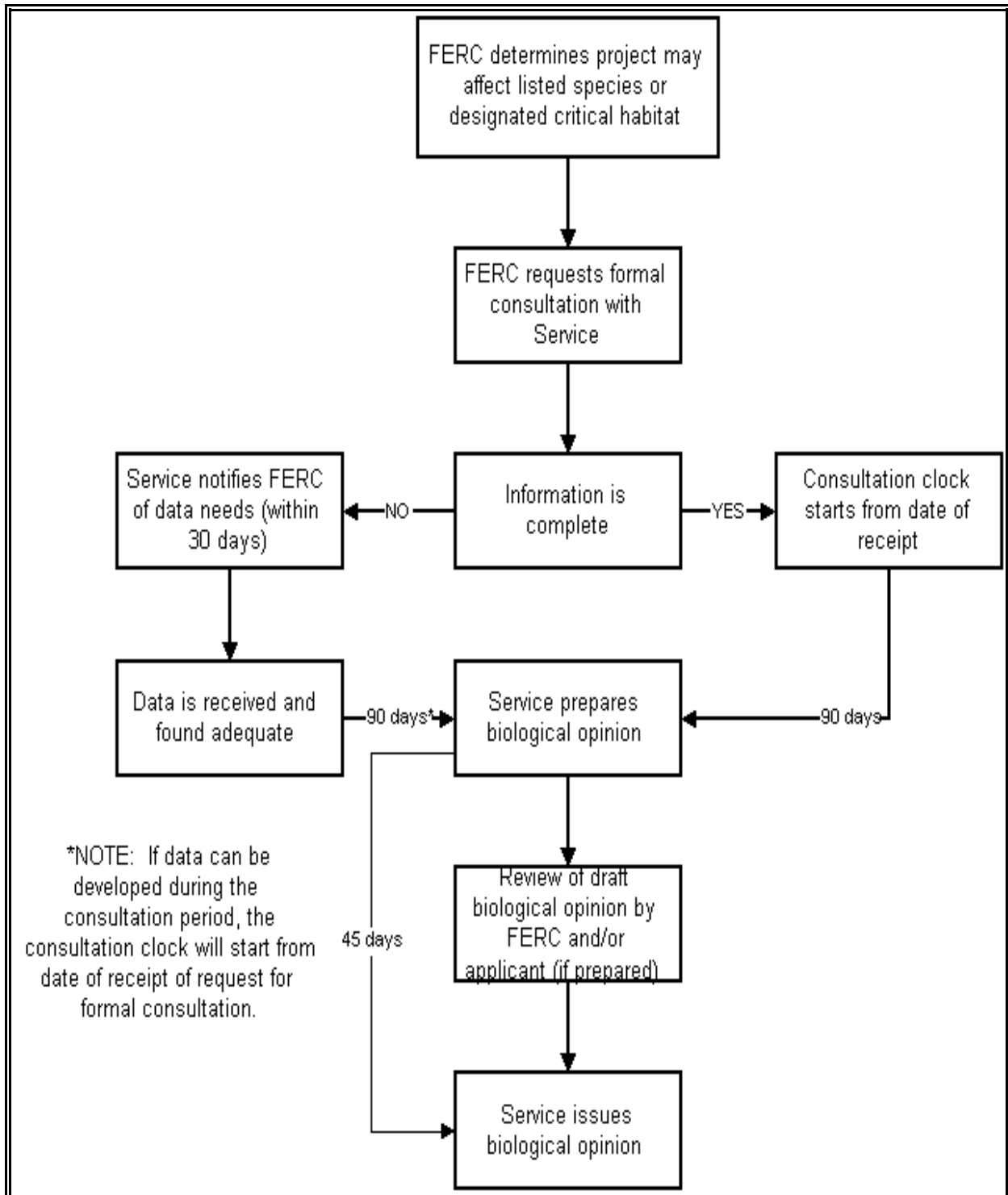


Figure 6. Formal consultation process (Source: Service Section 7 Consultation Handbook, as modified by staff).

opinion."⁴⁵ In most cases, our DEA or DEIS or separate BA will satisfy the biological assessment and initiation package requirements.

If we use the DEA or DEIS, however, the letter requesting the initiation of formal consultation should provide the exact location and page numbers of where the following information can be found: (1) the action to be considered (generally, this will be the preferred alternative); (2) the specific area that may be affected by the action; (3) any listed species or critical habitat that may be affected by the action; (4) the manner in which the action may affect listed species or critical habitat, including any direct, indirect, or cumulative effects; (5) relevant reports, including any EA, EIS, or biological assessment (generally, this will be a list, because the reports will either be publicly available or will already be part of the administrative record of the proceeding); and (6) any other relevant available information on the action, affected species, or critical habitat. An example of a letter requesting formal consultation is found in [exhibit 6](#). Make sure you contact the Service to confirm that they received the request.

Adequacy of Information

The Service will review the information provided (initiation package) and will inform the Commission whether the information is sufficient to initiate consultation. If the information is sufficient or can be obtained during the consultation, formal consultation will be initiated. If the information is not sufficient, the Service will describe the specific information that is lacking and recommend the manner the information might be obtained. [See adequacy of information section of ITF Report ([appendix A](#)).]

In some cases, the Service may believe that additional data beyond what is needed to initiate consultation would provide a better information base on which to base a BO. If we agree, we will request the applicant to develop the information. Otherwise, consultation will continue with the existing information and the Service will provide the benefit of the doubt to the species. We need to balance the value of the additional information versus the delays that may result from developing the information.

⁴⁵ **Biological opinion**--the document that states the opinion of the Service as to whether the proposed action is likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (50 CFR § 402.02).

Exhibit 6. Suggested language for letter requesting formal consultation.

[send by overnight mail]

As required by section 7 of the Endangered Species Act, I'm requesting formal consultation with your office.

The _____ Project is located on the _____ River in _____ County, (*state*). We address the project's effects on threatened or endangered species and/or critical habitat in the enclosed (*draft environmental assessment, draft environmental impact statement, or biological assessment, as appropriate*). **For a DEA or DEIS, add:** The enclosed (*DEA or DEIS*) serves as our biological assessment. The location of the threatened and endangered species information is provided in the attachment.

We conclude that (*describe type of proposed action*) the project, with our recommended measures, is likely to adversely affect the (*list species and critical habitat, as appropriate*), is "not likely to adversely affect" the (*list species and critical habitat, as appropriate*), and would have no effect on (*list species and critical habitat, as appropriate*).

Please give us your biological opinion on our findings no later than 135 days from receipt of this request. If we don't hear from you within 30 days, we will assume that you have sufficient information to initiate consultation and will provide us with your biological opinion by (*insert date**).

(If we would like to review the draft biological opinion, add: We would like the opportunity to comment on the draft biological opinion prior to its finalization.)

Please file your response (an original and eight copies) with _____, Secretary, Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426. Please put the docket number, P-_____-_____, on the first page of your response. If you have any questions, please call _____ at (202) 219-_____.

Enclosure--Draft Environmental Assessment for the _____ Project (P-_____-_____) [*or BA or DEIS, as appropriate*]

Attachment--Location of information needed to complete consultation on the _____ Project (P-_____-_____)

cc: Public Files
Service List

*Since we send requests by overnight mail, the receipt date would typically be the next business day.

Exhibit 6 (cont.). Suggested language for letter requesting formal consultation.

Attachment --Location of Information in the attached (*DEA or DEIS*) needed to complete consultation on the _____ Project (P-_____-____).

<p>Description of the Action</p>	<p>Information on the general project location and description of federal lands affected are found in the Application section (pages _____) (see location map--figure __, page ____).</p> <p>The preferred action, described in the Proposed Action and Alternatives section (pages ____), consists of the applicant's proposal (pages ____), as supplemented by additional measures recommended by staff (pages ____).</p>
<p>Description of Listed Species and Critical Habitat</p>	<p>In the Affected Environment subsection (pages _____) of the Threatened and Endangered Species section, we summarize available background information on species biology, habitat requirements, abundance, and distribution within the project area and surrounding areas; and summarize the results of the surveys conducted by the applicant.</p>
<p>Description of Affected Area and Description of the Effects of the Project, including cumulative effects</p>	<p>In the Environmental Impacts and Recommendations subsection (pages 70-77), we provide a description of the geographic area that may be affected by the proposed action; an evaluation of the potential direct, indirect, and cumulative effects on species and critical habitat of the proposed action and alternatives; an evaluation of measures proposed by the applicant and recommended by staff to reduce, avoid, minimize, or enhance endangered species; and a determination of effect associated with the preferred alternative for each species.</p> <p>Cumulative effects are specifically discussed on page ____.</p> <p>Interrelated or interdependent actions are described on page ____ [<i>or none were identified</i>].</p> <p>In the Unavoidable Adverse Impacts subsection, we summarize effects to listed species that can't be avoided or mitigated (page ____).</p>
<p>Relevant Reports</p>	<p>A list of relevant reports and other relevant information on the action, listed species, or critical habitat that form the basis of our assessment of impacts to endangered species are included in the Literature Cited section (pages ____). Copies of the reports prepared by the applicant, including _____ studies and survey results have already been filed with your office. Additional reports are enclosed (<i>as appropriate</i>).</p>

Timing

The Service has 90 days to complete formal consultation, which involves the exchange of information and discussions between us, the Service, and the applicant. Consultation can be extended by up to 60 days with agreement between the Service and the Commission, without the applicant's consent. The Service must submit to the applicant before the close of the 90-day period a written statement explaining:

- The reasons why a longer period is required
- Any information that may be required
- The estimated date on which consultation will be completed

Longer extensions may only be granted with the written consent of the applicant. If we do not agree to the extension, the Service will issue the biological opinion using the best available data.

At the end of the 90-day period, unless extended, the Service has 45 days to deliver its biological opinion.

Integration of the 10(j) Process with Formal Consultation

For routine cases (sufficient information has been developed and there is no need for the Service to issue a draft biological opinion for comment), the 10(j) process⁴⁶ (if needed) and ESA formal consultation process can be conducted concurrently to avoid delays (figure 7 and accompanying text). The NEPA clarification meeting (figure 7, box 13a), if held, will be used to determine the appropriateness of initiating formal consultation. The Commission's letter requesting formal consultation will be issued at the same time as the Commission's letter outlining any preliminary inconsistencies between fish and wildlife agency recommendations and applicable law [10(j) letter]. If a 10(j) meeting is needed, the meeting will be held during the formal consultation period and will be used to discuss outstanding endangered species issues.

Integrating Settlements into the Formal Consultation Process

The Commission's policy is to encourage applicants to look toward collaboration

⁴⁶ The 10(j) process involves the Commission's attempt to resolve inconsistencies between fish and wildlife agency recommendations and the purposes and requirements of the FPA and applicable law [see section 10(j) of the FPA and 18 CFR § 4.34(e)].

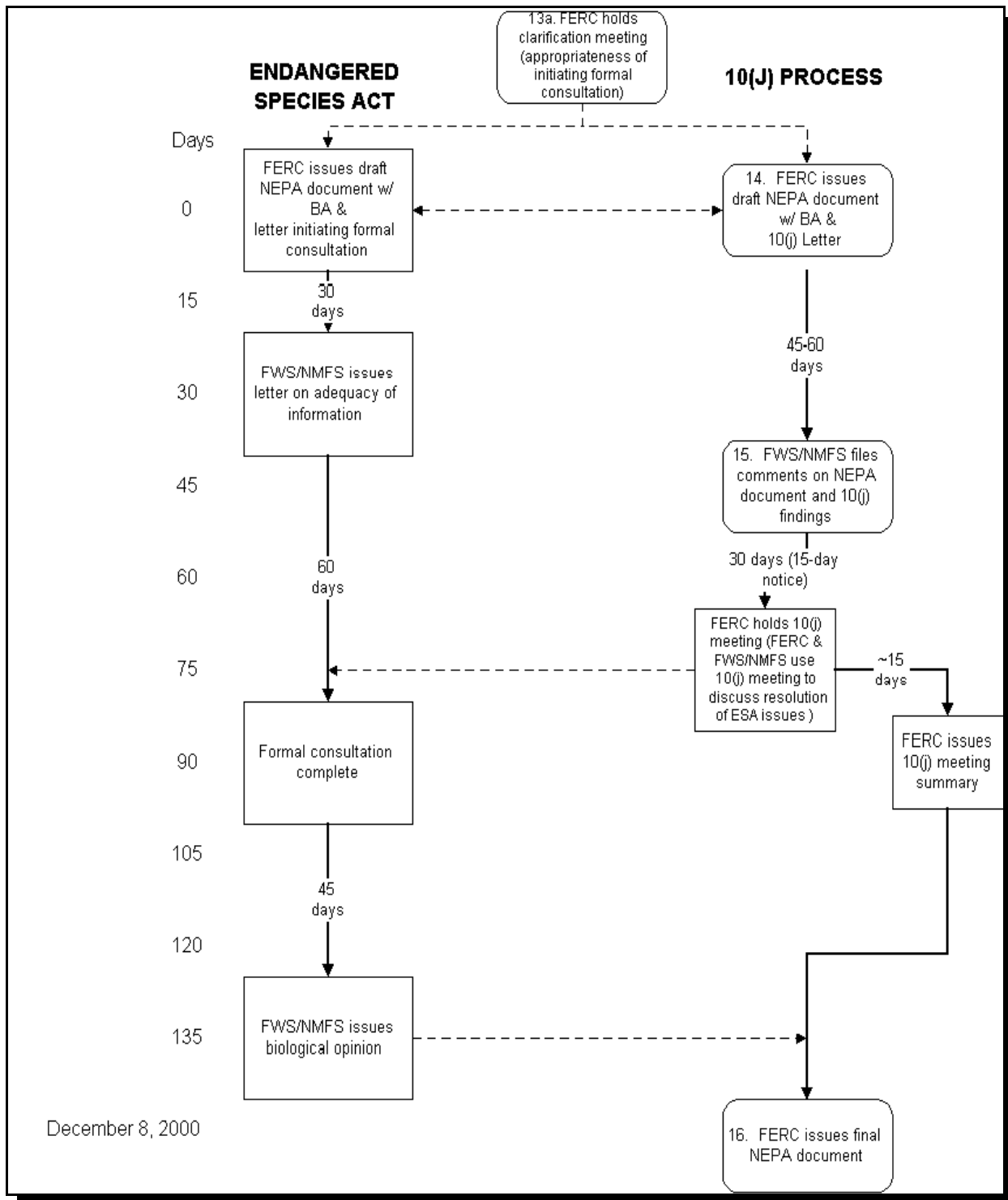


Figure 7. Integration of the 10(j) process and endangered species formal consultation (Source: ITF Report, appendix I, figure 3).

The ESA/10(j) Integration Process

The steps described below refer to the stages represented by each box in [Figure 7](#), "Integration of Endangered Species Consultation and the 10(j) Process" (Source: ITF Report).

BOXES 14 THROUGH 15—If use of the ESA/10(j) integration process is appropriate, FERC and the Service will coordinate the section 10(j) process with the ESA formal consultation process. If a section 10(j) meeting is held, FERC and the Service will discuss ESA issues together with section 10(j) issues and FERC staff will issue a summary of the meeting. If a section 10(j) meeting is not held, FERC and the Service will determine whether to hold an ESA consultation meeting. If an extension of time to complete formal ESA consultation is needed, the Service will request an extension as provided by ESA regulations.

The ESA/10(j) integration process is intended for simple cases not requiring the Service to develop a draft Biological Opinion (BO). If FERC's initiation package contains sufficient information to initiate consultation using the ESA/10(j) integration process, but after initiation the Service preliminarily determines that the proposed action is likely to jeopardize listed species or adversely modify critical habitat, the Service will inform FERC (and the applicant and other parties) that it intends to issue a draft jeopardy BO. The draft BO will include proposed reasonable and prudent alternatives, if available, and proposed reasonable and prudent measures to minimize the impact of any incidental take. The Service will coordinate with FERC and the applicant in developing these RPAs.

If an extension of time to complete formal ESA consultation is needed to develop a draft BO, the Service will request an extension as provided by ESA regulations.

and settlement as a means to afford listed species the mitigation and enhancement that should be provided for proposed actions. In many cases, the drafting of a biological opinion can be incorporated into a settlement process, usually with the assistance and support of separated Commission staff,⁴⁷ in order to submit the final biological opinion to the Commission along with an Offer of Settlement.⁴⁸

Draft Biological Opinion

If we request, the Service will provide a copy of its draft biological opinion [50 CFR § 402.14(g)(5)]. The applicant may request a copy of the draft opinion from the Commission; any comments the applicant may have on the draft BO must be submitted

⁴⁷ Staff would be separated from the advisory staff in such a proceeding and thus would not participate in the Commission's decision-making process.

⁴⁸ See Order approving offer of settlement and issuing new licenses, Kingsley and North Platte/Keystone Diversion Projects, P-1417/1835, 84 FERC ¶ 61,077, July 29, 1998.

to the Service through the Commission. If comments are filed with the Service within 10 days of the deadline for issuing the opinion, the time frame for the biological opinion is extended by 10 days. Otherwise, the 45-day period in which the Service must deliver the biological opinion can only be extended if we get the applicant to agree in writing.

The Commission will provide a revised economic analysis if a draft BO contains reasonable and prudent alternatives that differ from the recommendations in the draft EA or EIS (ITF Report).

If more time is needed to resolve issues presented in the draft BO, everyone should work together to design a process that can provide sufficient time to work out unresolved issues.

Final Biological Opinion

In a biological opinion (figure 8), the Service makes three possible findings--a no-jeopardy or no adverse modification opinion, a jeopardy and/or adverse modification opinion with reasonable and prudent alternatives,⁴⁹ or a jeopardy and/or adverse modification opinion with no reasonable and prudent alternatives.

A no-jeopardy or no adverse modification opinion

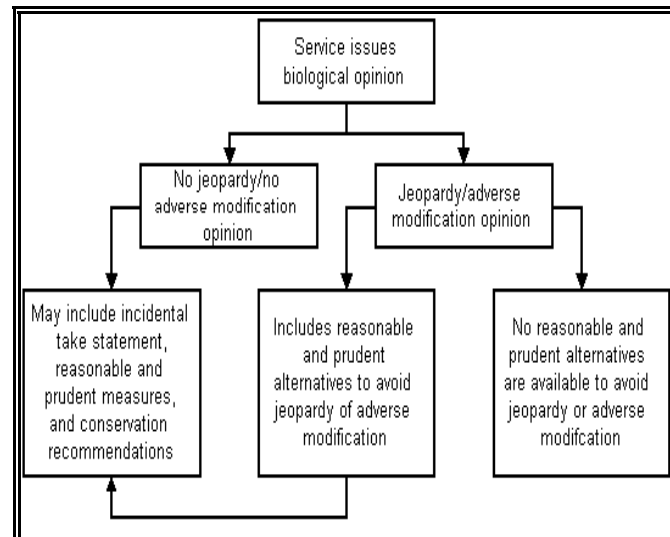


Figure 8. Contents of a biological opinion.

The Service finds that the proposed action, with modifications recommended by staff, wouldn't likely jeopardize the continued existence of the listed species or cause the destruction or adverse modification of critical habitat. The biological opinion will

⁴⁹ Reasonable and prudent alternatives--alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purpose of the action, that can be implemented consistent with the scope of the federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that the Service believes would avoid the likelihood of jeopardizing the continued existence of listed species or resulting in the destruction or adverse modification of critical habitat (50 CFR § 402.02).

usually include an "incidental take" statement⁵⁰ that:

- Specifies the amount of take that would be expected to occur incidental to the proposed action (take is usually expressed as the number of individuals reasonably likely to be taken or the extent of habitat to be disturbed, but could be expressed as a change in habitat characteristics).

Examples of incidental take statements

- Unquantifiable number of juvenile trout may be taken annually as a result of fish entrainment
- Harassment of 6 eagles by altering their behavior
- No incidental take of eagles is expected and none is authorized
- Approximately 40 bull trout will be subjected to predation mortality annually

- Includes reasonable and prudent measures⁵¹ found necessary to minimize the incidental taking of a listed species, which may involve only minor changes to the proposed action (those not altering the basic design, location, scope, or the timing of the proposed action)
- Includes terms and conditions implementing the reasonable and prudent measures⁵²

The Service's biological opinion also can include non-binding conservation recommendations.⁵³

A jeopardy and/or adverse modification opinion with reasonable and

⁵⁰ Incidental take statement--the part of the biological opinion that exempts incidental take of a listed species from the section 9 prohibitions.

⁵¹ Reasonable and prudent measures--actions the Service believes are necessary or appropriate to minimize the impacts, i.e., amount or extent of incidental take (50 CFR § 402.02).

⁵² The Commission has routinely included reasonable and prudent measures to ensure that any incidental take would not be considered prohibited, pursuant to section 7(b)(4) of the ESA.

⁵³ Conservation recommendations--suggestions of the Service regarding discretionary measures to minimize or avoid adverse effects of a proposed action on listed species or critical habitat or regarding the development of information (50 CFR § 402.02).

prudent alternatives

The Service develops alternatives ensuring that the proposed action would not likely jeopardize the continued existence of the listed species or result in the destruction or adverse modification of critical habitat. An incidental take statement may be included.

A jeopardy and/or adverse modification opinion with no reasonable and prudent alternatives

The Service finds that no alternatives are available to avoid jeopardizing the continued existence of the listed species or preventing the destruction or adverse modification of critical habitat. Such a finding may be based on the species status, the lack of economically or technically feasible alternatives, or the lack of Commission jurisdiction to implement the alternative.

4.5 Conference

We must request a conference with the Service whenever we find that the proposed action is likely to jeopardize the continued existence of a proposed species or to destroy or adversely modify proposed critical habitat ([figure 5](#)). This conference should help identify and resolve potential conflicts at an early stage in the planning process. (See 50 CFR § 402.10.) If it's unclear whether we're required to hold a conference in a particular case, it may be a good idea to hold one. The request for a conference is incorporated into any request for concurrence or formal consultation.

Informal Conference

Conferences are informal discussions on the project's effects and ways to avoid or minimize the effects. The Service may make advisory recommendations. The Service documents and provides us and the applicant with any conclusions reached during the conference and any recommendations.

Formal Conference

If we determine that a project may affect a proposed species, we can also request a "formal conference," which is similar to formal consultation. If the Service agrees, they issue a "conference opinion." When a species becomes listed--assuming new information hasn't been developed or the project's effects haven't significantly changed--we may ask the Service to adopt the conference opinion as its biological opinion. When combined with formal consultation, the Service will issue a combined biological opinion and conference opinion.

4.6 Final EA/EIS

The FEA or final EIS should include:

- Any revisions to the threatened and endangered species section
- A summary of the results of the section 7 consultation process
- An analysis of the results of the Service's biological opinion, including whether the conservation recommendations are adopted under section 10(a) of the Federal Power Act

In some cases, the FEA or final EIS (FEIS) is used to initiate section 7 consultation, as previously described.

4.7 Licensing Decisions

License Orders

The license order will include an analysis and discussion of ESA issues and necessary license conditions for the protection of listed species or designated critical habitat.

The license order should include an endangered species section ([exhibit 7](#)). This section should include any findings we've made after completing the EA or EIS. The order should document the Service's position, including concurrence with any findings that the project isn't likely to adversely affect listed species. The order (either issuing or denying a license) should also document the results of formal consultation, including a determination of whether, and in what manner, the Commission would proceed with the action [50 CFR § 402.15(b)].⁵⁴

If we can't issue a license consistent with section 7(a)(2) of the ESA and wish to

⁵⁴ The final decision on how to proceed with the proposed licensing action rests with the Commission, pursuant to its authorities under the FPA and based on substantial evidence in the record. The Commission may not take any action that would jeopardize the continued existence of a listed species and cannot modify the terms of an incidental take statement.

Exhibit 7. Example of Threatened and Endangered Species section of license order.**THREATENED AND ENDANGERED SPECIES**

Section 7(a)(2) of the Endangered Species Act of 1973 (ESA), 16 U.S.C. § 1536(a)(2), requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally listed threatened and endangered species, or result in the destruction or adverse modification of designated critical habitat. The following federally listed species may occur in the project area: the threatened bald eagle, northern spotted owl, Columbia River Basin bull trout, and Upper Willamette River chinook salmon. In the EA, staff concluded that licensing the project as recommended by staff may adversely affect Upper Willamette River chinook salmon and bull trout, but would not affect the federally listed bald eagle, peregrine falcon, or northern spotted owl (see sections V.C.1 and V.C.2 in the FEA).

The Commission initiated formal consultation with FWS and NMFS by letters dated September 16, 1998 and June 3, 1999, respectively. On November 22, 1999, NMFS and FWS issued a joint biological opinion that concludes that issuing a license to the project, as recommended by Commission staff, is not likely to jeopardize the continued existence of bull trout or Upper Willamette River chinook salmon, and concurred with our finding for the bald eagle and spotted owl. Additionally, NMFS concludes that the project would not appreciably diminish the value of proposed critical habitat for both the survival and recovery of Upper Willamette River chinook salmon. NMFS and FWS included an incidental take statement with reasonable and prudent measures and terms and conditions to minimize incidental take of bull trout or Upper Willamette River chinook salmon as part of their biological opinion. The articles of this license that address these reasonable and prudent measures and conservation recommendations require the licensee to do, among other things, the following:

1. Minimize the effects of the operation of the project on water temperatures, to prevent take from chronic or acute physiological effects to listed fish (Articles 402 and 409).
2. Minimize the effects of in-water work associated with the project, to prevent direct mortality and injury of listed fish from construction activities (Article 406).
3. Minimize the effects of operating the project on fish passage and migration to prevent mortality and injury of listed fish from entrainment, impingement, migration delay, or other passage problems (Articles 404 and 405).
4. Document the continued operation of fish protection components of the project to ensure incidental take of listed fish does not exceed predicted levels (Article 410).
5. Monitor trends in bull trout populations (Article 411).

pursue the matter further, we can apply for an exemption.⁵⁵ This procedure has been used very rarely by other agencies. If we deny a license based on a jeopardy opinion and the decision is affirmed by the Commission on rehearing, the applicant at that time can apply for an exemption. The Governor of the state where the project is located can also apply for an exemption.

License Articles

Articles are needed to require licensees to: (1) implement endangered species measures, including those that may have been developed during the endangered species consultation process; (2) to finalize the design of required measures; or (3) to monitor the effectiveness of or compliance with recommended measures ([exhibit 8](#)). To the extent practicable, we should avoid using articles that delay resolution of important issues until after licensing.

Terms and Conditions of Biological Opinions

We typically would create separate articles that incorporate the conditions of the biological opinion. In some cases, we have attached the conditions as an appendix to the license or included articles requiring implementation of the conditions of the biological opinion. A compliance monitoring article may also be needed ([exhibit 8](#)).

Monitoring

Monitoring can be important to ensure that species and their habitat are protected during construction activities, document compliance with license conditions, to gather information on the effectiveness of measures, verify assumptions, determine the need for future measures, and to ensure that incidental take is not exceeded (see above). An example of a monitoring plan article is included in [exhibit 8](#).

Adaptive Management

Adaptive management allows for changes in protection strategies that may be

⁵⁵ The Endangered Species Committee, consisting of the Secretaries of Agriculture, Army, and Interior, the Chairman of the Council of Economic Advisors, the Administrators of the Environmental Protection Agency and the National Oceanic and Atmospheric Administration, and an individual from the affected state selected by the President, reviews all exemption applications. By vote, five members must concur that (1) there are no reasonable or prudent alternatives; (2) the benefits of the action outweigh the benefits of alternative actions and the action would be in the public interest; (3) the action is of regional or national significance; and (4) no irreversible or irretrievable commitment of resources were made (50 CFR § 453.03). Procedures for exemption applications are found in 50 CFR § 451.

Exhibit 8. Endangered species license articles.**Detailed Endangered Species Protection Plan Article**

Article . At least 180 days before the start of any land-clearing or land-disturbing activities, the licensee shall file with the Commission, for approval, a plan to protect the (*list species*). The plan shall include, but not be limited to, the following:

(1)

(2)

The licensee shall prepare the plan after consultation with the (*list agencies and tribes*). The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies and tribes, and specific descriptions of how the plan accommodates the agencies' and tribes' comments. The licensee shall allow a minimum of 30 days for the agencies and tribes to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No land-disturbing or land-clearing activities shall begin until the Commission notifies the licensee that the plan is approved. Upon Commission approval the licensee shall implement the plan, including any changes required by the Commission.

Biological Opinion Compliance Monitoring Article

Article . Within 180 days after the issuance date of this license and on, or before, (*insert date 90 days before measures would take affect*) of each year thereafter, the licensee shall file, for Commission approval, a Threatened and Endangered Species Plan and Annual Monitoring Report. The plan shall address the licensee's compliance with the terms and conditions of the incidental take statement filed by the *National Marine Fisheries Service and/or the U.S. Fish and Wildlife Service* on _____, and attached to this order as Appendix ____.

The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the *National Marine Fisheries Service and/or the U.S. Fish and Wildlife Service*, and specific descriptions of how the agency comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the plan with the Commission for approval. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information. The Commission reserves the right to make any changes to the plan.

Exhibit 8 (cont.). Endangered species license articles.**Endangered Species Monitoring Plan Article**

Article . The licensee, within 6 months from the date of issuance of this license, shall file with the Commission, for approval, a plan to monitor _____.
The plan shall include a schedule for implementing the plan; consultation with the appropriate federal and state agencies; a yearly monitoring program, and filing the results and agency comments with the Commission.

The licensee shall prepare the plan after consultation with the (*list agencies*).
The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments and recommendations are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the monitoring plan. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

If the results of the yearly monitoring program show that modifications to the project or its operations are necessary to protect the (*list species*), the licensee shall also file, for Commission approval, recommendations for modifying project operations or other measures, a schedule for implementing the recommendations, and comments of the consulted agencies on the proposed modifications or measures. The Commission reserves the right to require changes to the proposed modifications or measures. Upon Commission approval, the licensee shall implement the proposed modifications or measures, including any changes required by the Commission.

Standard Fish and Wildlife Reopener Article*

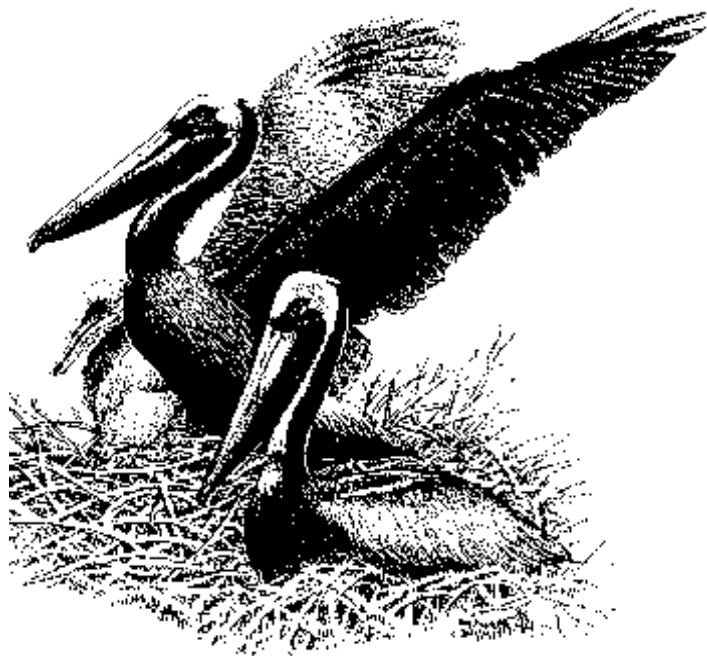
Article . The Licensee shall, for the conservation and development of fish and wildlife resources, construct, maintain, and operate, or arrange for the construction, maintenance, and operation of such reasonable facilities, and comply with such reasonable modifications of the project structures and operation, as may be ordered by the Commission upon its own motion or upon the recommendation of the Secretary of the Interior or the fish and wildlife agency or agencies of any State in which the project or a part thereof is located, after notice and opportunity for hearing.

** Although the Department of Commerce is not specifically mentioned, the Commission recognizes that either NMFS or FWS could invoke this article to recommend that the Commission reopen a license to permit compliance with the ESA. See Order on rehearing, Clark Fork Project, P-2058-015, 93 FERC ¶ 61,116, October 30, 2000.*

necessary to reach long-term goals. It can be used to: (1) ensure that conservation strategies are producing desired results particularly when there are significant biological data gaps; (2) respond to new information or changed circumstances; (3) test a range of actions; and (4) allow flexibility in meeting goals. While adaptive management can help deal with uncertainty, it is not a substitute for completing necessary studies before issuance of a license.

Reopeners

All licenses issued after 1975 include the Commission's standard reservation of authority (L-form article) to reopen the license for the conservation and development of fish and wildlife resources ([exhibit 8](#)). This authority can be used to reopen the license to address unforeseen circumstances related to ESA issues. Thus, there is no need to include a specific reservation of authority for ESA purposes.⁵⁶



⁵⁶ Order on rehearing, Clark Fork Project, P-2058-015, 93 FERC ¶ 61,116, October 30, 2000.

5

Post-licensing Process

5.1 LICENSE AMENDMENTS

Section 7 consultation for license amendments⁵⁷ is generally similar to the process followed for licensing. The pre-filing consultation process for a non-capacity amendment, however, is abbreviated [18 CFR § 4.38(a)(5)]. After filing, scoping may not be conducted and draft EAs may not be prepared. Otherwise, the major steps are the same: (1) development of adequate information; (2) opportunity for the applicant to be designated as a non-federal representative; (3) preparation of a BA by the applicant or Commission staff; and (3) issuance of a BO by the Service.

5.2 DEVELOPMENT OF NEW INFORMATION

New species may be listed or new information may become available suggesting a potential project effect on listed species or critical habitat. The Commission staff will work with the Service, as well as licensees, resource agencies, and other interested persons, regarding the Commission's section 7 responsibilities absent a license amendment or other federal action requiring Commission approval after a license is issued for ongoing project operations.⁵⁸

[W]hen the Commission becomes aware of information to suggest that ongoing operation of a project may affect a threatened or endangered species, it is our practice to direct our staff to investigate the situation, in consultation with the licensee, the FWS (or NMFS, as appropriate), and any other interested participants, to determine what effects, if any, may be occurring, and what changes, if any, should be considered to avoid or mitigate those effects or to benefit the listed species. If changes are considered either necessary or desirable, the Commission can then institute a reopener proceeding to require them, or can entertain a voluntary amendment application from the licensee.

⁵⁷ Information on the license amendment process can be found in the Hydroelectric Project Handbook for Filings Other than Licenses and Exemptions, FERC, April 2001 (http://www.ferc.gov/hydro/docs/post_licensing_handbook.pdf).

⁵⁸ As discussed in the ITF Report ([appendix A](#), Post-licensing & ESA Section 7 Consultation), the Commission and the Service disagree over what triggers the initiation of section 7 consultation for ongoing project operations.

In either case, Commission action would be required to accomplish the change, thus providing the requisite federal agency action for formal ESA consultation.⁵⁹

The post-licensing procedures developed by the ITF provide a procedural framework for: (1) identifying issues; (2) consulting among the Commission, the applicant, and the Service; and (3) determining the need for measures to protect listed species and critical habitat. A look at the steps in the process and how ESA issues are integrated are outlined in [figure 9](#) and accompanying text.

Once concerns regarding endangered species have been raised, the Commission, the licensee, and the Service will consult to identify the information that would be needed to determine potential project effects. This consultation could include, among other things, compilation of existing scientific data and studies and/or identification of needed additional information. If appropriate, the Commission and the licensee, with Service input, will use this information to prepare a biological evaluation (BE) on the effects of the project on the listed species. A BE generally contains the same information as is found in a BA.

If the BE indicates that no measures are needed to change project operations, the Commission will write a letter to the Service explaining the reasons for this conclusion. The Service will provide a written letter concurring with, or disputing this conclusion. If the Service disputes this conclusion, and the Commission and Service are unable to agree, they will seek to resolve the issue at a higher level within their respective agencies. If the results of the consultation indicate that changes in existing project operations or facilities are needed to protect listed species, and the licensee agrees with those changes, the licensee would either implement those changes that are consistent with the current license or file a non-capacity amendment application with FERC. This application may be accompanied by an Offer of Settlement and a BO on the proposed action, in accordance with the Commission's procedures.

If the licensee does not agree with the proposed changes developed during consultation, the Commission would attempt to bring the parties together to seek a mutually acceptable way of addressing the ESA issues presented. If this effort is unsuccessful and the Commission believes that changes in existing project operations or facilities and license conditions are needed to protect listed species, the Commission would use its reserved authority in the current license to initiate a license reopener proceeding (see [section 4.7](#)). The Commission would issue a public notice of the proceeding to invite public comments and interventions, and to provide the licensee

⁵⁹ See Order Denying Petition, Blue Ridge Project, P-2304-005, 94 FERC ¶ 61,202, February 23, 2000.

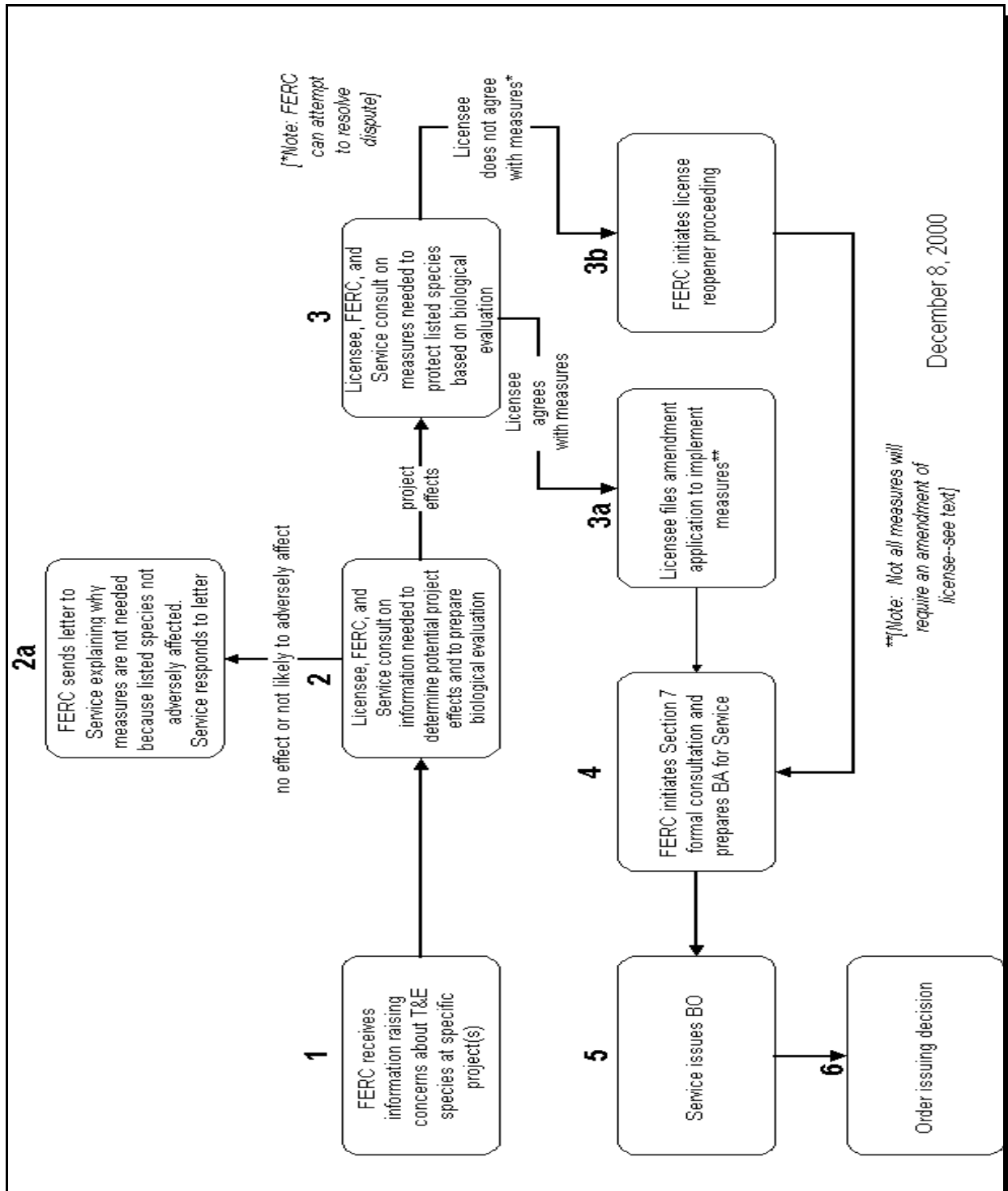


Figure 9. Post-licensing process and endangered species consultation (Source: ITF Report, appendix II, figure 4, as annotated by FERC staff).

Post-licensing Process

The steps described below refer to the stages represented by each box in [figure 9](#), "Post-licensing Process and Endangered Species Consultation" (Source: ITF Report, appendix II).

BOX 1--After a license is issued, new information may surface regarding project effects on listed species or critical habitat. In other instances, new species may be listed or critical habitat may be designated after a project is licensed and operational. FERC may receive information from licensees, non-governmental organizations, or the Service raising concerns about the effects of specific projects on the listed species or critical habitat.

BOX 2--FERC, the licensee, and the Service will consult to identify the information that would be needed to determine potential project effects. This consultation could include, among other things, compilation of existing scientific information/studies and/or identification of needed scientific information/studies. FERC and the licensee, with Service input as appropriate, will use this information to prepare a Biological Evaluation (BE) on the effects of the project on the listed species. FERC, the licensee, and the Service will attempt to reach agreement on a time frame for completing consultation, taking into account the potential effects that may be occurring while consultation proceeds.

BOX 2a--If the BE indicates that protective measures are not needed because project operations have no effect or are not likely to adversely affect the listed species, then FERC will send a letter and the BE to the Service explaining its reasons for the finding. FERC could also determine that, while there may be changes to existing project operations needed to protect listed species, no changes to the license would be needed to facilitate those changes. The Service will respond to FERC's letter indicating whether or not they agreed with FERC's determination. If FERC and the Service are unable to agree, they will seek to resolve the issue at a higher level within their respective agencies.

BOX 3--Based on the information developed in BOX 2, FERC, the licensee, and the Service will continue consultation to develop conservation actions and operational criteria that could be incorporated into the project to avoid and minimize impacts to the listed species.

BOX 3a--If the results of consultation indicate that changes in existing project operations or facilities and license conditions are needed to protect listed species, and the licensee agrees with those changes, the licensee would file a non-capacity amendment application with FERC. The application, among other things, should include the licensee's proposed changes to project operations or facilities, as well as the comments of the Service, any state fish and wildlife agencies, and any Indian tribes that may be affected by the proposed change.

BOX 3b--If the results of the consultation indicate that changes in existing project operations or facilities and license conditions are needed to protect listed species, but the licensee does not agree with those changes, FERC would initiate a license reopener proceeding based on a specific or

standard license reopener article.* FERC would issue a public notice of the reopener proceeding, indicating the reason for the reopener, inviting comments from the resource agencies and interveners, and providing notice and opportunity for hearing to the licensee.

BOXES 4 THROUGH 6--The activities identified in BOX 3a and BOX 3b will require formal consultation under section 7 of the ESA, unless FERC and the Service agree that the actions are not likely to adversely affect listed species. FERC may designate the licensee to act as its non-federal representative for purposes of informal consultation. FERC will initiate formal consultation under the ESA and, with the exception of the FPA 10(j) process, follow procedures as outlined in Boxes 13 -17 in the post-filing licensing process.

* All licenses issued since October 31, 1975, contain standard reopener articles for fish and wildlife that can be used to address ESA issues (see [exhibit 8](#)). Some older licenses do not contain provisions to reopen the license for the protection of fish and wildlife. In those cases, FERC and the Service should continue consultation with the licensee to facilitate the necessary changes to project operations or facilities.

with notice and an opportunity for a hearing. When a proposed action is developed (which could be an Offer of Settlement and license amendment proposal), the Commission will ensure that its formal consultation responsibilities under section 7(a)(2) of the ESA, as described above, are fulfilled. FERC may designate the licensee to act as its non-federal representative for purposes of informal consultation and may assign staff to assist in this process and to encourage the resolution of disputes regarding measures needed to protect listed species.

Implementation of measures to protect listed species will not always require a license amendment. The licensee, with FERC oversight, may voluntarily collaborate with the Service to facilitate any necessary changes in project operations, if those changes are consistent with the requirements of the current project license.

5.3 Article Compliance

Approval of measures required by license articles may require endangered species consultation if the effects of the measures on endangered species were not considered during the licensing action. Staff has conducted formal consultation on actions such as approval of a management plan for the Karner blue butterfly or approval of a dam remediation plan.

5.4 Reinitiation of Formal Consultation

We may need to reinitiate consultation during the license term if: (1) the amount of incidental take anticipated in the biological opinion is exceeded; (2) the action is modified such that impacts not previously considered could result; (3) unanticipated impacts result; or (4) a new species is listed or critical habitat is designated that may be affected by the action (50 CFR § 402.16).



Interagency Task Force Report on
Improving Coordination of
ESA Section 7 Consultation with the FERC Licensing Process¹

Prepared by the Work Group on the Coordination of Federal Mandates:

*Federal Energy Regulatory Commission
U.S. Department of the Interior
U.S. Department of Commerce
U.S. Department of Agriculture
Environmental Protection Agency
Advisory Council on Historic Preservation*

December 12, 2000

Introduction

Under Section 7(a)(2) of the Endangered Species Act (ESA), federal agencies are required to consult with the U.S. Fish and Wildlife Service (FWS) and/or the National Marine Fisheries Service (NMFS), as appropriate, to ensure that any federal action is not likely to jeopardize the continued existence of any threatened or endangered species, or adversely modify critical habitat designated for those species. For hydroelectric licensing proceedings under the Federal Power Act (FPA), ESA consultation is often required in connection with the issuance of original and new licenses. ESA consultation may also be required, in some cases, after a license is issued. Throughout this document, the term "Service" refers generically to FWS and/or NMFS.

This document describes procedures to coordinate and integrate the ESA consultation process with the FPA licensing process, and provides a means of addressing post-licensing consideration of ESA issues. These procedures are intended as general guidance for applicants, FERC staff, and resource agency staff who are engaged in either the traditional or alternative licensing process, subject to any modifications that may be required to address the particular circumstances of each proceeding. This document also addresses issues related to the adequacy of information, off-the record communications, economic feasibility, settlement agreements, information from the Service, and scope of effects of the proposed action. The solutions developed to address these issues are contained both in the main body of the document and in the accompanying appendices. In order to provide the reader with an overview of the new procedures, flow charts are also included with the appendices to this Report. This document is not intended as a modification or restatement of the applicable procedural regulations under the FPA and ESA section 7, respectively, and it is assumed that the reader has basic familiarity with these regulations. Therefore, the reader should refer to the applicable regulations for more detail regarding the procedures addressed in this document. This document does not address substantive issues related to FERC's and the Service's or other resource agencies' responsibilities under Sections 4(e), 10(j), and 18 of the FPA; these issues are considered in a later report.

Coordinating the ESA Section 7 and FPA Licensing Processes

Issues: If a proposed agency action may affect a listed species or critical habitat, consultation with the Service is required under Section 7 of the ESA. If formal consultation is required, this process culminates with the Service's

¹ This appendix only includes the main text of the ITF Report. Appendices I and II of the ITF report have been incorporated into the text of this guidance document (figures 2, 3, 7, and 9 and accompanying text). The entire report can be found on the Commission's web site (<http://www.ferc.gov/hydro/docs/interagency.htm>).

issuance of a Biological Opinion (BO). In formulating its BO, the Service must use the best scientific and commercial information available. The ESA Section 7 regulations and FPA licensing regulations establish processes which require certain actions to be completed within specific time frames before a BO or new license can be issued. While the licensing process may take several years, Section 7 consultations typically do not require this amount of time. Often, however, the same issues are raised in both processes and require the same or similar information for resolution. There is a common concern that, at times, the ESA Section 7 consultation and FPA licensing processes have not been well integrated, resulting in inefficiencies, inconsistencies, and delays in the application process. Examples of issues raised include:

- When should informal consultation be initiated?
- When should the Biological Assessment (BA) be prepared? (A BA, prepared by the action agency, or the applicant as FERC's designated non-federal representative, aids the action agency in determining if formal consultation is needed.)
- At what point in the licensing process should the formal consultation process begin and end to ensure the BO: Considers an accurate formulation of the proposed action; is based on the best information available; and, is coordinated with a licensing decision?
- How should the ESA Section 7 process be coordinated and integrated with the FERC NEPA process?
- To what extent can FERC's draft EA or draft EIS be used as a BA to initiate formal consultation?
- Where consultations with both NMFS and FWS are required, to what extent should a joint BO be prepared?
- How should the ESA Section 7 process be coordinated and integrated with the FPA Section 10(j) process?
- What is the role of FERC, and/or the applicant as its designated non-federal representative, in this process?

Proposed Solutions:

In Appendix I to this document, FERC and the Service have outlined a means of integrating and coordinating the procedural steps of the FPA licensing process and the ESA Section 7 consultation process. The coordination of the two processes is largely keyed to FERC's traditional licensing process, but Appendix I may be applied to the alternative licensing process as well. In order to expedite both ESA consultation and the overall licensing process, the streamlined process set out in the Appendix aims to ensure that ESA issues are considered early in the process and evaluated alongside other issues.

Specific solutions to the issues posed can be found throughout Appendix I. In summary, they include:

- FERC will designate the license applicant, whenever possible, to act as a non-federal representative for purposes of informal ESA consultation during the FPA pre-application consultation process. FERC will furnish guidance and supervision as needed and will independently review the biological assessment. FERC retains the ultimate responsibility for section 7 compliance during the licensing process.
- Parties are strongly encouraged to discuss, and resolve where possible, ESA issues before a license application is filed.
- Applicants are strongly encouraged to prepare and file a draft biological assessment with the license application.
- In requesting studies and additional information, resource agencies will consider ESA issues and draft their requests accordingly.
- FERC will make sure that ESA issues are integrated into the scoping process.
- If the effort to consider and integrate ESA issues early in the process is successful, FERC will integrate and coordinate ESA formal consultation with the NEPA and Section 10(j) processes, at least for routine cases. If applied flexibly, this approach may also provide useful guidance for more complex cases. (This approach assumes that the Service and FERC agree that the information base is sufficient to initiate consultation.)
- In such cases, FERC will request initiation of formal consultation when the draft NEPA document is issued. If the Service agrees that the information is sufficient, consultation will proceed expeditiously, and can be

completed simultaneously with completion of the Section 10(j) process. The Service will then issue its BO which FERC will include in its final NEPA analysis document.

FERC's Rules Regarding Off-the-Record Communications

Issues: FERC's rules prohibit off-the-record communications between FERC and persons outside FERC in contested on-the-record proceedings (those in which there is an opportunity to intervene and an intervener disputes any material issue). 18 CFR 2201. As a result, FERC has required that, when consultation under Section 7 of the ESA occurs in a contested case, it must be conducted on-the-record. Generally, only FERC and the Service are consulting parties, with the license applicant usually invited to participate. In some cases, an applicant may be designated to act as a non-federal representative for purposes of informal ESA consultation. If informal ESA consultation occurs early, before a license application is filed, the rule prohibiting off-the-record communications does not apply. However, if ESA consultation (whether informal or formal) occurs post-filing and involves FERC staff in the context of a contested proceeding, FERC requires that other parties be given notice of meetings or other substantive discussions of the matters at issue, as well as an opportunity to be present and observe the consultation. Section 7 consultations are usually most effective when done informally, early, and openly with the action agency and applicant, which allows for early resolution of ESA-related problems. Therefore, FERC's need for on-the-record communications may have the effect of deterring informal discussion of ESA issues.

Proposed Solutions:

FERC recently issued a final rule that would allow for certain limited exceptions to the rule prohibiting off-the-record communications, coupled with a disclosure requirement (64 Federal Register 51222, September 22, 1999). On November 21, 2000, FERC issued its decision on rehearing of the final rule. 93 FERC ¶ 61,181. On rehearing, the Commission declined to include a specific exemption for ESA consultation, and determined that the NEPA exemption regarding off-the-record communications should not be used for ESA consultation that occurs as part of the NEPA process. As a result, post-filing ESA consultation in contested cases will continue to be conducted on the record. We note, however, that the rule includes an exemption permitting off-the-record consultations in certain circumstances with non-party agencies under the ESA and other statutes.

The Work Group addressed this issue in the previous section on coordination by providing for early, informal consultation before a license application is filed, when an on-the-record proceeding has not yet begun and the rule prohibiting off-the-record communications does not apply.

Adequacy of Information

Issues: The ESA requires the Service to base its biological opinion on the best scientific and commercial data available. In the consultation context, the following issues may arise:

- What happens if the Service and FERC disagree about what constitutes the best available data for: (a) the purposes of initiating consultation or (b) providing the basis upon which the Service issues a BO?
- What constitutes the "best scientific and commercial data available" and to what lengths must the action agency go to obtain it?
- If the Service believes that additional data would provide a better information base upon which to formulate its biological opinion, how should the consultation proceed?
- When consultation is completed without additional data, to what extent is there a continuing responsibility to obtain that data?
- How should the consultation time line be coordinated with FERC's time line for the project in the event there is a need to obtain additional data?

Proposed Solutions:

1. If FERC and the Service are able to agree on what information is needed for the purpose of initiating consultation, FERC will provide the necessary information or request it from the license applicant.
2. If the Service and FERC disagree about what constitutes the best scientific and commercial data available for the purpose of initiating consultation, FERC, the Service, and the applicant will schedule a meeting (or teleconference)² to discuss what information is available and needed to initiate consultation, and what additional information can be obtained during the consultation to ensure that the Service's biological opinion is based upon the best scientific and commercial data available.
3. If, after meeting, FERC and the Service still cannot agree on whether the information provided by FERC for the purpose of initiating consultation is adequate, the Service will identify, in writing, the specific information needed to initiate consultation. The Service also may specify what, if any, information can be obtained during the consultation to ensure that the Service's biological opinion is based upon the best scientific and commercial data available. FERC will provide this information or demonstrate in writing why some or all of the information requested is unavailable or is not appropriate. In the latter case, the Service will take a hard look at the information provided to determine whether it is adequate to initiate formal consultation. The Service will inform FERC in writing of its determination and the reasons for it. If FERC and the Service are unable to agree, they will seek to resolve the issue at a higher level within their respective agencies. If the Service still determines that the information is not adequate to initiate consultation, FERC will decide what course of action may be appropriate with respect to the request and the pending license application, and if possible, notify the Service of its decision prior to taking action.
4. If the Service determines that sufficient information has been presented to initiate consultation, but additional data would provide a better information base upon which to formulate a biological opinion, the Service may request an extension of formal consultation and request that FERC obtain the additional data. The Service will provide FERC and the applicant with its reasons for concluding that additional data are needed.
5. If FERC and the Service agree that the additional data are needed, FERC will agree to the extension and obtain, to the extent practicable, the data that can be developed during the extension. An extension greater than 60 days shall require the consent of the applicant. (See 50 CFR 402.14(e))
6. If FERC and the Service are unable to agree on the need for additional information, the Service will proceed with consultation based on the data already provided and otherwise available to the Service. The Service will prepare a biological opinion that: (a) documents what information was not provided and why such information would have been helpful in improving the information base for consultation; and (b) resolves uncertainties in favor of the conservative protection of the listed species – including any uncertainties that arise from differences between the Service's and FERC's views of what constitutes the best scientific and commercial data available.

Economic Feasibility

Issues: To be considered a reasonable and prudent alternative (RPA), ESA regulations require that an action be both economically feasible and capable of avoiding jeopardy and destruction or adverse modification of critical habitat. To assess economic feasibility, information regarding how the proposed modifications will affect costs is needed. FERC provides information on the cost of environmental measures in its environmental documents and compares the cost of project power to the cost of replacement power. However, FERC's policy is to allow the license applicant to determine whether to accept the license, including conditions requiring any reasonable and prudent alternatives, and all costs associated with such conditions. This approach can make it difficult for the Service to determine whether RPAs are economically feasible.

² This should be discussed at the NEPA clarification meeting, if held.

Proposed Solutions:

1. The Service, the Commission, and the applicant will develop information on economic feasibility during informal consultation. If this information is not provided, the Service will inform FERC. If FERC agrees that such information is available or can be obtained during consultation, FERC will request the license applicant to provide this information, and will be responsible for ensuring that the applicant supplies such information to the Service, as appropriate.
2. FERC will include information on the cost of environmental measures to protect listed species and their habitat in its draft NEPA document, consistent with FERC's guidelines for conducting its economic analysis.
3. If the Service prepares a draft biological opinion with reasonable and prudent alternatives that differ from the environmental measures for threatened and endangered species included in FERC's draft NEPA document, FERC will provide the Service with a revised economic analysis of those measures upon request.

Settlement Agreements

Issues: Under both the traditional and the alternative licensing process, the Service may be involved in resource issues work groups and subsequent settlement negotiations. The Service may also be involved in settlements after license applications have been filed or after a license has been issued. Often these settlements address endangered species issues or include measures that could affect endangered species (e.g., minimum flow releases). Section 7 consultation, if needed, typically follows development of the settlement.

When parties reach a settlement agreement in a case that includes ESA issues, concerns may arise about how best to accommodate both the settlement process and the need for consultation under Section 7 of the ESA. If the Service participates in settlement negotiations and agrees to a settlement, parties may be concerned about the possibility of Section 7 consultation yielding results that are inconsistent with the settlement agreement. Parties may also be uncertain about the need for consultation on the provisions of the settlement. If a settlement is reached after consultation has been completed, the applicability of that consultation may be in question. These issues are related to the general issue of coordinating ESA consultation and the licensing process, and include both the timing and the substance of consultation in relation to settlement agreements.

Proposed Solution:

1. Service T&E staff, as well as Service hydropower staff, will participate in settlement discussions and anticipate the consequences of the settlement on listed or proposed species, on the applicability of any completed consultations, and on the future need for Section 7 consultation. This will help ensure that, to the degree practicable, the protective measures recommended in the settlement process will encompass those measures found necessary during the Section 7 process. However, the Service will reserve its right to develop additional or different measures necessary to meet its responsibilities under Section 7.

Post-licensing & ESA Section 7 Consultation

Issues: After a license is issued, FERC and the Service agree that ESA consultation may be triggered by a license amendment or other action requiring FERC approval. However, new species may be listed or new information may become available indicating a potential project effect on listed species or critical habitat. FERC and the resource agencies differ regarding FERC's Section 7 responsibility absent a license amendment or other federal action requiring Commission approval after a license is issued. In FERC's view, a definitive federal action, such as Commission approval of a license amendment, is needed to trigger consultation. In the Service's view, either new listings or new information, together with FERC's continued oversight and discretionary authority over licenses, are sufficient to trigger Section 7 consultation for an ongoing license. In addition, the Service believes that the transfer of a license is a federal process meeting the definition of an "action" in 50 CFR 402.02, whereas FERC regards a license transfer as not meeting this definition, because it involves merely a substitution of licensees without any

substantive changes in the license.

Proposed Solution:

In Appendix II to this document, FERC and the Service have outlined a means of addressing ESA issues in the post-licensing context. The Appendix provides a procedural framework for identifying issues; consulting among FERC, the applicant and the Service; and determining the need for measures to protect listed species and critical habitat.

Information from the Service

Issues: In both licensing and post-licensing proceedings, FERC and licensees often consult with resource agencies with respect to environmental issues. In some cases, the agencies have separate technical staffs that consult exclusively on either hydropower or ESA issues. In addition, there are cases in which ESA and hydropower staffs from both Services are participants. Given the various types of agency staff which might be involved, there is potential for conflicting agency guidance, processes, and understandings to develop.

Proposed Solution:

1. As outlined in Appendix I to this document, Service ESA staff, as well as Service hydropower staff, will become involved early in the process (i.e., during pre-filing consultation with prospective license applicants) to ensure that ESA issues are considered together with other issues. During licensing proceedings, Service ESA staff and Service hydropower staff will continue to consult and coordinate with one another to assure a consistent approach to licensing issues. Service participation in post-licensing proceedings and settlement negotiations will be similarly coordinated.

"Scope of Effects" of Proposed Action

Issues: The regulations on Section 7 consultation list examples of "action" as actions directly or indirectly causing modifications to the land, water, or air. Indirect effects are delayed effects caused by the proposed action which are reasonably certain to occur. The Service and FERC sometimes differ on the "scope of effects" of a proposed action. These differences concern whether the effects in question are reasonably related to the proposed action, and whether there is a "reasonable" likelihood that indirect effects may result from the proposed action.

Proposed Solutions:

1. Participants are encouraged to identify the scope of effects early in the FPA process thereby allowing sufficient time to adequately resolve concerns while avoiding delays that may otherwise result.
2. In its cover letter transmitting its NEPA document or Biological Assessment, FERC will explain how it considered direct and indirect effects of the proposed action, any cumulative effects, and the effects of any interrelated or interdependent actions, as well as the basis for its findings.
3. In assessing the adequacy of information provided, the Service will be as specific as possible about what effects or actions it believes FERC should have considered, or did not consider in sufficient detail.

**SECTIONS 7(a)-(d) OF THE ENDANGERED SPECIES ACT
INTERAGENCY COOPERATION****Sec. 7. (a) Federal Agency Actions and Consultations.-**

(1) The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purpose of this Act. All other Federal agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 4 of this Act.

(2) Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter 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, after consultation as appropriate with affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee pursuant to subsection (h) of this section. In fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available.

(3) Subject to such guidelines as the Secretary may establish, a Federal agency shall consult with the Secretary on any prospective agency action at the request of, and in cooperation with, the prospective permit or license applicant if the applicant has reason to believe that an endangered species or a threatened species may be present in the area affected by his project and that implementation of such action will likely affect such species.

(4) Each Federal agency shall confer with the Secretary on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under section 4 or result in the destruction or adverse modification of critical habitat proposed to be designated for such species. This paragraph does not require a limitation on the commitment of resources as described in subsection (d).

(b) Opinion of Secretary.-(1)(A) Consultation under subsection (a)(2) with respect to any agency action shall be concluded within the 90-day period beginning on the date on which initiated or, subject to subparagraph (B), within such other period of time as is mutually agreeable to the Secretary and the Federal agency;

(B) in the case of an agency action involving a permit or license applicant, the Secretary and the Federal agency may not mutually agree to conclude consultation within a period exceeding 90 days unless the Secretary, before the close of the 90th day referred to in subparagraph (A)-

(i) if the consultation period proposed to be agreed to will end before the 150th day after the date on which consultation was initiated, submits to the applicant a written statement setting forth-

(I) the reasons why a longer period is required

(II) the information that is required to complete the consultation; and

(III) the estimated date on which consultation will be completed; or

(ii) if the consultation period proposed to be agreed to will end 150 or more days after the date on which consultation was initiated, obtains the consent of the applicant to such period. The Secretary and the Federal agency may mutually agree to extend a consultation period established under the preceding sentence if the Secretary, before the close of such period, obtains the consent of the applicant to the extension.

(2) Consultation under subsection (a)(3) shall be concluded within such period as is agreeable to the Secretary, the Federal agency, and the applicant concerned.

(3)(A) Promptly after conclusion of consultation under paragraph (2) or (3) of subsection (a), the Secretary shall provide to the Federal agency and the applicant, if any, a written statement setting forth the Secretary's opinion, and a summary of the information on which the opinion is based, detailing how the agency action affects the species or its critical habitat. If jeopardy or adverse modifications is found, the Secretary shall suggest those reasonable and prudent alternatives which he believes would not

violate subsection (a)(2) and can be taken by the Federal agency or applicant in implementing the agency action.

(B) Consultation under subsection (a)(3), and an opinion issued by the Secretary incident to such consultation, regarding an agency action shall be treated respectively as a consultation under subsection (a)(2), and as an opinion issued after consultation under such subsection, regarding that action if the Secretary reviews the action before it is commenced by the Federal agency and finds, and notifies such agency, that no significant changes have been made with respect to the action and that no significant change has occurred regarding the information used during the initial consultation.

(4) If after consultation under subsection, (a)(2), the Secretary concludes that-

(A) the agency action will not violate such subsection, or offers reasonable and prudent alternatives which the Secretary believes would not violate such subsection; and

(B) the taking of an endangered species or a threatened species incidental to the agency action will not violate such subsection;

(C) if an endangered species or threatened species of a marine mammal is involved, the taking is authorized pursuant to section 1371(a)(5) of this title; the Secretary shall provide the Federal agency and the applicant concerned, if any, with a written statement that-

(i) specifies the impact of such incidental taking on the species,

(ii) specifies those reasonable and prudent measures that the Secretary considers necessary or appropriate to minimize such impacts,

(iii) in the case of marine mammals, specifies those measures that are necessary to comply with section 1371(a)(5) of this title with regard to such taking, and

(iv) sets forth the terms and conditions (including, but not limited to, reporting requirements) that must be complied with by the Federal agency or applicant (if any), or both, to implement the measures specified under clauses (ii) and (iii).

(c) Biological Assessment.-(1) To facilitate compliance with the requirements of subsection (a)(2) each Federal agency shall, with respect to any agency action of such agency for which no contract for construction has been entered into and for which no construction has begun on the date of enactment of the Endangered Species Act Amendments of 1978, request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action. If the Secretary advises, based on the best scientific and commercial data available, that such species may be present, such agency shall conduct a biological assessment of the purposed of identifying any endangered species or threatened species which is likely to be affected by such action. Such assessment shall be completed by 180 days after the date on which initiated (or within such other period as is mutually agreed to by the Secretary and such agency, except that if a permit or license applicant is involved, the 180-day period may not be extended unless such agency provides the applicant, before the close of such period, with a written statement setting forth the estimated length of the proposed extension and the reasons therefore) and, before any contract for construction is entered into and before construction is begun with respect to such action. Such assessment may be undertaken as part of a Federal agency's compliance with the requirements of section 102 of the National Environmental Policy Act of 1969 (42 U.S.C. 4332).

(2) Any person who may wish to apply for an exemption under subsection (g) of this section for that action may conduct a biological assessment to identify any endangered species or threatened species which is likely to be affected by such action. Any such biological assessment must, however, be conducted in cooperation with the Secretary and under the supervision of the appropriate Federal agency.

(d) Limitation on Commitment of Resources.-After initiation of consultation required under subsection (a)(2), the Federal agency and the permit or license applicant shall not make any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures which would not violate subsection (a)(2).

TITLE 50--WILDLIFE AND FISHERIES

CHAPTER IV--JOINT REGULATIONS
(UNITED STATES FISH AND
WILDLIFE SERVICE,
DEPARTMENT OF THE INTERIOR
AND NATIONAL MARINE FISHERIES
SERVICE,

**PART 402--INTERAGENCY
COOPERATION--ENDANGERED
SPECIES ACT OF 1973, AS
AMENDED**

Subpart A--General

Sec.

- 402.01 Scope.
- 402.02 Definitions.
- 402.03 Applicability.
- 402.04 Counterpart regulations.
- 402.05 Emergencies.
- 402.06 Coordination with other environmental reviews.
- 402.07 Designation of lead agency.
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- 402.09 Irreversible or irretrievable commitment of resources.

Subpart B--Consultation Procedures

- 402.10 Conference on proposed species or proposed critical habitat.
- 402.11 Early consultation.
- 402.12 Biological assessments.
- 402.13 Informal consultation.
- 402.14 Formal consultation.
- 402.15 Responsibilities of Federal agency following issuance of a biological opinion.
- 402.16 Reinitiation of formal consultation.

Authority: 16 U.S.C. 1531 et seq.

Source: 51 FR 19957, June 3, 1986, unless otherwise noted.

Subpart A--General**Sec. 402.01 Scope.**

(a) This part interprets and implements sections 7(a)-(d) [16 U.S.C. 1536(a)-(d)] of the Endangered Species Act of 1973, as amended ("Act"). Section 7(a) grants authority to and imposes requirements upon Federal agencies regarding endangered or threatened species of fish, wildlife, or plants ("listed species") and habitat of such species that has been designated

as critical ("critical habitat"). Section 7(a)(1) of the Act directs Federal agencies, in consultation with and with the assistance of the Secretary of the Interior or of Commerce, as appropriate, to utilize their authorities to further the purposes of the Act by carrying out conservation programs for listed species. Such affirmative conservation programs must comply with applicable permit requirements (50 CFR parts 17, 220, 222, and 227) for listed species and should be coordinated with the appropriate Secretary. Section 7(a)(2) of the Act requires every Federal agency, in consultation with and with the assistance of the Secretary, to insure that any action it authorizes, funds, or carries out, in the United States or upon the high seas, is not likely to jeopardize the continued existence of any listed species or results in the destruction or adverse modification of critical habitat. Section 7(a)(3) of the Act authorizes a prospective permit or license applicant to request the issuing Federal agency to enter into early consultation with the Service on a proposed action to determine whether such action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. Section 7(a)(4) of the Act requires Federal agencies to confer with the Secretary on any action that is likely to jeopardize the continued existence of proposed species or result in the destruction or adverse modification of proposed critical habitat. Section 7(b) of the Act requires the Secretary, after the conclusion of early or formal consultation, to issue a written statement setting forth the Secretary's opinion detailing how the agency action affects listed species or critical habitat. Biological assessments are required under section 7(c) of the Act if listed species or critical habitat may be present in the area affected by any major construction activity as defined in Sec. 404.02. Section 7(d) of the Act prohibits Federal agencies and applicants from making any irreversible or irretrievable commitment of resources which has the effect of foreclosing the formulation or implementation of reasonable and prudent alternatives which would avoid jeopardizing the continued existence of listed species or resulting in the destruction or adverse modification of critical habitat. Section 7(e)-(o)(1) of the

Act provide procedures for granting exemptions from the requirements of section 7(a)(2). Regulations governing the submission of exemption applications are found at 50 CFR part 451, and regulations governing the exemption process are found at 50 CFR parts 450, 452, and 453.

(b) The U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) share responsibilities for administering the Act. The Lists of Endangered and Threatened Wildlife and Plants are found in 50 CFR 17.11 and 17.12 and the designated critical habitats are found in 50 CFR 17.95 and 17.96 and 50 CFR part 226. Endangered or threatened species under the jurisdiction of the NMFS are located in 50 CFR 222.23(a) and 227.4. If the subject species is cited in 50 CFR 222.23(a) or 227.4, the Federal agency shall contact the NMFS. For all other listed species the Federal Agency shall contact the FWS.

Sec. 402.02 Definitions.

Act means the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 et seq.

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. Examples include, but are not limited to:

- (a) actions intended to conserve listed species or their habitat;
- (b) the promulgation of regulations;
- (c) the granting of licenses, contracts, leases, easements, rights-of-way, permits, or grants-in-aid; or
- (d) actions directly or indirectly causing modifications to the land, water, or air.

Action area means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.

Applicant refers to any person, as defined in section 3(13) of the Act, who requires formal approval or authorization from a Federal agency as a prerequisite to conducting the action.

Biological assessment refers to the information prepared by or under the direction of the Federal agency concerning listed and proposed

species and designated and proposed critical habitat that may be present in the action area and the evaluation potential effects of the action on such species and habitat.

Biological opinion is the document that states the opinion of the Service as to whether or not the Federal action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.

Conference is a process which involves informal discussions between a Federal agency and the Service under section 7(a)(4) of the Act regarding the impact of an action on proposed species or proposed critical habitat and recommendations to minimize or avoid the adverse effects.

Conservation recommendations are suggestions of the Service regarding discretionary measures to minimize or avoid adverse effects of a proposed action on listed species or critical habitat or regarding the development of information.

Critical habitat refers to an area designated as critical habitat listed in 50 CFR parts 17 or 226.

Cumulative effects are those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation.

Designated non-Federal representative refers to a person designated by the Federal agency as its representative to conduct informal consultation and/or to prepare any biological assessment.

Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but actions adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.

Director refers to the Assistant Administrator for Fisheries for the National Oceanic and Atmospheric Administration, or his authorized representative; or the Fish and Wildlife Service regional director, or his authorized representative, for the region where the action would be carried out.

Early consultation is a process requested by a Federal agency on behalf of a prospective applicant under

section 7(a)(3) of the Act.

Effects of the action refers to the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. Indirect effects are those that are caused by the proposed action and are later in time, but still are reasonably certain to occur. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration.

Formal consultation is a process between the Service and the Federal agency that commences with the Federal agency's written request for consultation under section 7(a)(2) of the Act and concludes with the Service's issuance of the biological opinion under section 7(b)(3) of the Act.

Incidental take refers to takings that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or applicant.

Informal consultation is an optional process that includes all discussions, correspondence, etc., between the Service and the Federal agency or the designated non-Federal representative prior to formal consultation, if required.

Jeopardize the continued existence of means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.

Listed species means any species of fish, wildlife, or plant which has been determined to be endangered or threatened under section 4 of the Act. Listed species are found in 50 CFR 17.11-17.12.

Major construction activity is a construction project (or other

undertaking having similar physical impacts) which is a major Federal action significantly affecting the quality of the human environment as referred to in the National Environmental Policy Act [NEPA, 42 U.S.C. 4332(2)(C)].

Preliminary biological opinion refers to an opinion issued as a result of early consultation.

Proposed critical habitat means habitat proposed in the Federal Register to be designated or revised as critical habitat under section 4 of the Act for any listed or proposed species.

Proposed species means any species of fish, wildlife, or plant that is proposed in the Federal Register to be listed under section 4 of the Act.

Reasonable and prudent alternatives refer to alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purpose of the action, that can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction, that is economically and technologically feasible, and that the Director believes would avoid the likelihood of jeopardizing the continued existence of listed species or resulting in the destruction or adverse modification of critical habitat.

Reasonable and prudent measures refer to those actions the Director believes necessary or appropriate to minimize the impacts, i.e., amount or extent, of incidental take.

Recovery means improvement in the status of listed species to the point at which listing is no longer appropriate under the criteria set out in section 4(a)(1) of the Act.

Service means the U.S. Fish and Wildlife Service or the National Marine Fisheries Service, as appropriate.

Sec. 402.03 Applicability.

Section 7 and the requirements of this part apply to all actions in which there is discretionary Federal involvement or control.

Sec. 402.04 Counterpart regulations.

The consultation procedures set forth in this part may be superseded by a particular Federal agency by joint counterpart regulations among that agency, the Fish and Wildlife Service, and the National Marine Fisheries

Service. Such counterpart regulations shall be published in the Federal Register in proposed form and shall be subject to public comment for at least 60 days before final rules are published.

Sec. 402.05 Emergencies.

(a) Where emergency circumstances mandate the need to consult in an expedited manner, consultation may be conducted informally through alternative procedures that the Director determines to be consistent with the requirements of sections 7(a)-(d) of the Act. This provision applies to situations involving acts of God, disasters, casualties, national defense or security emergencies, etc.

(b) Formal consultation shall be initiated as soon as practicable after the emergency is under control. The Federal agency shall submit information on the nature of the emergency action(s), the justification for the expedited consultation, and the impacts to endangered or threatened species and their habitats. The Service will evaluate such information and issue a biological opinion including the information and recommendations given during the emergency consultation.

Sec. 402.06 Coordination with other environmental reviews.

(a) Consultation, conference, and biological assessment procedures under section 7 may be consolidated with interagency cooperation procedures required by other statutes, such as the National Environmental Policy Act (NEPA) (42 U.S.C. 4321 et seq., implemented at 40 CFR Parts 1500-1508) or the Fish and Wildlife Coordination Act (FWCA) (16 U.S.C. 661 et seq.). Satisfying the requirements of these other statutes, however, does not in itself relieve a Federal agency of its obligations to comply with the procedures set forth in this part or the substantive requirements of section 7. The Service will attempt to provide a coordinated review and analysis of all environmental requirements.

(b) Where the consultation or conference has been consolidated with the interagency cooperation procedures required by other statutes such as NEPA or FWCA, the results should be included in the documents required by those statutes.

Sec. 402.07 Designation of lead agency.

When a particular action involves more than one Federal agency, the consultation and conference responsibilities may be fulfilled through a lead agency. Factors relevant in determining an appropriate lead agency include the time sequence in which the agencies would become involved, the magnitude of their respective involvement, and their relative expertise with respect to the environmental effects of the action. The Director shall be notified of the designation in writing by the lead agency.

Sec. 402.08 Designation of non-Federal representative.

A Federal agency may designate a non-Federal representative to conduct informal consultation or prepare a biological assessment by giving written notice to the Director of such designation. If a permit or license applicant is involved and is not the designated non-Federal representative, then the applicant and Federal agency must agree on the choice of the designated non-Federal representative. If a biological assessment is prepared by the designated non-Federal representative, the Federal agency shall furnish guidance and supervision and shall independently review and evaluate the scope and contents of the biological assessment. The ultimate responsibility for compliance with section 7 remains with the Federal agency.

Sec. 402.09 Irreversible or ir retrievable commitment of resources.

After initiation or reinitiation of consultation required under section 7(a)(2) of the Act, the Federal agency and any applicant shall make no irreversible or ir retrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternatives which would avoid violating section 7(a)(2). This prohibition is in force during the consultation process and continues until the

requirements of section 7(a)(2) are satisfied. This provision does not apply to the conference requirement for proposed species or proposed critical habitat under section 7(a)(4) of the Act.

Subpart B--Consultation Procedures

Sec. 402.10 Conference on proposed species or proposed critical habitat.

(a) Each Federal agency shall confer with the Service on any action which is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat. The conference is designed to assist the Federal agency and any applicant in identifying and resolving potential conflicts at an early stage in the planning process.

(b) The Federal agency shall initiate the conference with the Director. The Service may request a conference if, after a review of available information, it determines that a conference is required for a particular action.

(c) A conference between a Federal agency and the Service shall consist of informal discussions concerning an action that is likely to jeopardize the continued existence of the proposed species or result in the destruction or adverse modification of the proposed critical habitat at issue. Applicants may be involved in these informal discussions to the greatest extent practicable. During the conference, the Service will make advisory recommendations, if any, on ways to minimize or avoid adverse effects. If the proposed species is subsequently listed or the proposed critical habitat is designated prior to completion of the action, the Federal agency must review the action to determine whether formal consultation is required.

(d) If requested by the Federal agency and deemed appropriate by the Service, the conference may be conducted in accordance with the procedures for formal consultation in Sec. 402.14. An opinion issued at the conclusion of the conference may be adopted as the biological opinion when the species is listed or critical habitat is designated, but only if no significant new information is developed (including that developed during the rulemaking process on the proposed listing or critical habitat designation) and no

significant changes to the Federal action are made that would alter the content of the opinion. An incidental take statement provided with a conference opinion does not become effective unless the Service adopts the opinion once the listing is final.

(e) The conclusions reached during a conference and any recommendations shall be documented by the Service and provided to the Federal agency and to any applicant. The style and magnitude of this document will vary with the complexity of the conference. If formal consultation also is required for a particular action, then the Service will provide the results of the conference with the biological opinion.

Sec. 402.11 Early consultation.

(a) Purpose. Early consultation is designed to reduce the likelihood of conflicts between listed species or critical habitat and proposed actions and occurs prior to the filing of an application for a Federal permit or license. Although early consultation is conducted between the Service and the Federal agency, the prospective applicant should be involved throughout the consultation process.

(b) Request by prospective applicant. If a prospective applicant has reason to believe that the prospective action may affect listed species or critical habitat, it may request the Federal agency to enter into early consultation with the Service. The prospective applicant must certify in writing to the Federal agency that (1) it has a definitive proposal outlining the action and its effects and (2) it intends to implement its proposal, if authorized.

(c) Initiation of early consultation. If the Federal agency receives the prospective applicant's certification in paragraph (b) of this section, then the Federal agency shall initiate early consultation with the Service. This request shall be in writing and contain the information outlined in Sec. 402.14(c) and, if the action is a major construction activity, the biological assessment as outlined in Sec. 402.12.

(d) Procedures and responsibilities. The procedures and responsibilities for early consultation are the same as outlined in Sec. 402.14(c)-(j) for formal consultation, except that all references to the "applicant" shall be treated as the "prospective applicant" and all references to the "biological opinion" or

the "opinion" shall be treated as the "preliminary biological opinion" for the purpose of this section.

(e) Preliminary biological opinion. The contents and conclusions of a preliminary biological opinion are the same as for a biological opinion issued after formal consultation except that the incidental take statement provided with a preliminary biological opinion does not constitute authority to take listed species.

(f) Confirmation of preliminary biological opinion as final biological opinion. A preliminary biological opinion may be confirmed as a biological opinion issued after formal consultation if the Service reviews the proposed action and finds that there have been no significant changes in the action as planned or in the information used during the early consultation. A written request for confirmation of the preliminary biological opinion should be submitted after the prospective applicant applies to the Federal agency for a permit or license but prior to the issuance of such permit or license. Within 45 days of receipt of the Federal agency's request, the Service shall either:

(1) Confirm that the preliminary biological opinion stands as a final biological opinion; or

(2) If the findings noted above cannot be made, request that the Federal agency initiate formal consultation.

Sec. 402.12 Biological assessments.

(a) Purpose. A biological assessment shall evaluate the potential effects of the action on listed and proposed species and designated and proposed critical habitat and determine whether any such species or habitat are likely to be adversely affected by the action and is used in determining whether formal consultation or a conference is necessary.

(b) Preparation requirement. (1) The procedures of this section are required for Federal actions that are "major construction activities"; provided that a contract for construction was not entered into or actual construction was not begun on or before November 10, 1978. Any person, including those who may wish to apply for an exemption from section 7(a)(2) of the Act, may prepare a biological assessment under

the supervision of the Federal agency and in cooperation with the Service consistent with the procedures and requirements of this section. An exemption from the requirements of section 7(a)(2) is not permanent unless a biological assessment has been prepared.

(2) The biological assessment shall be completed before any contract for construction is entered into and before construction is begun.

(c) Request for information. The Federal agency or the designated non-Federal representative shall convey to the Director either (1) a written request for a list of any listed or proposed species or designated or proposed critical habitat that may be present in the action area; or (2) a written notification of the species and critical habitat that are being included in the biological assessment.

(d) Director's response. Within 30 days of receipt of the notification of, or the request for, a species list, the Director shall either concur with or revise the list or, in those cases where no list has been provided, advise the Federal agency or the designated non-Federal representative in writing whether, based on the best scientific and commercial data available, any listed or proposed species or designated or proposed critical habitat may be present in the action area. In addition to listed and proposed species, the Director will provide a list of candidate species that may be present in the action area. Candidate species refers to any species being considered by the Service for listing as endangered or threatened species but not yet the subject of a proposed rule. Although candidate species have no legal status and are accorded no protection under the Act, their inclusion will alert the Federal agency of potential proposals or listings.

(1) If the Director advises that no listed species or critical habitat may be present, the Federal agency need not prepare a biological assessment and further consultation is not required. If only proposed species or proposed critical habitat may be present in the action area, then the Federal agency must confer with the Service if required under Sec. 402.10, but preparation of a biological assessment is not required unless the proposed listing and/or designation becomes final.

(2) If a listed species or critical

habitat may be present in the action area, the Director will provide a species list or concur with the species list provided. The Director also will provide available information (or references thereto) regarding these species and critical habitat, and may recommend discretionary studies or surveys that may provide a better information base for the preparation of an assessment. Any recommendation for studies or surveys is not to be construed as the Service's opinion that the Federal agency has failed to satisfy the information standard of section 7(a)(2) of the Act.

(e) Verification of current accuracy of species list. If the Federal agency or the designated non-Federal representative does not begin preparation of the biological assessment within 90 days of receipt of (or concurrence with) the species list, the Federal agency or the designated non-Federal representative must verify (formally or informally) with the Service the current accuracy of the species list at the time the preparation of the assessment is begun.

(f) Contents. The contents of a biological assessment are at the discretion of the Federal agency and will depend on the nature of the Federal action. The following may be considered for inclusion:

(1) The results of an on-site inspection of the area affected by the action to determine if listed or proposed species are present or occur seasonally.

(2) The views of recognized experts on the species at issue.

(3) A review of the literature and other information.

(4) An analysis of the effects of the action on the species and habitat, including consideration of cumulative effects, and the results of any related studies.

(5) An analysis of alternate actions considered by the Federal agency for the proposed action.

(g) Incorporation by reference. If a proposed action requiring the preparation of a biological assessment is identical, or very similar, to a previous action for which a biological assessment was prepared, the Federal agency may fulfill the biological assessment requirement for the proposed action by incorporating by reference the earlier biological assessment, plus any supporting data from other documents that are pertinent to the consultation,

into a written certification that:

(1) The proposed action involves similar impacts to the same species in the same geographic area;

(2) No new species have been listed or proposed or no new critical habitat designated or proposed for the action area; and

(3) The biological assessment has been supplemented with any relevant changes in information.

(h) Permit requirements. If conducting a biological assessment will involve the taking of a listed species, a permit under section 10 of the Act (16 U.S.C. 1539) and part 17 of this title (with respect to species under the jurisdiction of the FWS) or parts 220, 222, and 227 of this title (with respect to species under the jurisdiction of the NMFS) is required.

(i) Completion time. The Federal agency or the designated non-Federal representative shall complete the biological assessment within 180 days after its initiation (receipt of or concurrence with the species list) unless a different period of time is agreed to by the Director and the Federal agency. If a permit or license applicant is involved, the 180-day period may not be extended unless the agency provides the applicant, before the close of the 180-day period, with a written statement setting forth the estimated length of the proposed extension and the reasons why such an extension is necessary.

(j) Submission of biological assessment. The Federal agency shall submit the completed biological assessment to the Director for review. The Director will respond in writing within 30 days as to whether or not he concurs with the findings of the biological assessment. At the option of the Federal agency, formal consultation may be initiated under Sec. 402.14(c) concurrently with the submission of the assessment.

(k) Use of the biological assessment.

(1) The Federal agency shall use the biological assessment in determining whether formal consultation or a conference is required under Sec. 402.14 or Sec. 402.10, respectively. If the biological assessment indicates that there are no listed species or critical habitat present that are likely to be adversely affected by the action and the Director concurs as specified in paragraph (j) of this section, then formal consultation is not required. If the

biological assessment indicates that the action is not likely to jeopardize the continued existence of proposed species or result in the destruction or adverse modification of proposed critical habitat, and the Director concurs, then a conference is not required.

(2) The Director may use the results of the biological assessment in (i) determining whether to request the Federal agency to initiate formal consultation or a conference, (ii) formulating a biological opinion, or (iii) formulating a preliminary biological opinion.

Sec. 402.13 Informal consultation.

(a) Informal consultation is an optional process that includes all discussions, correspondence, etc., between the Service and the Federal agency or the designated non-Federal representative, designed to assist the Federal agency in determining whether formal consultation or a conference is required. If during informal consultation it is determined by the Federal agency, with the written concurrence of the Service, that the action is not likely to adversely affect listed species or critical habitat, the consultation process is terminated, and no further action is necessary.

(b) During informal consultation, the Service may suggest modifications to the action that the Federal agency and any applicant could implement to avoid the likelihood of adverse effects to listed species or critical habitat.

Sec. 402.14 Formal consultation.

(a) Requirement for formal consultation. Each Federal agency shall review its actions at the earliest possible time to determine whether any action may affect listed species or critical habitat. If such a determination is made, formal consultation is required, except as noted in paragraph (b) of this section. The Director may request a Federal agency to enter into consultation if he identifies any action of that agency that may affect listed species or critical habitat and for which there has been no consultation. When such a request is made, the Director shall forward to the Federal agency a written explanation of the basis for the request.

(b) Exceptions. (1) A Federal agency need not initiate formal consultation if,

as a result of the preparation of a biological assessment under Sec. 402.12 or as a result of informal consultation with the Service under Sec. 402.13, the Federal agency determines, with the written concurrence of the Director, that the proposed action is not likely to adversely affect any listed species or critical habitat.

(2) A Federal agency need not initiate formal consultation if a preliminary biological opinion, issued after early consultation under Sec. 402.11, is confirmed as the final biological opinion.

(c) Initiation of formal consultation. A written request to initiate formal consultation shall be submitted to the Director and shall include:

- (1) A description of the action to be considered;
- (2) A description of the specific area that may be affected by the action;
- (3) A description of any listed species or critical habitat that may be affected by the action;
- (4) A description of the manner in which the action may affect any listed species or critical habitat and an analysis of any cumulative effects;
- (5) Relevant reports, including any environmental impact statement, environmental assessment, or biological assessment prepared; and
- (6) Any other relevant available information on the action, the affected listed species, or critical habitat.

Formal consultation shall not be initiated by the Federal agency until any required biological assessment has been completed and submitted to the Director in accordance with Sec. 402.12. Any request for formal consultation may encompass, subject to the approval of the Director, a number of similar individual actions within a given geographical area or a segment of a comprehensive plan. This does not relieve the Federal agency of the requirements for considering the effects of the action as a whole.

(d) Responsibility to provide best scientific and commercial data available. The Federal agency requesting formal consultation shall provide the Service with the best scientific and commercial data available or which can be obtained during the consultation for an adequate review of the effects that an action may have upon listed species or critical habitat. This information may include the results of studies or surveys conducted by the

Federal agency or the designated non-Federal representative. The Federal agency shall provide any applicant with the opportunity to submit information for consideration during the consultation.

(e) Duration and extension of formal consultation. Formal consultation concludes within 90 days after its initiation unless extended as provided below. If an applicant is not involved, the Service and the Federal agency may mutually agree to extend the consultation for a specific time period. If an applicant is involved, the Service and the Federal agency may mutually agree to extend the consultation provided that the Service submits to the applicant, before the close of the 90 days, a written statement setting forth:

- (1) The reasons why a longer period is required,
- (2) The information that is required to complete the consultation, and
- (3) The estimated date on which the consultation will be completed.

A consultation involving an applicant cannot be extended for more than 60 days without the consent of the applicant. Within 45 days after concluding formal consultation, the Service shall deliver a biological opinion to the Federal agency and any applicant.

(f) Additional data. When the Service determines that additional data would provide a better information base from which to formulate a biological opinion, the Director may request an extension of formal consultation and request that the Federal agency obtain additional data to determine how or to what extent the action may affect listed species or critical habitat. If formal consultation is extended by mutual agreement according to Sec. 402.14(e), the Federal agency shall obtain, to the extent practicable, that data which can be developed within the scope of the extension. The responsibility for conducting and funding any studies belongs to the Federal agency and the applicant, not the Service. The Service's request for additional data is not to be construed as the Service's opinion that the Federal agency has failed to satisfy the information standard of section 7(a)(2) of the Act. If no extension of formal consultation is agreed to, the Director will issue a biological opinion using the best scientific and commercial data available.

(g) Service responsibilities. Service responsibilities during formal consultation are as follows:

(1) Review all relevant information provided by the Federal agency or otherwise available. Such review may include an on-site inspection of the action area with representatives of the Federal agency and the applicant.

(2) Evaluate the current status of the listed species or critical habitat.

(3) Evaluate the effects of the action and cumulative effects on the listed species or critical habitat.

(4) Formulate its biological opinion as to whether the action, taken together with cumulative effects, is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.

(5) Discuss with the Federal agency and any applicant the Service's review and evaluation conducted under paragraphs (g)(1) through (3) of this section, the basis for any finding in the biological opinion, and the availability of reasonable and prudent alternatives (if a jeopardy opinion is to be issued) that the agency and the applicant can take to avoid violation of section 7(a)(2). The Service will utilize the expertise of the Federal agency and any applicant in identifying these alternatives. If requested, the Service shall make available to the Federal agency the draft biological opinion for the purpose of analyzing the reasonable and prudent alternatives. The 45-day period in which the biological opinion must be delivered will not be suspended unless the Federal agency secures the written consent of the applicant to an extension to a specific date. The applicant may request a copy of the draft opinion from the Federal agency. All comments on the draft biological opinion must be submitted to the Service through the Federal agency, although the applicant may send a copy of its comments directly to the Service. The Service will not issue its biological opinion prior to the 45-day or extended deadline while the draft is under review by the Federal agency. However, if the Federal agency submits comments to the Service regarding the draft biological opinion within 10 days of the deadline for issuing the opinion, the Service is entitled to an automatic 10-day extension on the deadline.

(6) Formulate discretionary conservation recommendations, if any,

which will assist the Federal agency in reducing or eliminating the impacts that its proposed action may have on listed species or critical habitat.

(7) Formulate a statement concerning incidental take, if such take may occur.

(8) In formulating its biological opinion, any reasonable and prudent alternatives, and any reasonable and prudent measures, the Service will use the best scientific and commercial data available and will give appropriate consideration to any beneficial actions taken by the Federal agency or applicant, including any actions taken prior to the initiation of consultation.

(h) Biological opinions. The biological opinion shall include:

(1) A summary of the information on which the opinion is based;

(2) A detailed discussion of the effects of the action on listed species or critical habitat; and

(3) The Service's opinion on whether the action is likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (a "jeopardy biological opinion"); or, the action is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (a "no jeopardy" biological opinion). A "jeopardy" biological opinion shall include reasonable and prudent alternatives, if any. If the Service is unable to develop such alternatives, it will indicate that to the best of its knowledge there are no reasonable and prudent alternatives.

(i) Incidental take. (1) In those cases where the Service concludes that an action (or the implementation of any reasonable and prudent alternatives) and the resultant incidental take of listed species will not violate section 7(a)(2), and, in the case of marine mammals, where the taking is authorized pursuant to section 101(a)(5) of the Marine Mammal Protection Act of 1972, the Service will provide with the biological opinion a statement concerning incidental take that:

(i) Specifies the impact, i.e., the amount or extent, of such incidental taking on the species;

(ii) Specifies those reasonable and prudent measures that the Director considers necessary or appropriate to minimize such impact;

(iii) In the case of marine mammals, specifies those measures that are

necessary to comply with section 101(a)(5) of the Marine Mammal Protection Act of 1972 and applicable regulations with regard to such taking;

(iv) Sets forth the terms and conditions (including, but not limited to, reporting requirements) that must be complied with by the Federal agency or any applicant to implement the measures specified under paragraphs (i)(1)(ii) and (i)(1)(iii) of this section; and

(v) Specifies the procedures to be used to handle or dispose of any individuals of a species actually taken.

(2) Reasonable and prudent measures, along with the terms and conditions that implement them, cannot alter the basic design, location, scope, duration, or timing of the action and may involve only minor changes.

(3) In order to monitor the impacts of incidental take, the Federal agency or any applicant must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement. The reporting requirements will be established in accordance with 50 CFR 13.45 and 18.27 for FWS and 50 CFR 220.45 and 228.5 for NMFS.

(4) If during the course of the action the amount or extent of incidental taking, as specified under paragraph (i)(1)(i) of this Section, is exceeded, the Federal agency must reinstate consultation immediately.

(5) Any taking which is subject to a statement as specified in paragraph (i)(1) of this section and which is in compliance with the terms and conditions of that statement is not a prohibited taking under the Act, and no other authorization or permit under the Act is required.

(j) Conservation recommendations. The Service may provide with the biological opinion a statement containing discretionary conservation recommendations. Conservation recommendations are advisory and are not intended to carry any binding legal force.

(k) Incremental steps. When the action is authorized by a statute that allows the agency to take incremental steps toward the completion of the action, the Service shall, if requested by the Federal agency, issue a biological opinion on the incremental step being considered, including its views on the entire action. Upon the issuance of such

a biological opinion, the Federal agency may proceed with or authorize the incremental steps of the action if:

(1) The biological opinion does not conclude that the incremental step would violate section 7(a)(2);

(2) The Federal agency continues consultation with respect to the entire action and obtains biological opinions, as required, for each incremental step;

(3) The Federal agency fulfills its continuing obligation to obtain sufficient data upon which to base the final biological opinion on the entire action;

(4) The incremental step does not violate section 7(d) of the Act concerning irreversible or irretrievable commitment of resources; and

(5) There is a reasonable likelihood that the entire action will not violate section 7(a)(2) of the Act.

(l) Termination of consultation. (1) Formal consultation is terminated with the issuance of the biological opinion.

(2) If during any stage of consultation a Federal agency determines that its proposed action is not likely to occur, the consultation may be terminated by written notice to the Service.

(3) If during any stage of consultation a Federal agency determines, with the concurrence of the Director, that its proposed action is not likely to adversely affect any listed species or critical habitat, the consultation is terminated.

[51 FR 19957, June 3, 1986, as amended at 54 FR 40350, Sept. 29, 1989]

Sec. 402.15 Responsibilities of Federal agency following issuance of a biological opinion.

(a) Following the issuance of a biological opinion, the Federal agency shall determine whether and in what manner to proceed with the action in light of its section 7 obligations and the Service's biological opinion.

(b) If a jeopardy biological opinion is issued, the Federal agency shall notify the Service of its final decision on the action.

(c) If the Federal agency determines that it cannot comply with the requirements of section 7(a)(2) after consultation with the Service, it may apply for an exemption. Procedures for exemption applications by Federal agencies and others are found in 50 CFR part 451.

Sec. 402.16 Reinitiation of formal consultation.

Reinitiation of formal consultation is required and shall be requested by the Federal agency or by the Service, where discretionary Federal involvement or control over the action has been retained or is authorized by law and:

- (a) If the amount or extent of taking specified in the incidental take statement is exceeded;
- (b) If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered;
- (c) If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or
- (d) If a new species is listed or critical habitat designated that may be affected by the identified action.

GUIDELINES FOR PREPARING A BIOLOGICAL ASSESSMENT (BA)

This document provides suggestions on how to organize the information in a stand-alone biological assessment. The format is flexible so modify as appropriate. *(If the biological assessment is incorporated into an environmental assessment (EA) or environmental impact statement (EIS), the location is shown in italics.)*

The level of detail should be commensurate with the potential effects of the project and the species involved. Not all the information discussed below will be needed for every BA.

1. Consultation History and Summary

Endangered Species Act section of EA or Relationship to Laws and Policies section of EIS

Cite the most recent list of species received from FWS and/or NMFS. Outline any previous attempts to consult (meetings, correspondence, etc.). Include a table summarizing the species considered in the analysis and the conclusions, as appropriate ([exhibit D-1](#)).

If species are included on the list of species, but is not considered in the BA, explain why (no suitable habitat, etc.).

2. Description of the Project (who, what, where, when, and how)

Project location

Application section of EA and Purpose of Action section of EIS

Identify the applicant and the date the application was filed and, if appropriate, amended.

Identify the nearest town or city, county, state, section township, and range, and any federal or Indian reservation lands located within the project boundary or affected by the project. Include location map.

Exhibit D-1. Example of table summarizing species considered in BA.

Table 1. List of federally listed, proposed, and candidate species evaluated in this biological assessment and our conclusions under section 7 of the Endangered Species Act.

Common Name	Scientific Name	Species Status	Species Finding	Critical Habitat Status/ Finding
Bald eagle	<i>Haliaeetus leucocephalus</i>	threatened	not likely to adversely affect	none
California red-legged frog	<i>Rana aurora draytonii</i>	threatened	not likely to adversely affect	no effect
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	threatened	not likely to adversely affect	none
California tiger salamander	<i>Ambystoma californiense</i>	candidate	not likely to adversely affect	n/a
Mountain plover	<i>Charadrius montanus</i>	proposed	not likely to jeopardize	n/a
Delta smelt	<i>Hypomesus transpacificus</i>	threatened	no effect	downstream--no effect
Central Valley steelhead	<i>Oncorhynchus mykiss</i>	endangered	not likely to adversely affect	downstream--not likely to adversely affect
Sacramento River winter-run chinook salmon	<i>Oncorhynchus tshawytscha</i>	endangered	not likely to adversely affect	downstream--not likely to adversely affect
Central Valley spring-run chinook salmon	<i>Oncorhynchus tshawytscha</i>	threatened	not likely to adversely affect	downstream (proposed)--no destruction or adverse modification
Fringed myotis bat	<i>Myotis evotis</i>	species of concern	no effect	n/a
Greene's tuctoria	<i>Tuctoria greenei</i>	endangered	no effect	none

Project description

Proposed Action and Alternatives section of EA and EIS

Briefly describe existing facilities and project operation. Describe any facilities proposed to be constructed or modified and/or proposed changes to existing operation. Focus on aspects that are most relevant to the species being evaluated. Include a map of project facilities.

Identify any measures proposed by the applicant, preliminary, draft, or final mandatory conditions (fishway prescriptions, land management conditions, water quality certificate conditions, etc.), and measures recommended by staff. Reference appropriate resource protection plans that have been developed.

Summarize the measures proposed by the applicant and recommended by staff to protect, mitigate, or enhance listed species and their habitat. Include monitoring plans.

If construction is proposed, describe construction methods and type of equipment, timing and duration of construction (including instream construction), site access, preparation and restoration, temporary construction areas (staging areas, stockpile areas, etc.), extent of vegetation removal and disturbance, and borrow and disposal sites.

Describe project maintenance activities, such as vegetation management, road maintenance, etc.

3. Affected Environment and Species Account

Affected Environment subsection of EA or EIS, within the Threatened and Endangered Species section. Description of project area is found in General Description of the River Basin of EA and General Locale section of EIS.

For each listed, proposed, or candidate species (evaluation species), and designated and proposed critical habitat, include sufficient information to understand the potential effects of the project on the species or habitat. Don't give the specific locations of the species and habitat in the BA if it may endanger the species. If necessary, sensitive information can be provided to the Service under separate cover.

Project area

Provide a brief discussion of the general project area and river basin, including, but not limited to, predominant land uses and vegetative cover, climate, hydrology, and topography.

Species background and requirements

Provide a background of the biology that's relevant to potential impacts of the project, including aspects of biology that relate to proposed action. Include general distribution of species and species status (trends in habitat and population numbers, historical occurrence in project vicinity, amount of habitat remaining, etc.).

Species occurrence in area potentially affected by the project

Describe the abundance and distribution of evaluation species in the project area, level of use, and timing of use. Summarize results of surveys, database searches, literature reviews, and consultations. Reference survey reports.

Habitat description and use

Describe the habitat for the evaluation species, including amount, quality, and suitability. Describe how the evaluation species use the habitat in the area affected by the project. For example, for wildlife, describe use for nesting, perching, roosting, migration, rearing, feeding, etc. For fish, describe use for migrating, spawning, rearing, overwintering, etc. Include seasonal use patterns.

Critical habitat

Describe any critical habitat that has been designated or proposed that could potentially be affected by the project. Identify specific habitat unit(s).

Recovery and other plans

Identify the existence of recovery plans for the listed species considered. Describe the relationship between the proposed action and any recovery units, describe any recovery actions that may be applicable to the proposed action, and describe any recovery plan tasks that apply to the project or the project vicinity. Also identify other plans that relate to endangered species (habitat conservation plans, state species conservation plans, etc).

4. Effects of the Proposed Project

Environmental Impacts and Recommendations and Unavoidable Adverse Impact subsections of EA and Environmental Effects and Recommendations and Unavoidable Adverse Impact sections of EIS, under the Threatened and Endangered Species section.

Cumulative effects are also discussed in Cumulative Effects section of EA and Cumulatively Affected Resources and Cumulative Effects Summary sections of EIS. Where recommendations require the balancing of developmental and non-developmental resources, additional discussion is found in the Comprehensive Development section of an EA and Staff Conclusions section of EIS.

Listed, proposed, and candidate species and critical habitat

Describe any direct, indirect, and cumulative impacts, beneficial effects, and effects of interrelated and interdependent actions ([exhibit D-2](#)). If no effects, say so and document. The analysis should address effects on individuals as well as populations. Where possible, quantify the effects.

Generally, determination of impact will depend on four factors: (1) which biological resource is present; (2) the type of action; (3) the distance between the action and the resource; and (4) the time of year.

Describe the areal extent, timing, intensity, direction and duration of disturbance. If possible, quantify the disturbance (e.g., number of acres; decibel level at a given distance, degrees increase in water temperature). Distinguish between long-term and short-term effects. Factor in the species sensitivity to change, resilience, and recovery rate.

Put the effects into perspective. Describe the relative impact on the resources of concern (e.g., the proportion of the local population impacted).

Don't forget to address all the different phases of a project--construction or modification of facilities, project operation or changes in project operation, maintenance activities (such as road maintenance, right-of-way management), and recreational and other land uses (such as grazing on project lands).

Discuss the effect of the proposed project on critical habitat, including effects on constituent elements, where they exist, that formed the basis of the designation of the critical habitat. See the final rule designating critical habitat for the particular species for more information.

Exhibit D-2. Description of effects.		
Type of Effect	Definition	Example
direct effects	direct or immediate effects; effects directly attributable to the proposed action	blockage of migration corridors; turbine mortality; elevated dissolved gas levels; erosion resulting from construction activities; loss of old-growth habitat
indirect effects	effects to individuals or habitat that would result later in time and are reasonably certain to occur	increased exposure to predation and competition; erosion resulting from reservoir fluctuations
cumulative effects	effects of unrelated future state or private activities, not including federal activities, that are reasonably certain to occur in the project area	loss of old-growth habitat resulting from timber cutting on private and state-owned lands; planned basin-wide water diversions for irrigation and water supply
beneficial effects	wholly positive effects	implementation of tributary protections; improved habitat resulting from increased minimum flow releases
effects of interrelated actions*	actions that are part of the primary action and dependent on the primary action for their justification	irrigation diversions from a proposed project reservoir
effects of interdependent actions*	actions that have no independent utility apart from the primary action	single home development along a proposed project reservoir

*Both interrelated and interdependent actions are assessed by applying the "but-for" test that asks whether any action and its resulting impacts would occur "but-for" the proposed action (Consultation Handbook). It is not important to differentiate between interrelated and interdependent actions.

Provide an analysis of cumulative impacts. Describe ongoing actions along with in the project area. Describe measures that would avoid impacts or would benefit species in addition to the proposed measures. Be specific as possible. Discuss the potential effectiveness of the measures. If impacts can't be avoided, describe measures that would minimize or mitigate impacts.

Discuss recommendations made by the Service or other entities.

Discuss alternatives considered (such as alternative penstock routes, minimum flow releases, rights-of-way widths, etc.).

Describe the need for monitoring--compliance monitoring or effectiveness monitoring and adaptive management. Discuss monitoring methods, schedule, contingency measures, reporting, etc.

Recovery and other plans

Discuss consistency with any draft or final species recovery plans, habitat conservation plans, state species conservation plans, or other endangered species plans. When such plans have been filed as comprehensive plans filed under section 10(a)(1)(A) of the Federal Power Act, discuss consistency of these plans in the Comprehensive Plan section of the EA or EIS.

Incidental take

To the degree possible, assess and describe the potential for take of listed species. For example, disturbance during construction of a boat ramp and parking lot would reduce the reproductive success of one pair of bald eagles for 1 year; or about 10 percent of migrating smolts are expected to be lost to turbine mortality.

5. Determination of Effect

Conclusions outlined in Environmental Impacts and Recommendations Section of EA or Environmental Effects and Recommendations section of EIS

Make a determination of effect for each listed and proposed species and designated and proposed critical habitat, briefly summarizing effects. See section of main report and [exhibit D-3](#) for additional information on making determinations.

Exhibit D-3. Determinations of effect.	
Listed Species or Designated Critical Habitat	
no effect	<i>no direct or indirect effects</i>
not likely to adversely effect	<i>beneficial, insignificant (very small in scale and cannot be meaningfully measured, detected, or evaluated), or discountable (extremely unlikely to occur) effects</i>
likely to adversely effect	<i>measurable effects or results in take</i>
Proposed Species	
no jeopardy	<i>jeopardy--an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species</i>
jeopardy	
Proposed Critical Habitat	
no adverse modification	<i>adverse modification--a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species.</i>
adverse modification	

6. Literature Cited

Literature Cited section of EA or EIS

This section will include citations for relevant reports that formed the basis for the analysis in the BA or EA/EIS.

7. Attachments

Provide any documents or figures that were used to support the conclusions and recommendations that may not have been provided to the Service. It is helpful to include a topographic map.¹

¹ Topographic maps are available at <http://www.topozone.com>.