COMPLYING WITH SECTION 7 OF THE ENDANGERED SPECIES ACT FOR TRANSPORTATION PROJECTS

This Handbook provides an overview of Section 7 consultation under the Endangered Species Act (ESA) and provides advice on carrying out Section 7 consultation for transportation projects. This Handbook focuses on the consultation process primarily from the perspective of the federal action agency and the applicant.

The Background Briefing section describes the legal framework for Section 7 consultation as defined in the ESA itself and in regulations issued by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. This section includes a flow chart illustrating the four main steps in Section 7 consultation and the findings that can be made at each step.

The Key Issues to Consider section raises a series of questions for practitioners to consider when undertaking Section 7 consultation for a transportation project. This section can be used as a checklist when preparing for each step in Section 7 consultation.

The Practical Tips section provides advice on how to comply with Section 7 requirements as efficiently and effectively as possible. Issues covered in the Practical Tips section of the Handbook include:

- Preparing for Section 7 consultation
- Defining the action area and requesting or submitting a species list
- Assessing the effects of the proposed action on Section 7 resources
- Conducting formal consultation
- Conducting conference for proposed species and proposed critical habitat
- Coordinating Section 7 with the NEPA process and other requirements
- Complying with Section 7 following completion of the NEPA process
This Handbook provides an overview of Section 7 consultation under the Endangered Species Act (ESA) as well as advice on carrying out Section 7 consultation for transportation projects. This Handbook is intended primarily for use by transportation agencies and their consultants and therefore focuses on the consultation process from the perspective of the Federal action agency and applicant.

This Handbook consists of four parts:

- **Background Briefing** provides an overview of the ESA as a whole and summarizes the four main steps in Section 7 consultation. This section also briefly discusses the relationship of Section 7 consultation to the National Environmental Policy Act (NEPA) process.

- **Key Issues to Consider** raises a series of questions for practitioners to consider when undertaking Section 7 consultation for a transportation project. This section can be used as a checklist when preparing for Section 7 consultation.

- **Practical Tips** provides advice on how to comply with Section 7 requirements as efficiently and effectively as possible. This section is organized according to the steps of the consultation process, from initiation through completion. It also addresses intersecting issues, such as how to coordinate Section 7 consultation with the NEPA process and other requirements.

- **Reference Materials** includes a list of key resource materials relevant to Section 7 consultation, including the statute, regulations, and important guidance, as well as links to additional materials on agency websites.

This Handbook also includes two appendices:

- **Appendix A** provides brief explanations of key terms and concepts in Section 7 consultation.

- **Appendix B** lists timeframes specified in the Section 7 regulations for various stages within the Section 7 consultation process.

For readability, this Handbook uses the following simplified terminology:

- **“Service”** refers to the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS), as applicable. In general, “the Service” is used when describing an action that could be taken by either the USFWS or NMFS. The term “Services” is used when referring to both agencies together. The terms “USFWS” and “NMFS” are used when it is necessary to refer to a particular agency.

- **“Federal action agency”** refers to the Federal agency with responsibility for compliance with Section 7. The Section 7 regulations use the term “Federal agency” to refer to the agency with Section 7 consultation obligations, but “Federal action agency” is commonly used in practice to distinguish that agency from the USFWS and NMFS. As used in this Handbook, the “Federal action agency” also includes any State Department of Transportation (state DOT) that has assumed the responsibilities of a U.S. Department of Transportation (U.S. DOT) agency for Section 7 consultation pursuant to an assignment program.1

- **“Listed” and “designated”** are used in this Handbook to refer to species listed and critical habitat designated under the ESA. In other words, these terms are used to refer to federally listed species and federally designated critical habitat. If context requires reference to a species listed under state law, the term “state-listed” is used.

- **“Section 7 resource”** is used in this Handbook to refer collectively to “listed and proposed species as well as designated and proposed critical habitat.” Where context requires, this Handbook refers specifically to listed species, proposed species, designated critical habitat, and proposed critical habitat, as applicable.

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1 See 23 USC 326 and 327.
“Finding” and “determination” are used interchangeably in this Handbook to refer to a conclusion reached by a Federal action agency or the Services, as applicable, during Section 7 consultation. Both of these words are used in the Section 7 regulations, and the regulations do not give them different meanings.

“Section 7 regulations” refers to the Services’ regulations that establish the procedures for Section 7 consultation (codified at 50 CFR Part 402).

“Services’ Section 7 Handbook” refers to the Handbook issued by the Services as guidance for the Services’ staff on carrying out Section 7 consultation. Note that the Services’ Section 7 Handbook was issued in 1998, and therefore it may not fully reflect the Services’ current interpretations, policies, and practices in all instances.

Finally, practitioners should keep in mind that Section 7 consultation practices and terminology vary somewhat among different states and regions of the country. In addition, Federal action agencies and the Services sometimes differ in their interpretations of the Section 7 regulations. As a result, it is possible that practitioners may encounter interpretations or practices that vary from those outlined in this Handbook. In those cases, practitioners should look to the Services and the Federal action agencies for direction. This Handbook should be used as a source of information only; it is not official agency guidance.

### Background Briefing

This section provides background information that may be useful in understanding the recommendations provided in the Practical Tips section. This section includes:

- an overview of the ESA;
- Federal agency responsibilities under Section 7 of the ESA;
- Section 7 consultation process steps, including a flow chart; and
- relationship of Section 7 consultation to NEPA and other requirements.

#### Overview of the ESA

**Purpose of the ESA.** Enacted in 1973, the ESA creates a comprehensive regulatory regime that seeks to protect imperiled fish, wildlife, and plant species from extinction and to promote the recovery of those species and the ecosystems that support them, so that they no longer need protection under the statute.

**USFWS and NMFS Roles.** The two agencies primarily responsible for administering the ESA are the USFWS and NMFS. The USFWS, which is part of the U.S. Department of the Interior, is responsible primarily for terrestrial and freshwater organisms. NMFS, which is part of the U.S. Department of Commerce, is responsible for marine (ocean-dependent) species such as whales, seals, and salmon. The USFWS and NMFS share responsibility for turtles, Atlantic salmon, and Gulf sturgeon.

**Requirement to List Species as Threatened or Endangered.** Section 4 of the ESA gives the Services responsibility for listing fish, wildlife, and plant species as threatened or endangered. A species is listed as “threatened” if it “is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range”; a species is listed as “endangered” if it is “in danger of extinction throughout all or a significant portion of its range.” Any interested person can petition the Service to list, de-list, or re-classify a species. The listing process begins with a notice of proposed rulemaking published in the Federal Register. After an opportunity for public comment on the proposed listing, the Service may issue a final rule listing the species.

**Requirement to Designate Critical Habitat.** Section 4 of the ESA directs the Services to designate critical habitat for species that have been listed as threatened or endangered. As with a species listing, the designation of critical habitat occurs through a rulemaking process: a proposed rule is published in the Federal Register, followed by a public comment period, and then

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2 USFWS and NMFS, “Procedures for Conducting Consultation and Conference Activities Under Section 7 of the Endangered Species Act” (March 1998).
3 16 USC 1533(a)(1).
4 16 USC 1532(6) (definition of “endangered”) and 1532(20) (definition of “threatened”).
5 16 USC 1533(b)(3).
6 16 USC 1533(a)(3).
a final rule designating the critical habitat. All critical habitat designations identify specific geographic areas for that habitat. The statute requires critical habitat to be designated “concurrently” with the listing of a species, but in practice, there often is a delay in designating critical habitat, and there are many listed species for which no critical habitat has as yet been designated.

**Requirement to Develop Recovery Plans.** Section 4 of the ESA directs the Services to develop recovery plans for species that have been listed as threatened or endangered. A recovery plan, as the name suggests, is intended to help a species recover to the point that protection under the ESA is no longer needed. A recovery plan is developed through a public notice-and-comment process and typically includes recommendations for action by Federal and state agencies as well as private landowners and other stakeholders. A recovery plan’s recommendations are not binding, but they are intended to provide a common framework for efforts to promote recovery of the species. Binding requirements imposed under other provisions of the ESA may be based, in part, on recommendations in a recovery plan.

**Prohibition against “Take” of Listed Fish and Wildlife Species.** Section 9 of the ESA prohibits any individual from “taking” any federally listed fish or wildlife species without a permit. Practitioners should understand several key points about this prohibition:

- *The definition of “take” is very broad.* As defined in the ESA, “take” means to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” The USFWS has defined the terms “harm” and “harass” as follows:
  - Harm means “significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.”
  - Harass means “an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding or sheltering.”
- *Take can result from inadvertent acts, without any intention to cause harm to the species.* The term “incidental take” includes “ takings that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or applicant.”
- *Incidental take can be authorized by the Services.* The Services can authorize the incidental take of listed species under two distinct processes:
  - An “incidental take statement” is issued for federally funded or approved projects through Section 7 consultation. This statement is included in a Biological Opinion issued at the conclusion of formal consultation.
  - An “incidental take permit” is issued under Section 10 of the ESA for actions that do not require Section 7 consultation, such as many private development projects.
- *The prohibition against take applies regardless of the project’s status.* The late discovery of a species, or the new listing of a species, could require an agency to engage in additional Section 7 consultation, even if the environmental review process is complete and project construction is under way. The need for additional consultation may require construction to halt in whole or in part.
- *The prohibition against “take” does not apply to plant species.* Plants are subject to different requirements, which prohibit various deliberate acts, such as removing listed plants from areas within Federal jurisdiction.

**Federal Agency Responsibilities under Section 7 of the ESA**

Section 7 of the ESA includes several distinct requirements applicable to Federal agencies. These requirements include a “conservation obligation” in Section 7(a)(1), as well as the consultation requirements in Section 7(a)(2).

7 16 USC 1533(f).
8 16 USC 1538(a)(1).
9 16 USC 1532(19).
10 50 CFR 17.3.
11 50 CFR 17.3.
12 50 CFR 402.02.
13 16 USC 1539(a)(1)(B).
14 16 USC 1538(a)(2).
**Conservation Obligation.** Federal agencies have a duty under Section 7(a)(1) of the ESA to promote the conservation of threatened and endangered species. This general duty is in addition to the Federal agencies' consultation obligations under Section 7(a)(2). Federal agencies have broad discretion to decide how to carry out their conservation obligations. The Services describe this provision as requiring “proactive” efforts by Federal agencies to participate in the conservation and recovery of listed threatened and endangered species.

**Section 7 Consultation.** Federal agencies are required under Section 7(a)(2) to engage in consultation with the Services before taking any action that has the potential to affect listed species or designated critical habitat. Federal agencies comply with this consultation requirement by following the procedures laid out in the Section 7 regulations.

**Duty to Avoid Jeopardy to Listed Species.** Section 7(a)(2) requires Federal agencies to ensure that their actions are not likely to jeopardize the continued existence of a listed threatened or endangered species. As part of formal consultation, the Services determine whether the proposed action would cause jeopardy to the species. The ESA includes a process for exempting Federal agencies from the jeopardy prohibition, but the exemption process has rarely been used.

**Duty to Avoid Destruction or Adverse Modification of Critical Habitat.** Section 7(a)(2) also requires Federal agencies to ensure that their actions are not likely to destroy or adversely modify designated critical habitat. As part of formal consultation, the Services determine whether the proposed action would adversely modify or destroy critical habitat. As with the jeopardy prohibition, the ESA includes a process for exempting Federal agencies from the prohibition against adversely modifying or destroying critical habitat. This exemption also has rarely been used.

**Conference on Proposed Species and Proposed Critical Habitat.** Section 7(a)(4) requires a process known as “conference” for species proposed for listing and for areas proposed for designation as critical habitat. Conference involves discussions between the Federal action agency and the Services, and it may result in issuance of a Conference Opinion, which is similar to a Biological Opinion. Important points to note:

- The Conference Opinion may include preliminary findings of “no jeopardy” and “no adverse modification or destruction” of critical habitat and a preliminary incidental take statement.
- The Conference Opinion also may include recommendations on ways to minimize or avoid adverse effects to proposed species or proposed critical habitat.
- The Federal action agency is not required to follow recommendations in a Conference Opinion.
- If a species is listed or critical habitat is designated before a project is fully implemented, the Federal action agency must review the action to determine whether formal consultation is required.
- If a Conference Opinion was previously issued, and there are no significant changes in the project or the affected environment, the Service can adopt the Conference Opinion as its Biological Opinion. If so, the preliminary findings and the preliminary incidental take statement become final.

**Consideration of Candidate Species.** Federal agencies are encouraged, although not required, to consider the effects of their actions on species that have been identified by the Services as candidates for listing. The Section 7 regulations define a candidate species as “any species being considered by the Service for listing as endangered or threatened species but not yet the subject of a proposed rule.”

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15 16 USC 1536(a)(1).
16 Services’ Section 7 Handbook, p. 5–1.
17 16 USC 1536(a)(2).
18 16 USC 1536(a)(2).
19 16 USC 1536(e)-(p).
20 16 USC 1536(a)(2).
21 See 16 USC 1536(e)-(p).
22 16 USC 1536(a)(4).
23 50 CFR 402.10(d).
24 50 CFR 402.12(d).

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Request for Species List and Preparation of Biological Assessment. Section 7(c) includes two requirements related to Section 7 consultation: requesting a species list and, in some cases, preparing a Biological Assessment. As implemented by the Section 7 regulations, these requirements include the following steps:

- **Species List.** The Federal action agency must submit to the Services 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) the agency’s own list of such species and habitat for the Services’ review. The Services must respond within 30 days of receipt, either by providing a species list or by concurring with or revising the species list submitted by the Federal action agency.

- **Biological Assessment.** If the proposed action is a “major construction activity” and listed species or designated critical habitat may be present in the action area, the Federal action agency must submit a Biological Assessment. A “major construction activity” is a construction project for which an environmental impact statement (EIS) is required under NEPA. A Biological Assessment evaluates the potential effects of the proposed action on any listed and proposed species and designated and proposed critical habitat that may be present in the action area. The Federal action agency may designate the applicant or non-Federal representative (e.g., a consultant) to prepare the Biological Assessment.

For a project that does not involve a “major construction activity,” a Biological Assessment is not required, but the Federal action agency is still required to assess the effects of the proposed action on any listed/proposed species and designated/proposed critical habitat that may be present in the action area. For such projects, the effects assessment may be documented in a Biological Assessment or an equivalent document, which is sometimes called a Biological Evaluation.

**Section 7 Consultation Process Steps**

The Section 7 consultation requirements are defined in Section 7(a)(2) of the statute and in the Section 7 regulations. The Services’ Section 7 Handbook provides additional guidance.

The main steps in Section 7 consultation are shown in the flow chart in Figure 1. Informal consultation steps are shown in blue, while formal consultation is shown in red; the color gray represents the initial step taken to determine whether consultation is required. As shown in the flow chart, findings must be made at the conclusion of each step. Based on those findings, consultation either ends or continues to the next step.

Keep in mind that this flow chart is a simplified illustration of the consultation process. The Section 7 regulations themselves do not specifically refer to consultation “steps” and in practice, the steps may overlap to some degree. Therefore, the flow chart should be used only as a general guide to the structure of the consultation process.

In addition, keep in mind that “Section 7 resource” is used in this Handbook to refer to any species for which consultation of any kind is required under Section 7. This term includes listed and proposed species as well as designated and proposed critical habitat. When a more specific reference is needed, this Handbook refers to “listed” or “proposed” species as well as designated or proposed critical habitat.

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25 16 USC 1536(c)(1).
26 50 CFR 402.12(c). The “action area” includes “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.” 50 CFR 402.02.
27 50 CFR 402.12(d).
28 See 16 USC 1536(c)(1) (“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.”) The regulations limit this requirement to proposed actions involving a “major construction activity.” 50 CFR 402.12(b).
29 See 50 CFR 402.02 (“‘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.”).
Complying with Section 7 of the Endangered Species Act for Transportation Projects

Step 1: Action Area & Species List
Action Agency Defines Action Area and Requests or Submits ‘Species List’; Services Provide or Concur in Species List

- Included on species list: Consultation not required for that resource.
- Not included on species list: Action Agency Defines Action Area and Requests or Submits ‘Species List’; Services Provide or Concur in Species List.

Step 2: Potential Effects
Action Agency Determines if the Proposed Action “May Affect” the Section 7 Resource

- “No Effect”: Process ends for that resource.
- Affected or “may be affected”:

Step 3: Adverse Effects
Action Agency Determines if the Proposed Action is “Likely to Adversely Affect” the Section 7 Resource

For “major construction activities,” a Biological Assessment is required.

- “Not likely to Adversely Affect” (with Service’s concurrence): Process ends for that resource.
- “May Affect: Likely to Adversely Affect”:

Step 4: Formal Consultation
Action Agency Initiates Formal Consultation with the Service; the Service Prepares and Issues a Biological Opinion

For proposed species/critical habitat, “conference” occurs at this step.

Service issues BiOp with findings of: “No Jeopardy” and “No Destruction or Adverse Modification”

- Service issues BiOp with findings of: “Jeopardy” and/or “Destruction or Adverse Modification”:

- Service proposes “reasonable and prudent alternatives” (if any) that avoid jeopardy and avoid destruction or adverse modification of critical habitat:

Formal consultation ends.

Figure 1: Simplified Illustration of Section 7 Process Steps
Step 1: Federal Action Agency Defines the Action Area and Requests or Submits a Species List

In this step, the Federal action agency defines the "action area" for the proposed action, and either requests a "species list" from the applicable Service office or submits a proposed species list to that office and requests the Service’s concurrence. For species within the jurisdiction of the USFWS, species lists can be obtained on-line from the Information Planning and Conservation System (IPaC) database.

Under the Section 7 regulations, the "action area" is defined as the geographic area within which direct and indirect project effects have the potential to occur. The species list must include all listed and proposed species and designated and proposed critical habitat that "may be present in the action area." In practice, the species list often includes species within a relatively broad geographic area (e.g., at the county level) to ensure that potentially affected species are not overlooked.

A species may be included on the species list based on the presence of "suitable habitat" for the species in the action area, even if individual members of the species have not been found in that area. Conversely, information showing that suitable habitat does not exist in the action area may support a finding or concurrence by the Service that the species is not present in the action area and therefore should not be included on the list. The term "suitable habitat" is not defined in the Section 7 regulations, but habitat generally is considered suitable if it is capable of supporting life activities of the species (e.g., breeding, sheltering, or feeding) at one or more life stages.

The Section 7 regulations require the species list to be re-verified if work on a Biological Assessment has not begun within 90 days after the list was provided, and require that the Biological Assessment be completed within 180 days after acquisition of the species list.

Step 1 leads to one of the following outcomes with regard to each Section 7 resource:

- **Process ends at Step 1 for** any Section 7 resource (e.g., a listed species) that is not included on the species list received from, or concurred in by, the Service. The species list may need to be verified later in the NEPA process.
- **Process continues to Step 2 if** for any Section 7 resource that is included on the species list received from, or concurred in by, the Service.

Step 2: Federal Action Agency Determines if the Proposed Action “May Affect” the Section 7 Resource

In this step, the Federal action agency assesses the potential for the project to affect any Section 7 resources included on the species list developed in Step 1. This assessment focuses on whether the Section 7 resource may be affected in any way, not whether it will be adversely affected. For purposes of this assessment, the effects of the project include the effects of any "interrelated or interdependent" actions.

In general, this assessment will include the following:

- Describing the proposed action (including any interrelated or interdependent actions), including when and where the action will occur and any other information relevant to assessing effects on the Section 7 resource.
- Assessing whether the Section 7 resource will be directly or indirectly exposed to the effects of the proposed action. Direct or indirect effects on suitable habitat for a species may be considered to affect the species.
- If exposure is anticipated, assessing how the Section 7 resource will respond.

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30 The requirement to request a species list is part of the process for preparing a Biological Assessment. See 50 CFR 402.12(a). Even if it is not clear whether a Biological Assessment will be needed, a species list still should be requested to obtain the information needed to comply with Section 7 consultation requirements.
31 IPaC is available at https://ecos.fws.gov/ipac.
32 50 CFR 402.02 (definition of “action area”).
33 50 CFR 402.12(c).
34 50 CFR 402.12(e).
35 50 CFR 402.12(i).
36 See 50 CFR 402.02 (defining “effects of the action”). In general, interrelated and interdependent actions include other projects or activities that would not proceed “but for” the proposed action. See Appendix A of this Handbook for additional information about identifying interrelated and interdependent actions.
Step 2 leads to one of the following outcomes for each Section 7 resource:

- **Process ends at Step 2 if** the Federal action agency determines that the proposed action would have no effect on the Section 7 resource. This finding can be based on a determination that (1) the Section 7 resource will not be exposed to the direct or indirect effects of the proposed action (i.e., the resource is not in the action area); or (2) while exposure to those effects may occur (i.e., the resource is in the action area), there is no foreseeable linkage between an effect of the action and a response by the Section 7 resource.

- **Process continues to Step 3 if** the Federal action agency determines that the proposed action may affect the Section 7 resource, even if the effect is beneficial. A “may effect” determination normally is made whenever the evidence is insufficient to support an unequivocal finding of “no effect.”

The responsibility for making the “no effect” determination rests with the Federal action agency; the Services’ concurrence is not required. A “no effect” finding made at this step should be revisited if new information relevant to the finding becomes available.

The assessment in Step 2 is analytically distinct from the assessment in Step 3, but in practice, Steps 2 and 3 often occur together and are included in the same Biological Assessment or equivalent document.

**Step 3: Federal Action Agency Determines if the Proposed Action is Likely to Adversely Affect the Section 7 Resource**

In this step, the Federal action agency assesses whether the proposed action is likely to adversely affect any Section 7 resource carried forward from Step 2. As in Step 2, this assessment includes effects of any interrelated or interdependent actions.

According to the Services’ Section 7 Handbook, an action is “not likely to adversely affect” if the effects are “completely beneficial, insignificant, or discountable.” The Services define these terms as follows:

- beneficial effects are “contemporaneous positive effects without any adverse effects to the species”;
- insignificant effects “relate to the size of the impact and should never reach the scale where take occurs”—i.e., “[b]ased on best judgment, a person would not be able to meaningfully measure, detect, or evaluate” the effects; and
- discountable effects “are those extremely unlikely to occur”— i.e., “[b]ased on best judgment, a person would not expect discountable effects to occur.”

Step 3 leads to one of the following outcomes for each Section 7 resource:

- **Process ends at Step 3 if** the Federal action agency finds, and the Service concurs, that the proposed action is “not likely to adversely affect” the Section 7 resource. Concurrence by the Services must be documented in a concurrence letter, often referred to as a “letter of concurrence.”

- **Process continues to Step 4 if** the Federal action agency finds that the project is “likely to adversely affect” the Section 7 resource or if the Service does not concur with the “not likely to adversely affect” finding.

The analysis and findings for Steps 2 and 3 normally occur at the same time and are documented together in the Biological Assessment (if prepared) or an equivalent document. Also note that this step can result in different findings for different resources—e.g., a “no effect” finding for one species and a “not likely to adversely affect” finding for another species.

**Step 4: Federal Action Agency Conducts Formal Consultation with the Services; Services Issue a Biological Opinion**

In this step, the Federal action agency engages in formal consultation with the Services regarding any species and/or critical habitat for which a finding of “likely to adversely affect” was made in Step 3. This step also includes “conference” with the Services regarding any proposed species and/or proposed critical habitat.

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37. An action agency may request concurrence from the Services in a no-effect finding. In practice, however, the Services often elect not to provide concurrence or non-concurrence in no-effect findings.

38. Services’ Section 7 Handbook, p. 3–12.

This step begins when the Federal action agency submits an initiation package to USFWS and/or NMFS, as applicable. The initiation package typically consists of a letter requesting formal consultation, a copy of the Biological Assessment (if any), and any other relevant supporting documents, such as a large topographical map showing the affected area. The Federal action agency is required to include the “best scientific and commercial data available or which can be obtained during the consultation” in the initiation package.

The Service normally provides written acknowledgement to the Federal action agency within 30 days after receipt of the initiation package. As part of that communication, the Service advises the Federal action agency whether the Service considers the initiation package to be complete. If the package is deemed complete, the Service has 135 days from initial receipt of the package to complete consultation and provide the Biological Opinion. If the package is deemed incomplete, the Federal action agency is requested to submit additional information to the Service, either supplementing or superseding the initial package. The 135-day period for formal consultation starts when a complete initiation package is submitted to the Service.

Under the Section 7 regulations, Step 4 must be completed within 135 days unless the time period is extended. An extension of the 135-day period requires agreement by the Federal action agency; an extension of more than 60 days requires agreement of the applicant as well. In practice, it is common for consultation to extend beyond the 135-day period specified in the regulations, due to the Services' budget and staffing constraints.

The Service may provide an opportunity for the Federal action agency and the applicant to review a draft of the Biological Opinion. If a draft Biological Opinion is made available for review, it normally will be provided only after it has been reviewed by the Service's legal counsel and is ready for signature. If the Federal action agency submits comments to the Service within 10 days before the Service's deadline for issuing the Biological Opinion, the Service is automatically given a 10-day extension to issue the opinion.

The Service may also seek input from the Federal action agency in other ways during the preparation of a Biological Opinion—for example, by requesting additional information about the project to ensure that the project description in the opinion is accurate and complete. Depending on the extent of the request for additional information, the time period needed to complete the consultation may need to be extended.

Issuance of the Biological Opinion concludes the Section 7 consultation process. The opinion includes the following components:

- a description of the proposed action;
- a description of the potentially affected species and critical habitat;
- an analysis of the direct and indirect effects of the proposed action, including the effects of any interrelated or interdependent actions, on the potentially affected species and habitat;
- an analysis of cumulative effects on the potentially affected species and habitat;
- a determination as to whether the project is likely to jeopardize the continued existence of any listed species and a determination as to whether it would adversely modify or destroy any designated critical habitat;
- an incidental take statement, which includes “reasonable and prudent measures” and “terms and conditions”—requirements that must be met during project implementation for the incidental take statement to remain valid;

40 The types of information required to be included in the initiation package are listed in Section 402.14(c) of the Section 7 regulations.
41 50 CFR 402.14(d).
42 Services’ Section 7 Handbook, p. 4–6. Please note that this does not always occur. The Federal agency should stay in contact with the Service to determine when consultation can begin.
43 If the Federal agency believes the package is complete, the Federal agency could take the position that formal consultation was in fact initiated upon the date of submittal. The Section 7 regulations themselves do not provide a mechanism for resolving disputes over the completeness of the initiation package.
44 50 CFR 402.14(e). This 135-day period consists of 90 days for formal consultation plus an additional 45 days for the Service to prepare the Biological Opinion. The entire 135-day period is commonly referred to as formal consultation.
45 50 CFR 402.14(e).
46 50 CFR 402.14(g)(5).
47 50 CFR 402.14(g)(5).
■ recommended conservation measures, which the Federal action agency and/or the applicant are encouraged, but not legally required, to implement; and

■ re-initiation criteria, which define the conditions under which the Federal action agency would be required to re-initiate consultation with the Service.  

In the rare cases where the Service makes a jeopardy finding, or a finding that the project will adversely modify or destroy designated critical habitat, the Service must propose “reasonable and prudent alternatives” that would avoid jeopardy and avoid the adverse modification and destruction of critical habitat. The reasonable and prudent alternatives are developed in collaboration with the Federal action agency. If it proceeds with the action, the Federal action agency must adopt one of the reasonable and prudent alternatives or seek an exemption.

If the Federal agency has engaged in “conference” with the Service regarding proposed species and/or proposed critical habitat, the Biological Opinion may include a Conference Opinion. A Conference Opinion would include preliminary findings regarding jeopardy of proposed species and adverse modification/destruction of proposed critical habitat.

**Relationship of Section 7 Consultation to NEPA and Other Requirements**

This section briefly describes the relationship between Section 7 consultation and environmental review requirements under other laws. For additional information, refer to the Red Book published by the USDOT, the Services, and other agencies.

**NEPA.** Projects that require compliance with Section 7 also require compliance with NEPA, because both laws apply to Federal agencies’ actions. Agencies have flexibility to determine how best to meld the NEPA process with Section 7 consultation. In general, the request for a species list, which initiates Section 7 consultation, occurs early in the NEPA process. A Biological Assessment, if needed, is usually prepared after the preferred alternative is identified in the NEPA process and focuses just on that alternative. In virtually all cases, the Section 7 consultation process is completed before the NEPA decision document is issued.

**Environmental Review Process under 23 USC 139.** Highway and transit projects that involve preparation of an environmental impact statement (EIS) are required to follow an “environmental review process” established in 23 USC 139. Railroad projects must follow the same process “to the greatest extent feasible.” This environmental review process includes several requirements relevant to coordination with the Services, including: designation of “participating agencies”; development of an overall schedule and coordination plan for the environmental review process, including Section 7 consultation; an opportunity for participating agencies to comment on the project’s purpose and need and range of alternatives; coordination with participating agencies in developing methodologies for environmental impact analyses; and a process for resolving issues that have the potential to delay completion of the environmental review process.

**Section 404 of the Clean Water Act.** Section 404 of the Clean Water Act (CWA) requires a permit for the discharge of dredged or fill material into “waters of the United States.” The U.S. Army Corps of Engineers (USACE) administers the permit program together with the U.S. Environmental Protection Agency (EPA). Under guidelines issued by the USACE and EPA, the USACE generally can issue a permit only for the practicable alternative that causes the least impact to the aquatic ecosystem—commonly known as the “least environmentally damaging practicable alternative (LEDPA).” The Services may provide comments to the USACE regarding the selection of the LEDPA. In addition, the USACE must engage in Section 7 consultation with the Services regarding the effects of a permitted activity on listed or proposed species and designated and proposed critical habitat.

**Fish and Wildlife Coordination Act.** The Fish and Wildlife Coordination Act (FWCA) requires Federal agencies to consult with the USFWS (and NMFS in some instances) regarding fish and wildlife impacts when proposing to undertake or approve any action that involves impounding, diverting, channel deepening, or otherwise controlling or modifying any stream or water

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48 50 CFR 402.14(h).
49 16 USC 1536(b)(3)(A).
50 An exemption allows the project to proceed notwithstanding its potential to jeopardize a species and/or adversely modify or destroy critical habitat. See 16 USC 1536(e)-(I). This authority has been used only a few times, and as a practical matter, is unlikely to be relevant to the vast majority of transportation projects.
51 23 USC 139(b).
52 49 USC 24201(a)(1).
54 33 USC 1344.
This consultation also must include the state agency with responsibility for fish and wildlife resources. The FWCA applies to many transportation projects, and when it does, it gives USFWS or NMFS, as applicable, a responsibility to provide comments on fish and wildlife issues in general, not just those involving threatened and endangered species.

**Other Federal Species-Protection Laws.** Several other Federal laws protect specific types of species, which may or may not also be listed as threatened or endangered under the ESA. These laws often are addressed in conjunction with Section 7 consultation. They include:

- **Magnuson-Stevens Act.** The Magnuson-Stevens Fishery Conservation and Management Act (MSA) requires Federal agencies to consult with NMFS when proposing to undertake or approve an action that may affect “essential fish habitat” (EFH). Through this process, NMFS may recommend ways to avoid, minimize, mitigate, or otherwise offset adverse effects on EFH and to promote the conservation of EFH. NMFS often works with the Federal action agency as conservation recommendations are developed. While the action agency is not required to accept the NMFS recommendations, it is required to provide a written response within 30 days after receiving the recommendations. NMFS normally provides its comments under the MSA as part of its comments on the Draft EIS or other NEPA document. Consultation under the MSA often is combined with Section 7 consultation; when they are combined, the EFH analysis is included in the Biological Assessment (if any) and NMFS normally provides a single letter addressing Section 7 and EFH issues.

- **Migratory Bird Treaty Act.** The Migratory Bird Treaty Act (MBTA) implements certain international treaty obligations of the United States by making unlawful certain activities involving migratory birds, including the “take” of any migratory bird. Unlike the ESA, the MBTA does not include a consultation process, and the law is unsettled as to whether the MBTA prohibits incidental takes. As of publication of this Handbook, there are no regulations that specifically authorize issuance of incidental take permits for migratory birds. The USFWS may use its comments during the NEPA process to provide recommendations on measures for avoiding take of migratory birds.

- **Bald and Golden Eagle Protection Act.** The Bald and Golden Eagle Protection Act (BGEPA) prohibits anyone from taking, possessing, or transporting bald eagles or golden eagles, or the parts, nests, or eggs of such birds without prior authorization. Pursuant to the BGEPA, the USFWS issues permits for “non-purposeful” take of both bald eagles and golden eagles—that is, a taking that is associated with, but not the purpose of, an activity and cannot practicably be avoided. Because bald and golden eagles are not listed as threatened or endangered, any consideration of impacts on these species occurs as part of compliance with NEPA, MBTA, and BGEPA, not the ESA.

- **Marine Mammal Protection Act.** The Marine Mammal Protection Act (MMPA) prohibits, with certain exceptions, the “take” of marine mammals in U.S. waters and by U.S. citizens on the high seas; take is defined to include harassment, even if inadvertent. The Federal action agency is responsible for determining if its action requires an incidental take authorization under the MMPA, and if so, must seek that authorization from NMFS or USFWS, as applicable. The applicable Service must comply with NEPA when issuing an incidental take authorization under the MMPA. With appropriate coordination, the Service can satisfy its NEPA responsibilities by adopting the NEPA document prepared by the Federal action agency.

**State Endangered Species Laws.** Many states have their own endangered species laws. State-listed species are normally addressed in the environmental impacts analysis in the NEPA process. Consultation required regarding state-listed species under state law is separate from the Section 7 consultation process under the ESA.

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55 16 USC 661-667e. The FWCA does not refer explicitly to NMFS, but it has been interpreted to require consultation with NMFS as well as USFWS.

56 16 USC 1855(b).


58 16 USC 703(a).

59 The USFWS has proposed regulations that would establish authority for incidental take permits, but those regulations have not been finalized. See 80 Fed. Reg. 30032 (May 26, 2015). In some instances, the USFWS has issued “miscellaneous take” permits under the MBTA as a means of authorizing incidental takes.

60 16 USC 668.


62 16 USC 1361–1423h.

Key Issues to Consider

Preparing for Section 7 Consultation

- What is known about the presence of listed and proposed species and/or critical habitat in the vicinity of the proposed project?
- What is known about the potential for listings or designations to occur during the NEPA process or project implementation? For example:
  - Are there any proposed species that are likely to become listed, or proposed critical habitat areas that are likely to become designated as critical habitat?
  - Are there any species that are likely to be proposed for listing, or habitat areas that are likely to be proposed for designation as critical habitat?
- What is known about the potential impacts of the proposed project on those species and/or critical habitat?
- What additional data can be collected before the NEPA process begins?
- Is a Biological Assessment likely to be needed? (See Practical Tips, Part 4).
- Is formal consultation likely to be required?
- What is the expected schedule for Section 7 consultation and how does it relate to key milestones in the NEPA process and project schedule?
  - Are there any upcoming events that could affect the amount of time needed for Section 7 consultation—e.g., upcoming listings or proposed listings?
- Given what is known about the species involved, what types of biological expertise will need to be included on the project team?
- Which Service (USFWS and/or NMFS) has jurisdiction over the species and/or critical habitat that may need to be addressed in Section 7 consultation?
- Who are the key contacts at the USFWS and/or NMFS for this project?
- Does the project involve any unusual issues that require technical assistance from NMFS and/or USFWS?

Defining the Action Area and Requesting or Submitting the Species List (Step 1)

- What are the elements of the proposed project as currently defined? What is known about its potential location? What is known about the potential timing of construction?
- Are there potential elements of the project that have not yet been identified or whose location is unknown?
- Are there any potential interrelated or interdependent actions that may need to be considered as part of the proposed action?
- How far are the project’s direct and indirect effects likely to extend—i.e., what areas need to be included in the action area?
- Have the boundaries of the action area been clearly identified and mapped? Are there any unresolved issues or questions about how to define the boundaries of the action area for purposes of Section 7 consultation?
- When will USFWS and/or NMFS be contacted to request a species list?
- Will the applicant be designated as the Federal agency’s non-Federal representative for purposes of informal consultation?
- Is there a need for surveys to assess the potential presence of certain species and/or their suitable habitat?
- Based on what is known, is there a basis for concluding that specific species are not present in the action area?

Assessing Effects of the Proposed Action on Section 7 Resources (Steps 2 and 3)

- What listed species and designated critical habitat will need to be addressed in the effects assessment?
- When will the effects assessment occur in relation to other key milestones in the NEPA process and project schedule?
Complying with Section 7 of the Endangered Species Act for Transportation Projects

■ What data-gathering is needed for the effects assessment (e.g., literature review, habitat surveys)?
■ What coordination is needed with the USFWS, NMFS, or other agencies (e.g., state agencies with responsibility for wildlife protection)?
■ What findings of effect can be made? Specifically:
  ▪ Is there a basis for making a “no effect” finding for any listed species and/or designated critical habitat?
  ▪ Is there a basis for making a “not likely to adversely affect” finding for any listed species and/or designated critical habitat?
  ▪ Is there a basis for making a “likely to adversely affect” finding for any listed species and/or designated critical habitat (in which case formal consultation is required)?
■ Are there any proposed species and/or proposed critical habitat that will need to be considered in the effects assessment?
■ Will candidate species be addressed in the effects assessment, and if so, at what level of detail?
■ If a Biological Assessment is being prepared, will a draft of the document be submitted to the Service or Services for review and comment?

**Conducting Formal Consultation [Step 4]**

■ Is formal consultation needed, and if so, for which specific listed species and/or designated critical habitat?
■ What information is needed for the formal consultation initiation package? (If a Biological Assessment was prepared, it is included in the initiation package.)
■ Are there any known factors that could cause USFWS and/or NMFS to seek an extension of the time period for formal consultation? What can the Federal action agency or applicant do to help make the consultation process as efficient as possible?
■ Have any changes been made to the project while formal consultation is under way? Are those changes pertinent to the issues under consideration by USFWS and/or NMFS? If so, when and how will that information be provided?
■ Is there any other new information that needs to be communicated to USFWS and/or NMFS during formal consultation—e.g., changed environmental conditions?
■ Will the Federal action agency and applicant be given an opportunity to review the draft Biological Opinion? If so, how much time will be allowed for this review?
■ Does the draft Biological Opinion include an incidental take statement? If so, what are the terms of that statement?

**Conducting Conference for Proposed Species and Proposed Critical Habitat**

■ Have any proposed species and/or proposed critical habitat been identified as present or potentially present in the vicinity of the project?
■ Is conference required for proposed species and/or proposed critical habitat?
■ Will conference be a separate process, or will it occur as part of the consultation process for listed species and designated critical habitat?

**Coordinating Section 7 with the NEPA Process and Other Requirements**

■ Is the project subject to the environmental review process requirements in 23 USC 139? If so, will USFWS and/or NMFS be invited to serve as participating agencies?
■ For projects subject to 23 USC 139, how will Section 7 consultation be addressed in the coordination plan and project schedule?
■ How will potential impacts on listed/proposed species and designated/proposed critical habitat be considered during the development and screening of alternatives and during selection of a preferred alternative in the NEPA process?
■ What commitments have been made in the Section 7 consultation process (e.g., regarding project design, location, or mitigation measures), and how will those commitments be incorporated into the NEPA document and NEPA approval?
Complying with Section 7 of the Endangered Species Act for Transportation Projects

What information about the Section 7 consultation process will be included in the NEPA document and its appendices (e.g., consultation chronology)?

What other species-protection laws may be applicable to the project, and how will those laws be coordinated with NEPA and ESA compliance?

Complying with Section 7 Following Completion of the NEPA Process

What process will be used to track compliance with environmental commitments, including compliance with the terms of any Biological Opinion?

What process will be used to monitor and evaluate changes that may be made to the project’s timing, design, or location (e.g., as part of the final design process) to assess consistency with assumptions made in the Section 7 consultation process?

If there have been changes in the project, or other new information relevant to the project’s effects on species or critical habitat, is it necessary to revisit and verify findings made during informal consultation—e.g., “no effect” or “not likely to adversely affect” findings?

Have there been any changes in the project, or other changed circumstances, that require re-initiation of formal consultation under the terms of the Biological Opinion?

Practical Tips

The Section 7 consultation process requires close collaboration between agencies with different missions and responsibilities—transportation agencies on one hand and natural resource agencies on the other. The issues involved in consultation often are complex and can involve strongly opposing viewpoints. This section provides recommendations on ways that transportation agencies can manage the Section 7 consultation process efficiently and effectively while complying with Section 7 requirements.

1 | General Recommendations for Effective Section 7 Consultation

The following tips are intended to help transportation agencies, including applicants, approach Section 7 consultation in a manner that avoids unnecessary disagreements and delays, maximizes the chance of maintaining project schedules, and helps achieve positive outcomes for the transportation system and the environment.

Demonstrate an Understanding of the Process. The Section 7 consultation process includes its own distinct requirements and vocabulary. For example, some effects findings require concurrence of the applicable Service while others do not. Some terms, such as “indirect effects” and “cumulative effects,” have different meanings in the Section 7 process than in the NEPA process. Demonstrating familiarity with ESA requirements and terminology helps to establish credibility with the Services.

Include Biologists with Relevant Species Expertise. Several species may be addressed in the Section 7 process, and each species may require biologists with different expertise. The Federal action agency and/or applicant should include biologists on the project team with relevant expertise for each species. Having biologists with relevant expertise on the project team will help build credibility and trust, and will also help to ensure that analyses submitted to the Services are scientifically sound.

Allow Sufficient Time for Consultation. The Section 7 consultation process can be time-consuming and resource-intensive, especially when a project requires formal consultation on multiple species. Moreover, much of the work in Section 7 consultation occurs after a preferred alternative is identified, which may be after the Draft EIS or EA has been issued. The project schedule should allow time needed for consultation, taking into account the time periods specified in the Section 7 regulations for each step.

Communicate Clearly and Regularly. The Federal action agency and applicant can reduce the burden on the Services and make the consultation process more efficient by communicating with Services’ staff clearly and regularly. Communication could occur in various ways, whether through regular inter-agency update meetings, telephone conferences or webinars,
written correspondence, a project portal where key documents are shared, or other means. The key is to ensure the Services have access to current, accurate information about the project itself and any upcoming study milestones.

**Provide Sound Data.** The Federal action agency and applicant should carefully review any data or other technical information submitted to the Services during Section 7 consultation to ensure it is accurate and complete. If the data has significant limitations (e.g., due to the methodology used, or the passage of time since collection of the data), those limitations should be acknowledged and explained. If the Federal action agency made a decision not to collect data requested by the Services, that decision also should be acknowledged and explained.

**Maintain Thorough Project Files.** Correspondence, reports, and other materials related to Section 7 consultation should be maintained in a central location by the Federal action agency and/or applicant. Maintaining a well-organized file for the Section 7 consultation process has several benefits: (1) it avoids confusion and delay during the process by ensuring that team members have access to previous correspondence and reports; (2) it allows the Federal action agency and applicant to respond more quickly to information requests from the Services or other parties; and (3) it helps to ensure that the Federal action agency has a strong administrative record if litigation is filed.

**Be Sensitive to Regional and State-Specific Variations.** Section 7 consultation practices and terminology vary to some extent across different states and regions of the country. These differences may involve issues such as the type of information provided, the format of documentation, the terminology used, and the frequency and mode of communication during consultation; it also may affect substantive issues such as approaches to avoiding, minimizing, or mitigating impacts on particular species. Practitioners should always be sensitive to these regional and state-specific differences.

**Create Opportunities for Early Coordination and Issue Resolution.** In regions where endangered species issues arise frequently, it can be helpful to hold regularly scheduled coordination meetings with the Services. These meetings can be used to provide updates for the Services on pending and upcoming projects. They also can be used to identify potential concerns before consultation begins, discuss the appropriate consultation path for upcoming projects, and address difficult issues or disputes that arise in consultation.

## 2 | Preparing for Section 7 Consultation

**Gather Existing Information about Species in the Project Area.** Existing information sources should be collected and synthesized early in the NEPA process, ideally before the NEPA process begins, so that potential impacts on species can be considered during scoping and in developing alternatives. Potential data sources include:

- The USFWS maintains a publicly available database, known as IPaC, which can be queried to identify federally listed and proposed species, designated and proposed critical habitat, and candidate species.
- Individual state agencies maintain natural heritage inventories, which typically have detailed location data regarding federally listed as well as state-listed species and other important ecological resources. Geographic Information Systems (GIS) mapping also is often available regarding these resources.
- Local resources, such as a university herbarium or natural history center, may have relevant data or experts.
- For projects located on land managed by a Federal agency (e.g., Forest Service, National Park Service, Bureau of Land Management), the land managing agency may possess information regarding species in the action area.

**Identify Key Contacts at the Services.** The Federal action agency or applicant should identify the key contacts at each Service office early in the NEPA process and ensure that those contacts are included on the project mailing list. In addition, it often is helpful to reach out to those contacts by telephone or in-person to help establish an effective working relationship. Many transportation agencies have designated agency-wide liaisons with the Services; the liaisons can play a key role in maintaining relationships and lines of communication.

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64 FHWA has established an ESA portal that can be used to share documents with the Services or other agencies during Section 7 consultation. See Reference Materials section below.

65 The ESA does not require the federal action agency to conduct new research, but it does require the action agency, when requesting formal consultation, to “provide the Service with the best scientific and commercial data available or which can be obtained during the consultation ….” 40 CFR 402.14(d).

66 FHWA’s web-based ESA portal includes an electronic “file cabinet” that can be used for this purpose.

67 See [https://ecos.fws.gov/ipac/](https://ecos.fws.gov/ipac/). Currently, IPaC only includes species within the jurisdiction of the USFWS.
Initiate Contact Early and Invite the Services to be Involved. For projects that will require Section 7 consultation, coordination with the Services should begin early in the NEPA process, or even before the NEPA process begins. For projects subject to the environmental review process in 23 USC 139, this coordination should include inviting the Service to participate as a cooperating agency under section 139, and perhaps also as a cooperating agency under NEPA. This early coordination helps to facilitate the flow of information, but even more importantly, it helps to build strong relationships among key staff members and consultants.

Assess Whether Formal Consultation is Likely to be Needed. In many cases, it is apparent early in consultation that the proposed project—or at least some of the alternatives—will be located in areas where listed species are or may be present. The project team should make an early assessment, based on existing data, of the likelihood that formal consultation will be needed. If formal consultation seems likely, the project schedule should include a realistic time period to complete that process—normally, at least 135 days following submittal of a complete formal consultation initiation package.

Include Section 7 Consultation in the Project Schedule. From the outset of the NEPA process, the project schedule should include at least placeholder dates for key milestones in Section 7 consultation. These dates can be modified as more detailed information becomes available regarding the project's potential to affect species and habitat. Remember that for projects subject to 23 USC 139, the project schedule will need to be developed early in the NEPA process (within 90 days after the notice of intent is issued) and will need to obtain concurrence of all participating agencies.

Discuss Any Unusual Issues Relating to Section 7 Consultation. Some projects involve unusual issues that may not be directly addressed in the Section 7 regulations, such as:

- how to comply with Section 7 in the context of a programmatic or tiered EIS;
- the potential impact of ongoing rulemaking processes that involve the listing status of species in the action area;
- the potential impact of ongoing litigation related to species listing decisions or other issues; and
- the development of, or revision to, recovery plans for species in the action area.

By identifying these issues early, the project team can engage the Service in assessing the implications for the Section 7 consultation process. This type of coordination can occur before the NEPA process is initiated or during the NEPA process. The Services have designated agency-wide liaisons with USDOT, and those liaisons may be able to provide assistance on issues that raise novel or difficult questions of law or policy.

Consider Impacts on Listed Species and Designated Critical Habitat When Developing and Screening Alternatives. It is prudent to consider potential impacts to species, to the extent feasible, early in the process when alternatives are being developed and screened. By doing so, the Federal action agency and applicant may be able to avoid the need for formal consultation, and if formal consultation is required, it generally will go more smoothly if the alternatives incorporate measures to avoid, minimize, and compensate for unavoidable impacts to listed species in the project area.

3 | Defining the Action Area and Requesting or Submitting the Species List

The first step in Section 7 consultation involves gathering information and determining whether any Section 7 resources may be present in the action area.

Determine the Action Area. The action area for a proposed action should be defined broadly when a species list is requested, because in most cases a range of alternatives remain under consideration and the direct and indirect effects of those alternatives have not yet been determined. The action area could be defined, for example, as a geographic area that includes all of the counties in which any of the alternatives are located. The boundaries of the action area can be refined over time as more becomes known about the definition of the project and the extent of its impacts. The Services should be consulted if there are difficult or unresolved issues concerning the definition of the action area.

Request a Species List. It is prudent to request a species list early in project development, so that the range of potentially affected species can be considered in developing alternatives. Good practices include:

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68 23 USC 139(g). Under section 139, the lead agencies are required to invite all Federal and non-Federal agencies that "may have an interest in the project" to become participating agencies. Participating agencies have specific rights and obligations in the environmental review process as defined in section 139.
For species in USFWS jurisdiction, obtain the species list by querying the on-line IPaC database. For species in NMFS jurisdiction, contact the relevant regional office.

- Make sure to include all project elements (including any “interrelated or interdependent” projects) in the project description when requesting a species list.

- Define the proposed project in a manner that includes the range of alternatives under consideration in the NEPA process. This is especially important when the alternatives extend across a broad geographic area.

- If there are uncertainties regarding how to define the project, or about the extent of the geographic area that should be included in the project description, contact the relevant Service office and seek technical assistance.

**For Species on List, Consider Whether Suitable Habitat Is Present.** For species included on the species list, consider whether suitable habitat for those species is present in the action area. If the presence of suitable habitat is uncertain, consider conducting habitat assessments to determine whether suitable habitat is in fact present. If it can be established that suitable habitat is not present, the Federal action agency may be able to make a finding that the species is not present, which concludes consultation for that species.

**Determine Whether a Biological Assessment Is Needed.** Based on the species list provided or concurred in by the Service, the Federal action agency should assess whether a Biological Assessment will be needed. A key point to remember is that the decision to prepare a Biological Assessment does not depend on the severity of the project’s effects. If the proposed action requires an EIS and listed species and/or designated critical habitat are or may be present in the action area, a Biological Assessment is needed. A Biological Assessment also may be prepared, at the Federal action agency’s option, to document determinations for projects involving preparation of an environmental assessment (EA) or categorical exclusion (CE).

**4 | Assessing Effects of the Proposed Action on Section 7 Resources [Steps 2 and 3]**

The Federal action agency must assess the direct and indirect effects of the proposed action on all listed species and/or designated critical habitat that are or may be present in the action area. This assessment occurs in the Biological Assessment or equivalent document. That document supports decisions on whether the proposed action has “effects” on the Section 7 resources [Step 2], and if so, whether the proposed action is “likely to adversely affect” the Section 7 resources [Step 3]. As noted previously, these findings are analytically distinct, but they often are made at the same time.

**Consider Modifying the Proposed Action to Avoid Adverse Effects.** The need for formal consultation can sometimes be avoided by changing some feature of the project itself or by placing seasonal restrictions on certain construction activities. For example, a common practice is to prohibit tree clearing except during times of year when the protected species will not be present. The Service can rely on these commitments as the basis for concurring in a “not likely to adversely affect” finding. In such cases, the Service’s letter of concurrence will specifically cite any commitments relied upon as the basis for the concurrence. The project sponsor must then ensure that the commitments are implemented in order for the Service’s concurrence to remain valid.

**Prepare the Biological Assessment (if Needed).** The responsibility for preparing the Biological Assessment, if needed, rests with the Federal action agency or its designated non-Federal representative, such as the applicant. As noted earlier, the Section 7 regulations list the types of information that a Biological Assessment should include, while leaving the Federal action agency with discretion to determine the contents. 69 The following suggestions provide a general guide and are not intended to be prescriptive.

- **Format.** It generally is best to start with an existing template (if available) and adapt it as needed, rather than using an entirely different format, which could create unnecessary confusion among agency reviewers. For example, FHWA has issued a template Biological Assessment, 70 and some state DOTs have done so as well.

- **Writing Style.** The target audience is primarily the technical staff at the resource agencies, including the Services. Write the document in technically appropriate language, but without using unnecessary technical jargon.

- **Project Description.** Describe the proposed action, including any mitigation measures or other environmental commitments that have been incorporated into the action, so that those commitments can be considered by the Services when assessing the effects of the proposed action. Make sure the project description covers the distinct stages of project implementation—for example, construction, operation, and maintenance. Identify any interrelated

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69 See 50 CFR 402.12(f).

70 FHWA’s template Biological Assessment is available on FHWA’s “ESA Webtool” website. See Reference Materials section below.
or interdependent actions associated with the proposed action; those actions are treated as part of the project for purposes of Section 7 consultation.

- **Action Area.** Define the action area to encompass all areas affected directly or indirectly by the proposed action, not just the immediate vicinity of the project. Define only one action area for the entire project, not a separate action area for each species or project element. Separate zones of impact may be identified within the action area to facilitate reporting and analysis of effects. Include a map showing the boundary of the action area.

- **Species and Critical Habitat in Action Area.** Identify the listed and proposed species that are known to occur or may be present in the action area, based on the species list provided previously by the Services. For each species, identify the Service with jurisdiction and the population addressed, and describe the species’ life history and stages. Designated and proposed critical habitat also should be identified. Although not required, candidate species often are discussed as well; FHWA recommends including a discussion of candidate species in an appendix. In some cases, a Biological Assessment also acknowledges species for which there are pending petitions for listing (sometimes called “petitioned species”).

- **Environmental Baseline.** Describe the current biological and physical conditions in the action area, as determined through Section 7 consultation. Keep in mind that the action area may be different from the “study area” or “project area” described in the NEPA document. This description should focus on the features of the action area that have the potential to be affected by the proposed action and that are relevant to the species being addressed. Ensure that the baseline includes all three elements: the past and present impacts of all Federal, state, or private activities; the anticipated impacts of all proposed Federal projects that have already undergone Section 7 consultation; and the impacts of state or private actions that are contemporaneous with the consultation in process. Include maps, photographs, and figures to illustrate relevant aspects of the baseline environmental conditions.

- **Analysis of Effects of the Proposed Action.** For each species (and critical habitat, if any), the analysis of effects must address all direct and indirect effects of the proposed action, including any interrelated or interdependent actions. FHWA provides several recommendations regarding the effects analysis, which include:
  - Use a logical framework for the effects analysis.
  - State the assumptions and unknowns on which the conclusion is based.
  - Do not assume that the reader is familiar with the project or its location.
  - Fully explain the impact the project may have on listed species and/or designated critical habitat.
  - Establish the key physical, chemical, and biological parameters affecting the species and determine how the action will change each parameter.
  - Address both the potential for an effect of the action on the Section 7 resource, and the potential response of the resource to that effect.
  - Include all measures that will minimize and avoid effects when describing the effects of the action.
  - Use neutral, objective language.
  - Provide clear, well-reasoned explanations for conclusions.

- **Cumulative Effects.** Discuss cumulative effects separately from the effects of the proposed action, and only if it is anticipated that the project will be proceeding into formal consultation. Cumulative effects are considered only as part of the Service’s decisions on whether the project would cause jeopardy to a species and/or adversely modify or destroy critical habitat. These determinations are based on the “aggregate effects” of the environmental baseline, the direct and indirect effects of the proposed action, and cumulative effects, which include the effects of other future actions.

- **Effects Determinations.** For each Section 7 resource considered in the Biological Assessment, provide one of the following determinations: (1) “no effect,” (2) “not likely to adversely affect,” or (3) “likely to adversely affect.” The determination for each species should take into account the effects of all component parts of the project and all

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71 50 CFR 402.02.
72 As noted earlier, cumulative effects, as defined under the ESA, consist solely of the effects of state and private actions that are “reasonably certain” to occur. See 50 CFR 402.02.
73 Services’ Section 7 Handbook, p. 4–37.
74 For a finding of “not likely to adversely affect,” the Biological Assessment should explain why the effect is beneficial, insignificant, or discountable. See Services’ Section 7 Handbook, p. 3–12.
For a project that does not require a Biological Assessment, equivalent documentation may be prepared to provide support for the findings made at Steps 2 and 3. As noted previously, the term Biological Evaluation is sometimes used to refer to the document prepared at this stage for a project that does not require a Biological Assessment.

Consider Providing a Draft Biological Assessment to the Services for Comment. The Federal action agency or applicant may, at their discretion, submit a draft of the Biological Assessment to the Service for review and comment prior to formal submittal. While this step is not required, it can be a prudent step when the technical issues are complex and the Service has sufficient staff availability to provide timely comments on the draft. Addressing the Service’s comments on the draft increases the likelihood that the Services will concur in the recommendations of the Biological Assessment when the document is formally submitted.

Request the Service’s Concurrence. The cover letter transmitting the Biological Assessment to the Service should briefly describe the proposed project and summarize the findings for which the Federal action agency is requesting concurrence. As noted above, the Service’s concurrence is not required for findings of “no effect,” and the Service’s concurrence is required for findings of “not likely to adversely affect.” The Service must provide its response to the Biological Assessment, including concurrence if any, within 30 days after receipt of the document.

5 | Conducting Formal Consultation (Step 4)

This section of the Handbook recommends ways that the Federal action agency and applicant can participate effectively in formal consultation, which is required when an action is likely to adversely affect any listed species and/or designated critical habitat. Conference requirements, which apply to proposed species and proposed critical habitat, are addressed in the following section.

Submit the Initiation Package. If informal consultation has been completed with a Biological Assessment and the Service has concurred in the findings of that document, then the Federal action agency normally can initiate formal consultation by submitting the Biological Assessment, related correspondence, and any other supporting documents to the Service. However, before submitting a request for formal consultation, it is prudent to consult with the Service to determine whether any additional information is needed or would be helpful. For example, the Service may request clarification of the project description. In addition, it is possible that updated information may be needed due to the passage of time since the Biological Assessment was prepared. Coordination with the Services prior to submitting the package helps to ensure the package is deemed complete.

Revise the Initiation Package (if Deemed Incomplete). It is not uncommon for the Service to respond to an initiation package by requesting clarification and/or additional information. From a project schedule standpoint, it is best to respond to requests for additional information promptly. Do not assume that the 135-day period has begun until the Service has confirmed that the initiation package is complete.

Engage in Formal Consultation. Formal consultation itself involves the Service’s review of the information provided in the initiation package. The Federal action agency and applicant typically have a less active role during formal consultation, and there may be times during this period when there is little communication between the action agency and applicant, on one hand, and the Service, on the other. Intermittent communication during this period is not necessarily cause for concern; by this point, the Service normally has received the information it needs and is conducting its own analysis and deliberations.

Respond to Requests for Additional Information during Formal Consultation. If the Service does have concerns about the project itself and/or about the adequacy of the information provided, the Service will raise those concerns with the Federal action agency and applicant during the formal consultation period. If the Service requests additional information and the

75 50 CFR 402.13.

76 A clear, comprehensive description of the proposed action is a critical factor from the Services’ perspective in determining whether the initiation package contains the information needed for formal consultation.
requested information is not provided, the Service’s policy is to provide the benefit of the doubt to the species. For example, if there is uncertainty about whether an effect is adverse, the Service may assume that the effect would be adverse.

Advise the Service of New Information during Formal Consultation. It is common during project development for the preferred alternative to be modified in response to public comments or for other reasons. If changes are made that affect the project description as provided in the Biological Assessment or equivalent document, this updated information should be provided to the Service, so that the Biological Opinion is based on accurate and complete information about the project. In addition, if new information is learned about the project’s impacts, and the new information is relevant to the effects assessment, that new information also should be provided to the Service. When additional information is provided, it may change the completion date of the Biological Opinion.

Respond to Requests for Extensions. For a complex project, it is not uncommon for the Service to request an extension of the 135-day period for formal consultation and preparation of the Biological Opinion. The Federal action agency’s consent is required for any extension, and the applicant’s consent is required if the extension is greater than 60 days. In practice, the Federal action agency and applicant normally grant the requested extension, in deference to the Service and because there is little to be gained by insisting on issuance of a Biological Opinion when the Service has stated that the submitted information is not complete. Even so, the Federal action agency and applicant should not hesitate to communicate any schedule concerns and work with the Service toward agreement on a mutually agreeable extension.

Review a Draft Biological Opinion (if Provided by the Service). The Federal action agency and the applicant may be given an opportunity to review a partial or full draft of the Service’s Biological Opinion. For example, the Service may share the project description portion of the Biological Opinion to make sure the description is correct. The Service also may share a draft of the entire opinion—but when this occurs, the draft typically is provided after the Service’s internal reviews are complete and the opinion is ready for signature. If given the opportunity to review a draft Biological Opinion, practitioners should consider the following elements:

- **Project Description.** Does the Biological Opinion accurately describe all elements of the proposed action, including mitigation measures or other environmental commitments that have been incorporated into the proposed action?

- **Findings.** Does the Biological Opinion include a finding of “no jeopardy” for each listed species and a finding of “no adverse modification or destruction” for any designated critical habitat? Normally, the Services will alert the Federal action agency in advance if the Service cannot make these findings based on the project as proposed. Still, it is prudent to confirm that the Biological Opinion includes these findings for each listed species and all designated critical habitat.

- **Incidental Take Statement.** Does the Biological Opinion include an incidental take statement (normally, it will), and if so, what are the key terms of that statement? In particular, look for the following:
  - What is the “anticipated take” and how is that level defined? For example, is it defined as a specific number of individuals? Or is it defined using a surrogate, such as a quantity of habitat?
  - What “reasonable and prudent measures” are required? These measures are mandatory and must be implemented for the incidental take statement to remain valid. They are intended to minimize the amount of incidental take.
  - What “terms and conditions” are included? The terms and conditions set out the specific methods by which the reasonable and prudent measures are to be accomplished, and must include reporting and monitoring requirements.

- **Recommended Conservation Measures.** Conservation measures are recommendations, not requirements,
so the Federal action agency and applicant may have fewer concerns with the items included in this category. Nonetheless, these recommendations also should be reviewed and any concerns should be raised—e.g., concerns regarding the clarity or feasibility of any of the recommended measures.

■ Re-Initiation Triggers. The Biological Opinion will include a paragraph specifying the conditions under which the Federal action agency and applicant will be required to re-initiate formal consultation with the Service. The Services’ Section 7 Handbook provides standard language, which closely follows the re-initiation criteria provided in the regulations. Because the basic criteria are established in the regulations, the Services have limited flexibility to modify the wording used in this provision of the Biological Opinion.

What If the Service Makes a “Jeopardy” Finding?

Although it happens infrequently, the formal consultation process sometimes results in a finding that the proposed action will jeopardize listed species or will result in the destruction or adverse modification of designated critical habitat. When this occurs, the Service is required to propose “reasonable and prudent alternatives” as part of its Biological Opinion. The reasonable and prudent alternatives must meet four criteria:

■ Can be implemented in a manner consistent with the intended purpose of the action
■ Can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction
■ Are economically and technologically feasible
■ Would avoid the likelihood of jeopardizing the continued existence of listed species or resulting in the destruction or adverse modification of critical habitat.

The Service satisfies its obligations under Section 7 by proposing alternatives that satisfy these criteria. The Federal action agency can then decide whether to implement these alternatives, or other alternatives that comply with Section 7 requirements, or not proceed with the proposed action at all.

6 | Conducting Conference on Proposed Species and Proposed Critical Habitat

The Federal action agency and applicant should address proposed species and proposed critical habitat as part of informal consultation. The results of informal consultation, including a Biological Assessment if any, will be used in determining whether conference is required for the proposed resources. Conference on the proposed resources normally will occur in conjunction with formal consultation (if any) on listed resources.

Addressing Proposed Resources During Informal Consultation. To ensure that proposed species and proposed critical habitat are properly addressed during informal consultation, the Federal action agency or applicant should:

■ Include proposed species and proposed critical habitat when requesting a species list at the outset of informal consultation.
■ After receiving the species list, determine whether proposed species and proposed critical habitat are or may be present in the action area.
■ If a Biological Assessment is prepared for listed resources, also assess the effects of the project on any proposed species and/or proposed critical habitat as part of that Biological Assessment and include proposed effects findings for those resources (i.e., proposed findings of “no effect,” “not likely to adversely affect,” or “likely to adversely affect”).

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82 50 CFR 402.16.
83 Services’ Section 7 Handbook, pp. 4–63 to 4–64.
84 50 CFR 402.14(h).
85 50 CFR 402.02.
86 50 CFR 402.13(a).
87 50 CFR 402.12(c).
88 50 CFR 402.12(c).
If no listed resources are present in the action area, a Biological Assessment is not required.\textsuperscript{89} Still, it may be prudent to prepare a Biological Assessment or other written analysis for the proposed resources in order to provide a basis for determining whether conference is needed and documenting that decision process.

**Deciding Whether to Request Conference.** Conference is legally required only if the project is likely to jeopardize the proposed species or likely to result in destruction or adverse modification of the proposed critical habitat.\textsuperscript{90} In practice, however, it is normal to request conference on a proposed resource if the Biological Assessment results in a finding of “likely to adversely affect” for the proposed resource. In other words, it is common to request conference on a proposed resource based on the same effects finding that would require formal consultation for a listed resource. In fact, the Service also will engage in conference for a proposed resource based solely on a “may affect” finding if requested by the Federal action agency.\textsuperscript{91} The benefits of requesting conference, even when it is not required, include:

- obtaining recommendations from the Services on ways to avoid and minimize impacts to the species, thereby promoting conservation and recovery of the species
- minimizing delays that could occur in the future if the species becomes listed before project implementation has been completed (because Section 7 consultation requirements would come into effect once the species is listed)

**Following Formal Consultation Procedures for Conference.** Conference is an informal process and is not required to follow the same procedures used for formal consultation.\textsuperscript{92} However, the Section 7 regulations allow conference to follow the formal consultation process, in which case the process results in a Conference Opinion.\textsuperscript{93} The Conference Opinion is, in substance, similar to a Biological Opinion, and can include a preliminary incidental take statement, which is non-binding at the time the Conference Opinion is issued. The Conference Opinion can be adopted as a Biological Opinion if the species or critical habitat is listed or designated while project implementation is still under way.

**Implementing Conference Recommendations.** The conference process results in recommendations, not requirements. The Services provide their recommendations either as part of a Biological Opinion (if one was prepared for listed resources) or in a separate document (if no Biological Opinion was prepared).\textsuperscript{94} The Federal action agency and applicant are then responsible for deciding whether, and to what extent, to adopt the Service’s conference recommendations. By adopting those recommendations as commitments in the NEPA process, the Federal action agency and applicant help to promote the conservation and recovery of the species or critical habitat and also help to minimize the risk of delay in the future if the proposed resource becomes listed or designated.

## 7 | Coordinating Section 7 Consultation with NEPA and Other Requirements

The recommendations in this section are intended to assist Federal action agencies and applicants in coordinating the Section 7 consultation process with other activities and milestones in the NEPA process, including compliance with 23 USC 139 where applicable.

**Inviting Participating and Cooperating Agencies.** The USFWS and NMFS, as applicable, should be invited to serve as participating agencies under 23 USC 139 for any project that has the potential to include informal or formal Section 7 consultation. If a project is not subject to section 139 (because an EIS is not being prepared), it is still advisable to contact the Services early in the NEPA process and include them in all agency coordination activities if Section 7 consultation is anticipated.

**Developing the Coordination Plan and Schedule.** The coordination plan and schedule for the environmental review process under 23 USC 139 should incorporate coordination with the USFWS and NMFS, as applicable, and should include Section 7 consultation milestones. Because the coordination plan and schedule are developed early in the NEPA process, the need for

89 50 CFR 402.12(d)(1).
90 16 USC 1536(a)(4).
91 See Services’ Section 7 Handbook, p. 4–62 (“A finding of ‘likely to jeopardize’ is not required to trigger the conference procedure if the action agency wishes to initiate a review of possible effects on a proposed species or critical habitat. The Services will confer when an agency requests such a conference based on their determination that the proposed action may affect a proposed species or critical habitat.’”).
92 50 CFR 402.02 and 402.10(c).
93 50 CFR 402.10(d).
94 50 CFR 402.10(e) (“If formal consultation also is required for a particular action, then the Service will provide the results of the conference with the biological opinion.”).

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Section 7 consultation may be uncertain at the time the plan and schedule are initially adopted. If so, the coordination plan and schedule could include placeholders for Section 7 consultation. If formal consultation is anticipated, the schedule should include at least 135 days to complete formal consultation.

Developing and Screening Alternatives. It is prudent to identify Section 7 resources (based on existing data) early in the NEPA process and include those resources on the maps used in the development and screening of alternatives. In addition to achieving better transportation and environmental outcomes, early consideration of Section 7 resources can help to streamline Section 7 consultation and NEPA in several ways:

1. avoiding the need for Section 7 consultation at all by developing alternatives that are located in areas where no Section 7 resources are present;
2. allowing Section 7 consultation requirements for specific Section 7 resources to be satisfied with informal consultation;
3. eliminating potential obstacles to achieving findings of “no jeopardy” and “no adverse modification or destruction” during formal consultation; and
4. reducing the overall level of effort and time needed for informal and formal consultation, as well as the potential for inter-agency disputes and related delays.

Selecting the Preferred Alternative. Section 7 does not require the Federal action agency to select the alternative with the least impact to Section 7 resources. Even so, impacts to Section 7 resources should be considered in selecting a preferred alternative, along with all of the other factors considered in the NEPA document. For example, impacts to Section 7 resources may be one factor supporting a finding that an alternative is not a “practicable” alternative for avoiding or minimizing impacts to aquatic resources that are protected under Section 404 of the CWA.

Incorporating Minimization and Mitigation into the Preferred Alternative. The description of the preferred alternative in the final NEPA document should include any features that have been incorporated to avoid, minimize, and mitigate impacts to Section 7 resources. If the final NEPA document includes a list of environmental commitments, that list also should include (or incorporate by reference) all of the commitments made in the Section 7 consultation process, including any “reasonable and prudent measures” and “terms and conditions” required by an incidental take statement in a Biological Opinion.

Documenting Section 7 Consultation in the NEPA Document. The NEPA document itself should document steps taken to comply with the Section 7 consultation process and summarize any findings made by the Federal action agency and the Service in that process. Good practices for NEPA documentation include:

- Summarize the Section 7 consultation requirements at the beginning of the section or chapter that addresses impacts to threatened and endangered species.
- Ensure that the project description, the description of the affected environment, and the assessment of environmental consequences in the NEPA document are consistent with the corresponding discussion of those issues in Section 7 documentation.
- Include a chronology of the Section 7 consultation process in the NEPA document. The key events should be summarized in the text of the NEPA document, with specific dates and specific titles of relevant reports. In addition, it is a good practice to include a complete consultation chronology, organized by date, in a table.
- Include all Section 7 correspondence (both to and from the Service or Services) in an appendix to the NEPA document. Redactions may be required if the Section 7 correspondence includes confidential information—e.g., regarding specific locations where a threatened or endangered species has been found.
- Specifically state each of the findings made in the Section 7 consultation process, with dates of the findings and any concurrences with those findings along with the supporting rationale for those findings.
- Include the final, approved Biological Opinion, including any attachments, as an appendix to the NEPA document (e.g., Final EIS or Record ofDecision). The Biological Assessment, if any, also may be included or referenced.
Complying with Section 7 Following Completion of the NEPA Process

Formal consultation concludes when the Service issues a Biological Opinion for the proposed project. The conclusion of the consultation process does not mean that the Federal action agency or the applicant has no further obligations under Section 7. The Federal action agency and applicant remain bound by the terms of the Biological Opinion and must ensure that the project is implemented in accordance with that opinion, including all “reasonable and prudent measures” and “terms and conditions” identified in the incidental take statement.

In addition, it is prudent for the Federal action agency and applicant to remain alert for new information or changed circumstances that may warrant review of findings of “no effect” and “not likely to adversely affect” that were made during informal consultation.

The suggestions below address ways that the Federal action agency and applicant can help to ensure that they remain in compliance with Section 7 throughout project implementation.

Tracking Implementation of Commitments. The applicant should put in place a process for tracking implementation of all environmental commitments, including commitments that result from the Section 7 consultation process (whether in a Biological Opinion or some other document). The applicant should have the ability to generate a report showing the Service the implementation status of all commitments related to Section 7 resources.

Evaluating Changes in the Project. The findings made in the Section 7 consultation process may be based not only on specific mitigation commitments, but also on assumptions about the design and location of the project itself. Modifications to the project’s location and design—which often are made during final design, after the NEPA process is completed—should be assessed for consistency with the assumptions underlying the findings made in the Section 7 process. If the changes involve a project element that was relied upon as the basis for Section 7 findings, some additional documentation may be needed to verify that the findings remain valid; in some cases, re-initiation is required, as discussed below.

Monitoring any Changes in Species or Habitat Status. The findings made during the consultation process are based on species and habitat status as it existed when that process was under way. But Section 7 consultation does not immunize a Federal action agency or applicant against potential future changes in a species’ or habitat’s status. For example, a species may have been only a candidate for listing at the time Section 7 consultation occurred; if it is proposed for listing (or listed) while the project is still being implemented, Section 7 conference (or consultation) would be required.

Re-Confirming Findings Made in Informal Consultation. The informal consultation process—Steps 1 through 3 of the consultation process—includes a series of findings (e.g., “no effect” or “not likely to adversely affect”). It is prudent for the Federal action agency and applicant to review these findings in light of new information after the NEPA process is completed and make sure the findings remain valid or modify the findings as appropriate. In some cases, it may be necessary to initiate formal consultation during project implementation because new information shows that the project is likely to adversely affect a listed species or designated critical habitat.

Re-Initiating Formal Consultation. Every Biological Opinion includes specific criteria for determining when formal consultation must be re-initiated. New information and changes in the project should be monitored closely throughout project implementation to assess whether re-initiation is required. If there is any question about whether the criteria have been met, the Federal action agency should inform the applicable Service of the issue and discuss whether re-initiation is required under the terms of the Biological Opinion. A decision not to re-initiate should be documented, with its rationale, in the project file.

Preparing Reevaluations or Supplemental Documents under NEPA. New information or changes in the project may require additional environmental analysis under NEPA. In general, if there is a circumstance that requires initiation or re-initiation of Section 7 consultation after completion of the NEPA process, there is likely a need for a reevaluation to be prepared under NEPA. Any additional Section 7 consultation and documentation should be coordinated with any reevaluation prepared under NEPA. Similarly, if a Supplemental EIS is required, any additional Section 7 consultation should be coordinated with that process.

Special Issues

Emergency Consultation. The Section 7 regulations provide for expedited consultation in emergency circumstances, such as a natural disaster. Emergency consultation involves:
Informal consultation during the initial response to the emergency condition. The Services’ Section 7 Handbook instructs Service staff to offer recommendations for minimizing the effects of the emergency response action on listed species or their critical habitat during this initial phase and to document any advice given. It also advises Service staff not to stand in the way of the response efforts.

Formal consultation after the emergency is under control. Formal consultation is required as soon as practicable after the emergency is under control, if the emergency response adversely affected Section 7 resources. Formal consultation would address the effects of the emergency response on the Section 7 resources and would result in a Biological Opinion.

Section 7 Consultation for Tiered EISs. Transportation agencies often prepare tiered EISs for complex projects or lengthy transportation corridors. The Section 7 consultation regulations do not directly address the Section 7 compliance obligations of a Federal action agency during the Tier 1 phase of a tiered NEPA process, so guidance is provided by the Service on a case-by-case basis. Possible approaches include:

- Conducting Section 7 consultation during the Tier 1 NEPA process on the entire action considered in the Tier 1 EIS. This approach would include developing a Biological Assessment for the entire project, and if the project has potential adverse effects on Section 7 resources, the Service would prepare a Biological Opinion, which may be called a “programmatic” or Tier 1 Biological Opinion. If individual portions of the project are then implemented with a series of separate Tier 2 NEPA documents, additional Section 7 consultation would occur on a project-specific level in each Tier 2 NEPA study.

- Conducting Section 7 consultation for each project section in Tier 2. Under this approach, the Tier 1 NEPA process includes an assessment of potential impacts on threatened and endangered species, as well as coordination with the Services, but a Biological Assessment and Biological Opinion are not prepared in Tier 1. Section 7 consultation would then occur for each Tier 2 project, with Biological Assessments and Biological Opinions prepared, as needed, as part of Tier 2 NEPA studies.

Planning-Environmental Linkage. The practice of planning-environmental linkage (PEL) involves using transportation planning studies to develop analyses and findings that are later adopted as part of the NEPA process for a transportation project. Under this approach, the planning study is prepared by a state DOT and/or a metropolitan planning organization (MPO) as part of a statewide or metropolitan planning process; the planning study itself is not a Federal action and therefore does not require Section 7 consultation. The planning study can be used to identify issues that will require Section 7 consultation when the NEPA process begins for an individual project.

Programmatic and Batched Consultation. The Services have a range of options for addressing a large number of similar projects—e.g., bridge rehabilitations—in a single Section 7 consultation process. These include:

- Batched consultation. The term “batched consultation” is not used in the Section 7 consultation regulations, but has been used informally by the Services as a way of describing a single process that includes consultation on multiple projects (typically, small projects with similar impacts). In a batched consultation, the proposed action includes a category of projects, which may be divided into sub-categories based on their physical condition, location, or impacts. Consultation on all of the projects occurs as part of a single process, and may be documented in a single Biological Assessment and, if needed, Biological Opinion. However, each individual project is specifically addressed as part of the consultation process.

- Programmatic consultation. The term “programmatic” consultation refers to consultation on an agency program under which the agency plans to approve or carry out a series of actions in the future. Programmatic consultations have been carried out in various ways for many years, with the specific procedures determined on a case-by-case basis. In 2015, the Section 7 regulations were amended to include a definition of “framework programmatic action.” The regulations state that, when consulting on a framework programmatic action, it is not necessary for a Biological Opinion issued at the programmatic level to include an incidental take statement because any incidental take will be addressed in subsequent Section 7 consultations for individual projects within the overall program.

95 Services’ Section 7 Handbook, p. 8–1.
96 This practice is authorized in the statewide and metropolitan transportation planning regulations and in Federal law. See 23 CFR 450.212 and 450.318; see also 23 USC 168.
97 50 CFR 402.02 (“Framework programmatic action means, for purposes of an incidental take statement, a Federal action that approves a framework for the development of future action(s) that are authorized, funded, or carried out at a later time, and any take of a listed species would not occur unless and until those future action(s) are authorized, funded, or carried out and subject to further Section 7 consultation.”).
Reference Materials

Statutes, regulations, and guidance documents cited in this Handbook are available on the Center for Environmental Excellence website: [http://environment.transportation.org](http://environment.transportation.org). Additional resources can be found on the following agency websites:

USFWS: [https://www.fws.gov/Midwest/endangered/section7/index.html](https://www.fws.gov/Midwest/endangered/section7/index.html)


FHWA: [https://www.environment.fhwa.dot.gov/esa/webtool/](https://www.environment.fhwa.dot.gov/esa/webtool/)

Statutes and Regulations

16 USC 1536 (ESA Section 7 statute)

50 CFR 402 (ESA Section 7 consultation regulations)

Guidance


Appendix A

Section 7 Consultation—Key Terms and Concepts

This section summarizes some of the terms that practitioners need to understand when navigating the Section 7 consultation process. These and other terms are defined in the Section 7 regulations and the Services’ Section 7 Consultation Handbook.99

**Action Area.** The “action area” in Section 7 consultation is the geographic area within which direct and indirect project effects have the potential to occur.100 The action area often extends beyond the immediate vicinity of the project. To initiate Section 7 consultation, there must be at least a preliminary definition of the action area; the full scope of the action area can be further refined as consultation continues. A single action area is defined for the entire project; there are not separate action areas for potential impacts on different species or habitats.

**Applicant.** The term “applicant” in Section 7 consultation refers to the entity seeking Federal funding or approval.101 For a transportation project, the applicant is normally the project sponsor (e.g., state DOT). The applicant has a defined role under Section 7 consultation regulations that is distinct from the role of the Federal action agency.

**Best Available Scientific and Commercial Data.** The Endangered Species Act (ESA) requires the Federal action agency to “use the best scientific and commercial data available” when carrying out its responsibilities under Section 7(a)(2).102 This requirement imposes an obligation on Federal action agencies to gather existing information, but not to conduct new research. The Services have adopted a policy, based on case law, of “giving the benefit of the doubt to the species” when information relevant to a decision is unavailable or inconclusive.103

**Biological Assessment.** A Biological Assessment (BA) is a document prepared by a Federal action agency during informal consultation under Section 7 of the ESA. Preparation of a BA is required for a “major construction activity”—that is, a project for which an EIS is prepared—if the Federal action agency determines that listed species and/or designated critical habitat may be present in the action area.104 If a BA is prepared, it must consider the effects of the action on listed and proposed species as well as designated and proposed critical habitat. 105

**Biological Opinion.** A Biological Opinion is a document issued by the USFWS and/or NMFS following formal consultation under Section 7 of the ESA. The Biological Opinion includes the applicable Service’s determinations on whether the Federal action is likely to jeopardize the continued existence of listed species and/or result in the destruction or adverse modification of designated critical habitat, as well as information and analysis in support of those determinations. The Biological Opinion typically also includes an incidental take statement and recommended conservation measures. It also may include a Conference Opinion, which addresses proposed species and proposed critical habitat.

**Candidate Species.** A candidate species is defined as “any species being considered by the Service for listing as endangered or threatened species but not yet the subject of a proposed rule.”106 As a matter of policy, the Services give this designation to species for which the Services have on file sufficient information to support issuance of a proposal to list, but “issuance of a proposed rule is currently precluded by higher priority listing actions.”107 NMFS also maintains a list of “species of concern” for which more information is needed before they can be proposed for listing.

**Conference.** “Conference” refers to informal discussions between a Federal agency and the Service regarding the impact of an action on proposed species or proposed critical habitat. Conference on proposed species and proposed critical habitat normally occurs in conjunction with consultation on listed species and listed critical habitat. Conference concludes with a Conference Opinion rather than a Biological Opinion. A Conference Opinion includes non-binding recommendations to

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99 50 CFR 402.02; Services’ Section 7 Handbook, pp. x through xix.
100 50 CFR 402.02.
101 50 CFR 402.02.
102 16 USC 1536(a)(2).
104 50 CFR 402.12(b).
105 50 CFR 402.12(a).
106 50 CFR 402.12(d).
107 Services’ Section 7 Handbook, p. xi.
minimize or avoid the adverse effects. If the species later becomes listed, the Service may adopt the Conference Opinion as a Biological Opinion, in which case the recommendations would become requirements.

**Cumulative Effects.** Under Section 7, cumulative effects include effects of future state or private activities (not Federal activities) that are “reasonably certain” to occur within the action area of the proposed project.\(^\text{108}\) Practitioners should be aware of two key points regarding cumulative impacts under the ESA:

- Cumulative effects are defined differently under the Section 7 regulations than under NEPA. Cumulative effects under NEPA include the impacts of reasonably foreseeable future actions taken by Federal, state, or private actors.\(^\text{109}\) By contrast, cumulative effects under the ESA include reasonably certain future actions taken by only state or private actors (i.e., without Federal involvement).
- Cumulative effects are considered under Section 7 only when assessing the potential for jeopardy and/or adverse modification or destruction of critical habitat during formal consultation. Cumulative effects are not considered when making findings of “no effect” or “not likely to adversely affect” during informal consultation.\(^\text{110}\)

**Destruction or Adverse Modification.** “Destruction or adverse modification” means “a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.”\(^\text{111}\)

**Environmental Baseline.** Effects of the proposed action are determined in reference to the “environmental baseline.”\(^\text{112}\) The Section 7 regulations state that the environmental baseline includes three types of activities:

- past and present impacts of all Federal, state, and private actions in the action area;
- anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early Section 7 consultation; and
- impact of state or private actions which are contemporaneous with the consultation in process.\(^\text{113}\)

Note that the baseline is conceptually distinct from the No Action alternative in the NEPA process, which often includes future projects that are considered committed (e.g., because they are in a transportation plan) regardless of whether they have Federal involvement or have completed the NEPA process.

**Federal Agency.** The term “Federal agency” (often called the “Federal action agency”) is the Federal agency with the obligation to consult with the Service(s) on the effects of that agency’s actions. When a proposed action involves funding or other approval by more than one Federal agency, a single Federal agency normally serves as “lead agency,” carrying out Section 7 consultation and conference responsibilities on behalf of the other Federal agency or agencies.\(^\text{114}\)

**Formal Consultation.** Formal consultation requirements are defined in Section 402.14 of the Section 7 regulations. Formal consultation may be initiated at any time in the development of an action; normally, it is initiated after the Federal action agency has engaged in informal consultation, including preparation of a Biological Assessment, and has determined that the proposed action has the potential to adversely affect one or more listed species and/or designated critical habitat. Formal consultation concludes with the issuance of a Biological Opinion by USFWS and/or NMFS.\(^\text{115}\)

**Indirect Effects.** Section 7 consultation requires consideration of both direct and indirect effects of the proposed action. The Section 7 regulations define indirect effects somewhat differently from the NEPA definition of that term; under Section 7, indirect effects are “effects that are caused by the proposed action and are later in time, but are still reasonably certain to

\(^{108}\) 50 CFR 402.02.  
\(^{109}\) 40 CFR 1508.7.  
\(^{110}\) See Services’ Section 7 Handbook, p. 4-31; see also USFWS Midwest Region, Guidance for Preparing a Biological Assessment, p. 3 (Cumulative effects analysis “is necessary only if listed resources will be adversely affected and Formal Consultation is necessary”), available at [https://www.fws.gov/midwest/endangered/section7/ba_guide.html](https://www.fws.gov/midwest/endangered/section7/ba_guide.html).  
\(^{111}\) 50 CFR 402.02.  
\(^{112}\) 50 CFR 402.02.  
\(^{113}\) 50 CFR 402.02.  
\(^{114}\) 50 CFR 402.07.  
\(^{115}\) 50 CFR 402.02.
occur.”\textsuperscript{116} By contrast, indirect effects under NEPA need only be “reasonably foreseeable.”\textsuperscript{117} Direct and indirect effects are considered part of the effects of the action, because there is a causal relationship between the action and those effects.

**Informal Consultation.** Informal consultation requirements are defined in Section 402.13 of the Section 7 regulations. Informal consultation is defined as “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.”\textsuperscript{118} Informal consultation may include preparation of a Biological Assessment. The basic purpose of informal consultation is to assist the Federal action agency and the applicable Service in determining whether formal consultation and/or a conference is required.

**Interrelated and Interdependent Actions.** When considering effects of the proposed action on listed species and their critical habitat, the Federal action agency must take into account the effects of “interrelated and interdependent actions.” Interrelated actions are those actions that are part of a larger action and depend on the larger action for their justification (e.g., moving a powerline to accommodate a project); interdependent actions are those actions having no independent utility apart from the proposed action (i.e., they are part of the action).\textsuperscript{119}

**Irreversible or Irretrievable Commitments.** The Federal action agency and applicant are prohibited from making any “irreversible or irretrievable commitment of resources to the agency action” during Section 7 consultation if that commitment would have “the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures” for avoiding jeopardy to listed species or adverse modification or destruction of designated critical habitat.\textsuperscript{120} While this prohibition is not absolute, it generally means that the applicant cannot proceed with construction of the project until Section 7 consultation is concluded. Two related points are important to note:\textsuperscript{121}

- This prohibition applies specifically to consultation regarding listed species and designated critical habitat, not to the conference requirement on proposed species or proposed critical habitat. However, it is a good practice to avoid irreversible and irretrievable commitments when engaged in a consultation or conference.
- This prohibition applies from the time a “may affect” finding is made through the completion of formal consultation or such other time as the consultation process is concluded in accordance with the regulations.\textsuperscript{122}
- The Section 7 regulations also include a separate requirement that a Biological Assessment, if any, be completed “before any contract for construction is entered into and before construction is begun.”\textsuperscript{123}

**Jeopardize.** Jeopardize 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.”\textsuperscript{124} The Services are responsible for determining whether a Federal action would jeopardize listed species. The Services make this determination in a Biological Opinion issued at the conclusion of formal consultation.

**Listed Species.** In the context of the ESA, the term “listed” refers to a species that the applicable Service has determined to be threatened or endangered under the ESA. Note that species also may be listed by state agencies under state species-protection laws. To avoid confusion with state-listed species, the terms “ESA-listed species” or “federally listed species” are sometimes used in practice to refer to species listed under the ESA.

**Letter of Concurrence.** The term “letter of concurrence” is not defined in the Section 7 regulations, but is commonly used to refer to a letter provided by the Services at the conclusion of informal consultation, concurring in the findings recommended in a Biological Assessment (e.g., a letter concurring in the Federal action agency’s proposed finding of “not likely to adversely affect” for a species).

\textsuperscript{116} 50 CFR 402.02.
\textsuperscript{117} 40 CFR 1508.8(b).
\textsuperscript{118} 50 CFR 402.02 and 402.13.
\textsuperscript{119} 50 CFR 402.02.
\textsuperscript{120} 16 USC 1536(d).
\textsuperscript{121} See Services’ Section 7 Handbook, p. 2–7 (“[R]esource commitments may occur as long as the action agency retains sufficient discretion and flexibility to modify its action to allow formulation and implementation of an appropriate reasonable and prudent alternative.”).
\textsuperscript{122} See Services’ Section 7 Handbook, p. 2–7.
\textsuperscript{123} 50 CFR 402.12(b)(2).
\textsuperscript{124} 50 CFR 402.02.
**Non-Federal Representative.** The Federal action agency may designate the applicant (or another entity) to take on the Federal action agency’s role during informal consultation. When this occurs, the “designated non-Federal representative” takes the lead role in preparing the Biological Assessment. The Federal action agency must still furnish guidance and supervision and must independently review and evaluate the Biological Assessment. The Federal action agency itself must initiate and carry out the formal consultation.

**Proposed Species and Proposed Critical Habitat.** The term “proposed species” refers to a species for which the applicable Service has issued a proposed rule (but not yet a final rule) in the Federal Register to list the species as threatened or endangered under the ESA. Similarly, “proposed critical habitat” refers to an area for which the applicable Service has issued a proposed rule in the Federal Register to designate the area as critical habitat.

**Reasonable and Prudent Alternatives.** If the Service makes a finding of “jeopardy” or “destruction or adverse modification” of critical habitat, the Service is required to propose “reasonable and prudent alternatives” for consideration by the Federal action agency. In essence, these alternatives are alternatives that would be feasible and accomplish the purpose of the proposed action, while avoiding jeopardy to species and destruction or adverse modification of critical habitat. The Federal agency can proceed with the reasonable and prudent alternatives, or with other alternatives that are consistent with Section 7 requirements.

**Technical Assistance.** The Services provide “technical assistance” regarding compliance with Section 7 consultation requirements. Technical assistance activities vary with each Service office but may entail: providing a species list, providing information about the identified species, providing names of key contacts within the Services, and engaging in discussions about the approach to Section 7 consultation for a specific project or series of projects.

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125 50 CFR 402.02, 402.08.
126 50 CFR 402.02.
127 Services’ Section 7 Handbook, p. 3–7.
# Appendix B

## Section 7 Consultation Timeframes

<table>
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<tr>
<th>Step</th>
<th>Summary of Requirement</th>
<th>Text of Regulation</th>
<th>Citation</th>
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<tr>
<td>Step 1</td>
<td>Service must respond to Federal action agency’s request for a species list within 30 days after receipt.</td>
<td><em>(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.</em></td>
<td>50 CFR 402.12(d)</td>
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<tr>
<td>Step 1</td>
<td>Federal agency must begin preparation of the Biological Assessment (if one is required) within 90 days after receipt of species list from the Service. If not received, list must be re-verified.</td>
<td><em>(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.</em></td>
<td>50 CFR 402.12(e)</td>
</tr>
<tr>
<td>Steps 2</td>
<td>Federal agency must complete the Biological Assessment (if one is required) within 180 days after receipt of species list from the Service, unless a different time is agreed to.</td>
<td><em>(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.</em></td>
<td>50 CFR 402.12(i)</td>
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<td>Steps 2</td>
<td>Service must respond to the Federal action agency within 30 days after receipt of a Biological Assessment, informing the agency whether the Service concurs with its findings.</td>
<td><em>(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 § 402.14(c) concurrently with the submission of the assessment.</em></td>
<td>50 CFR 402.12(j)</td>
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<td>Step 4</td>
<td>Service must conclude formal consultation within 90 days after its initiation, unless an extension is agreed to. Consent of applicant is needed for extensions more than 60 days. Service must complete the Biological Opinion within 45 days after the conclusion of formal consultation (for a total of 135 days from initiation of formal consultation through approval of the Biological Opinion).</td>
<td>*(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.</td>
<td>50 CFR 402.14(e)</td>
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<td>Step 4</td>
<td>The Service’s deadline to complete consultation is automatically extended by 10 days if comments on a draft Biological Opinion are submitted within 10 days of the Service’s deadline for completing the Biological Opinion.</td>
<td>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.</td>
<td>50 CFR 402.14(g)</td>
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ADDITIONAL RESOURCES

PRACTITIONER’S HANDBOOKS AVAILABLE FROM THE CENTER FOR ENVIRONMENTAL EXCELLENCE BY AASHTO

1. Maintaining a Project File and Preparing an Administrative Record for a NEPA Study
2. Responding to Comments on an Environmental Impact Statement
3. Managing the NEPA Process for Toll Lanes and Toll Roads
4. Tracking Compliance with Environmental Commitments/Use of Environmental Monitors
5. Utilizing Community Advisory Committees for NEPA Studies
6. Consulting under Section 106 of the National Historic Preservation Act
7. Defining the Purpose and Need and Determining the Range of Alternatives for Transportation Projects
8. Developing and Implementing an Environmental Management System in a State Department of Transportation
10. Using the Transportation Planning Process to Support the NEPA Process
11. Complying with Section 4(f) of the U.S. DOT Act
12. Assessing Indirect Effects and Cumulative Impacts under NEPA
13. Developing and Implementing a Stormwater Management Program in a Transportation Agency
15. Complying with Section 7 of the Endangered Species Act
16. Implementing Eco-Logical: Integrating Transportation Planning and Ecological Decision Making

For additional Practitioner’s Handbooks, please visit the Center for Environmental Excellence by AASHTO web site at: http://environment.transportation.org

Comments on the Practitioner’s Handbooks may be submitted to:
Center for Environmental Excellence by AASHTO
444 North Capitol Street, NW, Suite 249 Washington, DC 20001
Telephone: 202-624-5800
Email: environment@aashto.org
Web site: http://environment.transportation.org

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