

Guidance on Preparing an Initiation Package for Endangered Species Act Consultation¹

This document is intended to provide a general template and guidance on the type and detail of information that should be provided to initiate consultation with US Fish and Wildlife Service (USFWS) and/or National Marine Fisheries Service (NOAA Fisheries Service). This document is formatted as a general template you can follow when preparing an initiation package. You may develop one document for projects that affect species under both NOAA Fisheries Service and USFWS jurisdiction², but it is often advisable to prepare separate documents for each agency to avoid confusion. This is not intended to be an exhaustive document as specific projects may require more or less information in order to initiate consultation. The amount of information is typically correlated with the complexity of the project and severity of impacts, but in any case, is at least the minimum amount of information necessary to support the conclusions of the document. Also, note that this document contains guidance on the information required to initiate formal consultation procedures with USFWS and/or NOAA Fisheries Service. Additional information needs may be identified during consultation. Texts in italics below are examples. Normal text is guidance. A glossary of terms (in ***bold, italic*** text) is appended.

Obviously, before you draft an initiation package, before you even know if an ESA consultation will be needed, you will need to have determined which species and critical habitat may be affected by the proposed action and any interrelated or interdependent actions. This “may affect” determination is the first trigger for an ESA section 7 consultation for federal actions. The first step in this determination is usually to request a list from USFWS and NOAA Fisheries Service of species and critical habitats that occur in the vicinity of your project. Alternatively, your records may already include this information or you can collect the information from websites maintained by USFWS and NOAA Fisheries Service. The next steps include reviewing the action area for proposed action (the determination of action area is described in section III below) and then reviewing the known, expected or possible occurrence of listed species and critical habitat within the action area. If there is overlap between a species or critical habitat occurrence and the action area, then the action “may affect” the listed species and/or critical habitat. Additional analysis (described in later sections of this document) will allow you to determine whether the exposure of the species or critical habitat to the action is likely to adversely affect the species or critical habitat.

¹ Revised November 23, 2007

² With some exceptions, generally, marine and anadromous species are under the jurisdiction of NOAA Fisheries Service. Terrestrial species and freshwater aquatic species are under the jurisdiction of USFWS.

I. INTRODUCTION

Here is an example of introductory language:

The purpose of this initiation package is to review the proposed [project name] in sufficient detail to determine to what extent the proposed action may affect any of the threatened, endangered, proposed, or sensitive species and designated or proposed critical habitats listed below. In addition, the following information is provided to comply with statutory requirements to use the best scientific and commercial information available when assessing the risks posed to listed and/or proposed species and designated and/or proposed critical habitat by proposed federal actions. This initiation package is prepared in accordance with legal requirements set forth under regulations implementing Section 7 of the Endangered Species Act (50 CFR 402; 16 U.S.C. 1536 (c)).

Threatened, Endangered, Proposed Threatened or Proposed Endangered Species

Example language:

The following listed and proposed species may be affected³ by the proposed action:

*common name (Scientific name) **T***

*common name (Scientific name) **E***

*common name (Scientific name) **PT***

*common name (Scientific name) **PE***

This list should include all of the species from the species lists you obtained from USFWS and NOAA Fisheries Service. If it doesn't, include a brief explanation here and a more detailed explanation in your record to help USFWS and NOAA Fisheries Service understand your thought process for excluding a species from consideration.

Candidate Species, Sensitive Species and Species of Concern (USFWS only)

Example language:

The following candidate species, sensitive species, and species of concern may be affected by the proposed action:

common name (Scientific name) [include state designation, if appropriate]

Any State-listed species should be included here, if they are not federally listed.

Do not forget that the **action agency** may have additional responsibilities to help prevent these species from becoming listed. Check your agency's guidelines.

³ This document will discuss making the "may affect" and subsequent determinations in later sections.

Critical Habitat

Example language:

The action addressed within this document falls within Critical Habitat for [identify species].

II. CONSULTATION TO DATE

Consultation under the ESA consists of discussions between the action agency, the applicant (if any), and the USFWS and NOAA Fisheries Service. Consultation includes the sharing of information between all parties about the proposed action and related actions, the species and environments affected, and means of achieving project purposes while conserving the species and their habitats. Under the ESA, there can be both formal and informal consultation. The consultation process in each is similar, but formal consultation has statutory timeframes and other requirements (such as the submission of the information in this package). Informal consultation typically concludes after the action agency makes a determination that the action “*may affect, but is not likely to adversely affect*” listed species or critical habitat and USFWS and/or NOAA Fisheries Service concur with this determination in writing. Formal consultation typically occurs when the action agency makes a determination of “*may affect, likely to adversely affect*” and concludes when USFWS and/or NOAA Fisheries Service issue a biological opinion. Alternatively, formal consultation can also lead to incorporation of additional protective measures that render the project “not likely to adversely affect” listed species or designated critical habitat.

In this section, summarize any consultation that has occurred thus far. For example, prior to initiating formal consultation or requesting concurrence, agencies and applicants may engage in a period of technical assistance to discuss the project and develop avoidance, minimization, and conservation measures. Identify when consultation was requested (if not concurrent with this document). Be sure to summarize meetings, site visits and correspondence that were important to the decision-making process.

III. DESCRIPTION OF THE PROPOSED ACTION

The purpose of this section is to provide a clear and concise description of the proposed activity and any *interrelated* or *interdependent* actions.

The following information is necessary for the consultation process on an action:

1. The action agency proposing the action.
2. The authority(ies) the action agency will use to undertake, approve, or fund the action.
3. The applicant, if any.
4. The action to be authorized, funded, or carried out.
5. The location of the action.
5. When the action will occur, and how long it will last.

6. How the action will be carried out
7. The purpose of the action.
8. A description of any interrelated or interdependent actions, or that none exist to the best of your knowledge.

In other words, describe and specify: **WHO** is going to do the action and under what authority, include the name and office of the action agency and the name and address of the applicant; **WHAT** the project or action is; **WHERE** the project is (refer to attached maps); **WHEN** the action is going to take place, including time line and implementation schedules; **HOW** the action will be accomplished, including the various activities that comprise the whole action, the methods, and the types of equipment used; **WHY** the action is proposed, including its purpose and need; and **WHAT OTHER** interrelated and interdependent actions are known.

Include a clear description of all conservation measures and project mitigation such as avoidance measures, seasonal restrictions, compensation, restoration/creation (on-site and in-kind, off-site and in-kind, on-site and out-of-kind, off-site and out-of-kind), and use of mitigation or conservation banks.

Here are some examples of commonly overlooked items to include in your project description:

Type of project	Restoration areas
Project location	Conservation measures
Project footprint	Compensation and set-asides
Avoidance areas	Bank ratios and amounts
Start and end times	Mitigation: what kind and who is responsible?
Construction access	Dust, erosion, and sedimentation controls
Staging/laydown areas	Whether the project is growth-inducing or facilitates growth
Construction equipment and techniques	Whether the project is part of a larger project or plan
Permanent vs. temporary impacts	What permits will need to be obtained
Duration of “temporary” impacts	

Action Area

The **action area** is defined as “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.” The action area is not based simply on the Federal action and should not be limited to the location of the Federal action. The purpose of identifying this area is to provide a boundary around the area(s) in which the **effects of the action** will be felt. In this area, the physical, chemical, and biological changes resulting from the

proposed action and any interrelated and interdependent actions are considered in context of existing conditions and activities to determine the resulting consequence to species and critical habitat. The action area is defined by measurable or detectable changes in land, air and water, or other measurable factors that result from the proposed action and interrelated or interdependent actions. In this document, we call these measurable or detectable changes *stressors* (or *subsidies* in the case of changes you may consider beneficial to species and critical habitats). Please note that when defining the limits of measurable or detectable changes, the sensitivities and capabilities of the species and their habitats should be considered.

To determine the action area, we recommend that you first break the action down into its components (*e.g.*, vegetation clearing, construction of cofferdams, storage areas, borrow areas, operations, maintenance, etc.). Determine the stressors that are expected to result from each component. For example, instream actions may mobilize sediments that travel downstream as increased turbidity and then settle out as sediments on the stream substrate. Sound levels from machinery may be detectable hundreds of feet, thousands of feet, or even miles away. Use these distances when delineating the extent of your action area. We also recommend that you subsequently “reconstruct” the action to assess the combined stressors and subsidies of the components. You may find that some stressors are synergistically minimized or avoided, whereas other stressors may increase or are magnified.

Finally, describe the action area, including features and habitat types. Include photographs and an area map as well as a vicinity map. The vicinity map for terrestrial projects should be at a 1:24,000 scale with the USGS quad name included.

IV. STATUS OF THE SPECIES AND CRITICAL HABITAT IN THE ACTION AREA

The primary purpose of this section is to summarize relevant local information on the biological requirements of the species, population viability (trends, abundance, distribution, etc.),⁴ and condition of critical habitat. Some of this information will come from local sources, your records, or even information provided by USFWS or NOAA Fisheries Service. You will use this information to support your determination of the likelihood of adverse effects from the action. USFWS and/or NOAA Fisheries Service use this information to understand your reasoning and to supplement any additional information they consider as part of their decision to concur with your finding or to determine if the action is likely to jeopardize the listed species or result in the destruction or adverse modification of critical habitat⁵.

Provide local information on affected individuals and populations, such as presence, numbers, life history, etc. For some large or complex actions, it may also help to identify any ongoing threats, limiting factors to species viability or habitat value, and implementation of any recovery

⁴ For salmon species, NOAA Fisheries Service uses the concepts of Viable Salmonid Populations (VSP; McElhany *et al* 2000) to describe the status of the species populations and as a framework for assessing the effects of the action on the likelihood of both the survival and recovery of the species. The VSP framework focuses on the *abundance*, *population growth rate*, *diversity*, and *spatial structure* of populations to determine their viability.

⁵ The regulatory definition of critical habitat has been invalidated in several Federal Circuit Courts. The USFWS and NOAA Fisheries Service are drafting a revised regulatory definition. In the interim, both agencies consider the statutory definition and purpose of critical habitat when determining if an action is likely to result in destruction or adverse modification.

actions that occur in the action area. If the species has a recovery plan, that document will contain additional information on species status threats, and actions needed to recover the species.

Important Biological Requirements: Include aspects of the species' biology that relate to the impact of the action, such as sensitivity to or tolerance of: noise, light, heat, cold, inundation, smoke, sediments, dust, etc. For example, if the species is sensitive to loud sounds or vibration, and your project involves loud tools or equipment, reference that aspect of their biology. Include citations for all sources of information. If a species is limited to a narrow thermal range and a narrow humidity range, show where in the action area the temperatures are sufficient to support the species, where the humidity is sufficient to support the species, and where those areas overlap.

Describe habitat use in terms of breeding (spawning), feeding, and sheltering. Also discuss habitat use patterns, including seasonal use and migration (if relevant), and identify habitat needs.

Include survey information. For all monitoring and survey reports, please clearly identify how it was done, when, where, and by whom. If survey protocols were followed, reference the name and date of the protocol. If survey protocols were modified, provide an explanation of how the surveying occurred and the reasoning for modifying the protocol.

Keep it relevant. It is unnecessary to discuss biology that is totally unrelated to project impacts--*e.g.*, discussion of pelage color, teat number, and number of digits fore and aft is irrelevant when the project is a seasonal wetland establishment.

Utilize the best scientific and commercial information available. Use and cite publications/journal articles/agency data and technical reports. Include local information, relative to the action area, views of recognized experts, results from recent studies, and information on life history, population dynamics, trends and distribution. Reference field notes, unpublished data, research in progress, etc.

V. ENVIRONMENTAL BASELINE AND CUMULATIVE EFFECTS

This section provides information which is then used along with the species and critical habitat information from the preceding section to describe the pre-action condition of the species and critical habitat that will be exposed to the stressors and subsidies of the action(s) under consultation. The purpose of this section is to provide a summary of the relevant local information on the impacts that other factors (human and natural) in the action area have had on the viability of the species and value of critical habitat. These other factors may have occurred in the past, may continue to affect the species and habitat today, or will affect the species and habitat in the future.

Environmental Baseline

Provide information on past, present and future state, local, private, or tribal activities in the action area: specifically, the positive or negative impacts those activities have had on the species or habitat in the area in terms of abundance, reproduction, distribution, diversity, and habitat quality or function. Include the impacts of past and present federal actions as well. For continuing actions, describe those impacts (to the species under consultation) that occurred from

past existence of the action—including any operational actions that may have affected the species and are expected to continue to impact the species.

Relevant information such as habitat conditions at the site, habitat conditions between work areas and listed species locations, surrounding land-uses, hydrology and drainage patterns, and prevailing winds and expected seasonal shifts can all be presented to provide geographical foundation for your analysis of the effects of the action and your conclusions.

Cumulative effects include the effects of future State, Tribal, local or private actions that are reasonably certain to occur in the action area. Future Federal actions that are unrelated (*i.e.*, not interrelated or interdependent) to the proposed action are not considered in this analysis because they will be subject to separate consultation pursuant to section 7 of the Act. (Note: Cumulative effects under ESA are **not** the same as the definition under NEPA. Be careful not to mix them up⁶.) Describe the impacts of these cumulative effects in terms of abundance, reproduction, distribution, diversity, and habitat quality or function.

Present all known and relative effects to population, *e.g.*, fish stocking, fishing, hunting, other recreation, illegal collecting, private wells, development, grazing, local trust programs, etc. Include impacts to the listed and proposed species in the area that you know are occurring and that are unrelated to your action--*e.g.*, road kills from off-road vehicle use, poaching, trespass, etc.

VI. EFFECTS OF THE ACTION

The purpose of this section is to document your analysis of the potential impacts the proposed action will have on species and/or critical habitats. This analysis has two possible conclusions for listed species and designated critical habitat:

(1) May Affect, Not Likely to Adversely Affect – the appropriate conclusion when effects on a listed species or critical habitat are expected to be *discountable*, *insignificant*, or completely *beneficial*.

Beneficial effects – contemporaneous positive effects without any adverse effects

Insignificant effects – relate to the size of the impact and should never reach the scale where take would occur.

Discountable effects – those that are extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur.

(2) May Affect, Likely to Adversely Affect – the appropriate finding if *any* adverse effect may occur to listed species or critical habitat as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not discountable, insignificant, or beneficial.

In the case of proposed species or proposed critical habitat, the possible conclusions are:

⁶ Many cumulative effects under NEPA are addressed as effects of interdependent actions under ESA.

Proposed Species

Likely to Jeopardize the Continued Existence

Not Likely to Jeopardize the Continued Existence

Proposed Critical Habitat

Likely to Destroy or Adversely Modify

Not Likely to Destroy or Adversely Modify

The effects analysis includes assessment of:

- Direct and indirect effects (including stressors and subsidies) of the action(s) under consultation, including conservation and minimization measures.
- Direct and indirect effects (including stressors and benefits) of interrelated or interdependent actions
- The effects of the action on the species when added to the environmental baseline and cumulative effects in the action area.

Under the ESA, direct effects are those that are caused by the action(s) and occur at the time of the action(s), and indirect effects are those that are caused by the action(s) and are later in time, but are still reasonably certain to occur. For an ongoing action, such as operation of a tidal gate, the distinction between direct and indirect effects may be difficult to finely distinguish. What is critical is that the scope of the analysis consider stressors and subsidies that occur beyond when (and where) an action initially occurs.

Based on the various components of your action that you used to determine the extent of the action area, this analysis assesses the potential stressors and subsidies resulting from each component and predicts the likely responses species and critical habitat that are exposed to those stressors and subsidies will have.

To determine a species' and/or habitat's probable response to an action, you must evaluate the magnitude and scope of the species and/or habitat's exposure to the stressors resulting from the action. The overlap between the species and critical habitat and the stressors resulting from the action determined which species and habitat the action "may affect." Now, this overlap is further examined to determine the nature of the exposure in order to determine the response or range of responses that are likely to occur. This assessment is similar to evaluations of the effects of a drug or toxin on a living creature. At certain levels of exposure to the chemical, the animal may show no response. At higher doses, the animal may exhibit illness or diseases like cancer. At even higher doses, or in doses combined with other factors, the animal may die. These responses (no response to death) have different consequences on the short and long term fitness of the animal. USFWS and NOAA Fisheries Service are especially concerned with responses that reduce an animal's reproductive success, growth, or life span.

Your conclusions of "not likely to adverse affect" or "likely to adversely affect" are based in large part on the responses you predict will occur based on the best scientific and commercial information.

To begin your prediction of responses, here is a basic set of questions you might answer:

- What are the specific stressors causing the exposure
- Where the exposure to the stressors would occur
- When the exposure to stressors would occur
- How long the exposure to stressors would occur
- What is the frequency of exposure to stressor
- What is the intensity of exposure to stressor
- How many individuals would be exposed
- Which populations those individuals represent
- What life stage would be exposed

For critical habitat, the questions would be similar but would focus on primary constituent elements of critical habitat.

Remember that exposure to a stressor is not always direct. For example, in some cases individuals of a species may be directly exposed to the sediment mobilized during construction. However, in other cases, individuals of the species would be exposed indirectly when sediment mobilized during construction settles out in downstream areas, rendering those areas unusable for later spawning or foraging.

Here are some examples of stressors you should address:

Exposure to abiotic factors affecting land, air, or water

Exposure to biotic factors affecting species behavior

Spatial or temporal changes in primary constituent elements of critical habitat

Loss or gain of habitat--direct and indirect

Fragmentation of habitat

Loss or gain of forage and/or foraging potential

Loss or gain of shelter/cover

Loss or gain of access through adjacent habitat/loss of corridors

Once you have examined the details of the exposure of species or critical habitat to an action, the next step is to determine the potential response or range of responses the exposed individuals or components of critical habitat will have to those levels and types of exposure.

This is where the use of the best scientific and commercial information available becomes crucial. Your analysis must take this information into consideration and the resulting document must reflect the use of this information and your reasoning and inference based on that information. Bear in mind that this analysis may not be the final word on the expected responses as further consultation with USFWS or NOAA Fisheries Service may refine this analysis.

Be sure to describe the expected responses clearly and focus your analysis towards determining if any of the possible responses will result in the death or injury of individuals, reduced reproductive success or capacity, or the temporary or permanent blockage or destruction of biologically significant habitats (*e.g.*, foraging, spawning, or lekking grounds; migratory corridors, etc.). Any of these above responses are likely to qualify as adverse effects. If the available information indicates that no observable response is expected from the levels and types of exposure, the action may be unlikely to adversely affect a species or critical habitat. However, remember that no observable response may actually mask an invisible internal response such as increased stress hormone levels, elevated heart rate, etc. Depending on the fitness of the exposed individual and the surrounding environment (including other threats), these “invisible” responses may lead to more serious consequences. We recommend working with your NOAA Fisheries Service or USFWS contact to determine the appropriate conclusion.

Don't forget to consider:

- Individual responses based on the species biological requirements and sensitivity to exposure

- The combined effects of existing threats (baseline) and exposure

- Exposure and response of species and critical habitat to interrelated and interdependent actions

- The combined stressors of the components of the action.

- Any actions that are likely to result in the incidental take of a listed species are automatically considered “likely to adversely affect.”

Understand and avoid common flaws in developing an affect determination. These common flaws are: the Displacement Approach (*i.e.*, the species will move out of the way; there are plenty of places for them to go); the Not Known to Occur Here Approach (*i.e.*, looking at survey results, or lack of results to determine presence in spite of other information or conditions that predict the species would occur on site); the Well Tell You Later Approach (*i.e.*, if we find any, then well let you know and that is when we will consult); or the Leap of Faith Approach (*i.e.*, the agency wants the USFWS or NOAA Fisheries Service to accept a determination based on trust, rather than the best scientific and commercially available information.). In all of these cases, projects have been stalled or delayed when the species showed up in the work area and consultation had to be re-initiated just prior to project initiation or during project work.

Analysis of alternate actions

This analysis is required for actions that involve preparation of an EIS. For all other actions, a summary of alternatives discussed in other environmental documents is useful to understanding the purposes of the action and other feasible (or infeasible) methods to accomplish that purpose.

VII. OTHER RELEVANT INFORMATION

Provide any other relevant available information the action, the affected listed species, or critical habitat. This could include local research, studies on the species that have preliminary results, and scientific and commercial information on aspects of the project.

VIII. CONCLUSION

This is where you put your overall effect determination after you have analyzed the exposure and response of species and habitat to the stressors resulting from the proposed action and interrelated or interdependent actions. Effect determinations must be based on a sound reasoning from exposure to response and must be consistent with types of actions in the project description, the biology in the species accounts, the habitat status and condition, changes to the existing environment, and the best scientific and commercial information available.

Again, the two potential conclusions for **listed species** are:

Not likely to adversely affect species

Likely to adversely affect species

The two potential conclusions for **designated critical habitat** are:

Not likely to adversely affect critical habitat

Likely to adversely affect critical habitat

The two potential conclusions for **proposed species** are:

Not likely to jeopardize species

Likely to adversely jeopardize species

The two potential conclusions for **proposed critical habitat** are:

Not likely to destroy or adversely modify critical habitat

Likely to destroy or adversely modify critical habitat

Include the basis for the conclusion, such as discussion of any specific measures or features of the project that support the conclusion and discussion of species expected response, status, biology, or baseline conditions that also support conclusion.

If you make a "No effect" determination for another species or critical habitat, it doesn't need to be in the assessment you send to USFWS and/or NOAA Fisheries Service. However, because you might have to defend it that determination keep the documentation of your reasoning in your administrative record.

IX. LIST OF DOCUMENTS

Provide a list of the documents that have bearing on the project or the consultation, this includes relevant reports, including any environmental impact statements, environmental assessment, or

biological assessment prepared for the project. Include all planning documents as well as the documents prepared in conformance with state environmental laws

IMPORTANT NOTE: Each of these documents must be provided with the initiation package consultation for the Services to be able to proceed with formal consultation.

X. LITERATURE CITED

We are all charged with using the best scientific and commercial information available. To demonstrate you did this, it is a good idea to keep copies of search requests in your record. If you used a personal communication as a reference, include the contact information (name, address, phone number, affiliation) in your record.

XI. LIST OF CONTACTS/CONTRIBUTORS/PREPARERS

Please include contact information for contributors and preparers as well as local experts contacted for species or habitat information.

GLOSSARY

Action Agency – the federal agency that proposes to “authorize, fund, or carry out” an action that will be subject to ESA section 7 consultation.

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

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

Effects of the Action – refers to the direct and *indirect effects* of an action on the species or critical habitat, together with the effects of other activities that are *interrelated* or *interdependent* with that action, that will be added to the environmental baseline.

Indirect Effects - Indirect effects are those that are caused by the action(s) and are later in time, but are still reasonably certain to occur

Interrelated Actions - Interrelated actions are those that are part of a larger action and depend on the larger action for their justification *B.i.e.* the action under consultation and related actions would not occur *Abut for@* a larger action.

Interdependent Actions - Interdependent actions are those that have no significant independent utility apart from the action that is under consideration *B.i.e.* other actions would not occur *Abut for@* the action under consultation.

Environmental Baseline – includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions that are contemporaneous with the consultation in process.

Likely to jeopardize the continued existence of – 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.

May Affect, Not Likely to Adversely Affect – the appropriate conclusion when effects on a listed species or critical habitat are expected to be *discountable, insignificant,* or completely *beneficial*.

Beneficial effects – contemporaneous positive effects without any adverse effects

Insignificant effects – relate to the size of the impact and should never reach the scale where take would occur.

Discountable effects – those that are extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur.

May Affect, Likely to Adversely Affect – the appropriate finding if any adverse effect may occur to listed species or critical habitat as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not discountable, insignificant, or beneficial.