

Guidance for Preparing a Biological Assessment

The purpose for this guidance is to assist project proponents in documenting their analyses for actions that may affect listed species. Federal agencies are required to determine whether their actions may affect listed or proposed species and designated and proposed critical habitat (henceforth, referred to as protected resources). Once a “may affect” determination is made, the Federal agency must either request our concurrence with a “may affect, but not likely to adversely affect” finding or request initiation of formal consultation¹. Both require a written analysis to be submitted to us. This analysis is typically transmitted in a document referred to as a Biological Assessment or Biological Evaluation. The former is defined in regulation and is required under specific circumstances². The latter is a generic term used to document analyses and Section 7 determinations when a Biological Assessment is not required. Both documents are for the same purpose³, and hence for this guidance, we will use only the term Biological Assessment.

Biological Assessments (BA) may serve multiple purposes, but the primary role is to document an agency’s conclusions and the rationale to support those conclusions regarding the effects of their proposed actions on protected resources. Although there are no statutory or regulatory mandated contents for a BA, recommended elements are identified at 50 CFR §402.12(f). The bulleted list below highlights the elements that are essential for our review of your project.

- Project description - Describe the what, when, where, and how of the project. Describe (1) **what** the project or action is; (2) **where** the project is (refer to attached maps); (3) **when** the action is going to take place, time line/implementation schedules; (4) **who** is going to do the action and under what authority, include name and address of the applicant; and (5) **how** the action will be accomplished—*e.g.*, bulldozer, pile driver, feller-buncher, chain saw, steam roller. If it is multi-phased, describe the what, when, where and how of each phased separately. Identify any conservation measures that will be implemented to avoid, reduce, or eliminate adverse effects or that would benefit the protected species or critical habitat.
- Describe the project area - For determining whether a species or critical habitat “may be present,” it is necessary to delineate the “action area.” Action area is defined as all areas that may be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action. It encompasses the geographic extent of environmental changes (i.e., the physical, chemical and biotic effects) that will result directly and indirectly from the action. Action area is typically larger than the area directly affected by of the action.

- Describe the physical and biological attributes of the action area (e.g., topography, vegetation, condition and trend). It is helpful to include a map delineating where the action will occur. Also, identify any management or activities already occurring in the area.
- Identify listed or proposed species that “may be present.” List all species that “may be present” in the area and where you obtain this information. You may submit your own list to the Service or request a list from the Service. We recommend including candidate species, in addition to proposed and listed species and proposed and designated critical habitat. If you determined that a particular species that may be present in the general area, *but not in the action area*, it is helpful to identify that species and to explain why it is not present in the action area. This serves two purposes. First, it will provide documentation for your administrative record. Second, it will avoid need for additional correspondence with us regarding that particular species. If a species is missing from the list, we will either ask you for an explanation of why the species would not be present in the action area or why they are likely to be present. For additional guidance in determining whether a protected resource “may be present,” see our Section 7(a)(2) Process (Step 1) website.
- For each species that “may be present,” describe the current habitat conditions within the action area. If known, include population status and trend. For critical habitat, identify the primary constituent elements that occur in the action area. For a description of the primary constituent elements, refer to the rule in the Federal Register that designated the critical habitat.
- Describe how the action may affect each protected resource - This section should document your conclusion and supporting rationale. Document your analysis of the what, when and how the protected resources will be exposed to and how such individuals or habitat are likely to respond to this exposure. Remember that you must consider effects that may occur later in time (e.g., after completion of initial construction). If species experts were contacted, include a summary of the conversations/conclusions reached. Include the references for the literature that your analysis relied upon.

Following this analysis, you need to make a Section 7 finding for proposed or listed species and proposed or designated critical habitat that may be present in the action area. Your section 7 conclusion should be explicit. Generally, one of the following three determinations will apply⁴. For additional guidance in making a Section 7 determination, please see our Section 7(a)(2) Process (Steps 1-3) website.

- "No effect" means there will be no impacts, positive or negative, to listed or proposed resources. Generally, this means no listed resources will be exposed to action and its environmental consequences. Concurrence from the Service is not required.
- "May affect, but not likely to adversely affect" means that all effects are beneficial, insignificant, or discountable. Beneficial effects have contemporaneous positive effects without any adverse effects to the species or habitat. Insignificant effects relate to the size of the impact and include those effects that are undetectable, not measurable, or cannot be evaluated. Discountable effects are those extremely unlikely to occur. These determinations require written concurrence from the Service.
- "May affect, and is likely to adversely affect" means that listed resources are likely to be exposed to the action or its environmental consequences and will respond in a negative manner to the exposure.
- Include relevant reports- Results from species or habitat surveys should be included. If a survey was conducted, include a description of the survey methodology. It is important to note the specifics of your methodology. Explain the scope of the survey; did the survey cover the entire action area or only part of it? Identify who did the survey and when.

Supporting documents, such as environmental assessments or other planning documents, are helpful for our review.

Provide copies of supporting documentation, especially any agency reports or data that are not readily available.

- Complete a cumulative effects analysis- Cumulative effects are effects resulting from future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation. This step is necessary only if listed resources will be adversely affected and Formal Consultation is necessary.

Sample Outline for a Biological Assessment

Please include a cover letter with your BA. This letter should indicate that you are submitting a Biological Assessment for a particular project. It is helpful if you summarize your determinations and explicitly request an action from us, i.e., concur with your "may affect, but not likely to adversely affect" determination or initiate formal consultation.

Note: For projects that will adversely affect proposed or listed species or proposed or designated critical habitat, we strongly recommend that you contact our office for technical assistance before preparing or submitting a final Biological Assessment.

I. Introduction

- A. State the purpose of document, e.g., to assess the effects of the proposed action on federally protected resources.

- B. Briefly specify the proposed action. If applicable, include both the Federal action (e.g., issue 404 permit) and the applicant's action (e.g., build residential complex).

II. Project description

- A. Subdivide proposed action into project elements (e.g., construction, operation, and maintenance), if applicable.

- B. Describe the where, when, and how for each project element

- C. Include a map delineating the location of each project element

- D. Identify any conservation measures that will be incorporated into the project design

III. Action Area

- A. Delineate the geographic area that will be affected, i.e., the area where the physical, chemical, and biotic effects will occur.

- B. Delineate the specific areas that will be affected by each of the project elements

- C. Identify any ongoing activities that may be affecting the species or habitat

IV. Species/Critical Habitat Considered

- A. Identify the species or critical habitat that "may be present."

- B. Document how you identify these listed resources.

- C. Describe the current population and habitat conditions (status and trend, if known) in the action area for each protected resource that "may be present"

V. Effects Analysis

A. For each species or critical habitat parcel, explain how it will or will not be exposed to the project elements; be sure to consider effects to all life stage.

B. Describe the anticipated response (e.g., none, abandoned the area, decrease foraging success, reduced fecundity, injury, death, etc.) from any likely exposure

C. Cumulative Effects Analysis (for actions that are likely to adversely affect listed resources). Identify any future state or private activities, not involving Federal activities, that are reasonably certain to occur within the action area. Describe how such activities will affect listed resources within the action area

VI. Conclusion and Determination of Effects for each protected resource

A. For each protected resource, make a Section 7 determination and include your rationale.

B. For a "may affect, but not likely to adversely affect" finding, request our concurrence. For a "may affect, likely to adversely affect" finding, request initiation of Formal Consultation.

VII. Literature Cited

VIII. List of Contacts Made and Preparers

¹ Per regulations (50 CFR 402.14), Federal agencies must submit an initiation package before formal consultation may begin. The required contents of the package are identified in the regulations. With exception of a cumulative effects analysis and a catch-all of any other relevant information, the required information for an initiation package is the same as the information we recommend submitting with a BA.

² Biological Assessments (BA) are only required for "major construction activities," which are Federal actions that may significantly affect the quality of the human environment as referred to in the National Environmental Policy Act of 1969. The purpose of a biological assessment is to evaluate the potential effects of the action on listed and proposed species and designated and proposed critical habitat and determine whether any such species or habitat are likely to be adversely affected by the action.

³ Agencies are required to review all their actions—not just those that qualify as a “major construction activity.” This review entails assessing and documenting the effects of their action on protected resources. Whether an action qualifies as a “major construction activity” has no influence on how an agency should analyze its action or document its section 7 review. Hence, the purpose and contents of a Biological Assessment and a Biological Evaluation should be the same.

⁴ Formal Consultation is required if an action is likely to “adversely affect” listed species and designated critical habitat. For proposed species, further consultation is required only if the action is likely to “jeopardize the continued existence” of the species or result in “destruction or adverse modification” of critical habitat. To appropriately apply these determinations, you need to fully understand the terms “jeopardy” and “adverse modification” and must have complete knowledge of the rangewide status of the species and condition of the habitat, respectively. For these reasons, agencies typically conclude “may affect, and likely to adversely affect” and contact the Service for further guidance in making the jeopardy and adverse modification determinations for proposed species/critical habitat.