



Documentation Standard for a Biological Assessment or a Biological Evaluation

This documentation standard (DS) is used by project sponsors preparing a biological assessment (BA) for formal consultation or a Biological Evaluation (BE) for informal consultation with the U.S. Fish and Wildlife Service (USFWS). BAs must be prepared for all major construction activities, as defined by the National Environmental Policy Act ([42 USC 4321](#) et seq.), and for any project likely to adversely affect a proposed or listed species under the Endangered Species Act (ESA). The BA must include sufficient detail to provide all information necessary to complete the formal consultation with USFWS required under Section 7 of the ESA ([16 USC 1531](#) et seq. and [50 CFR 402.12](#)). BEs may be prepared for construction activities that may affect but are not likely to adversely affect a proposed or listed species under the ESA. The BE follows the same format as BA but does not include several sections that are specific to formal consultations (noted below).

Organize the BA/BE using the sections outlined below. In general, a BA/BE should not exceed 25 pages, unless the project is extremely complex, covers a very large action area, or involves a number of species in different habitat types. Retain any field notes, photographs, and other supporting data/documents produced in support of the BA/BE report in the project file. In addition to a BA/BE, a cover letter is also required to initiate formal consultation with the Service. Although the BA/BE may be prepared by a consultant or the TxDOT district, ENV is the responsible party for conducting all coordination with the Service and creating the BA/BE cover letter.

The BA/BE must comply with the standards outlined in the TxDOT Brand Guidelines and Publications Styleguide. For questions about or assistance applying these standards, contact the TxDOT district representative or the Environmental Affairs Division – Natural Resources Management Section at env_bio@txdot.gov.

I. Cover Page, Contact Information, and Table of Contents

Cover Page

- A. Fill in project name
- B. Fill in date
- C. Ensure the following certification is included:
The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 USC 327 and a memorandum of understanding dated December 16 2014, and executed by the Federal Highway Administration and Texas Department of Transportation.

Second Page - Contact Information

- A. Fill in contact information

Third Page – Table of Contents

- A. Create table of Contents



II. Introduction

The BA/BE must include an Introduction Section that addresses the following components. Each lettered item represents a subsection and must be labeled as such in the BA/BE. The introduction should be approximately one page in length.

- A. Purpose
State the purpose of the document (e.g., to assess the effects of the proposed action on federally protected resources).
 - B. Federal Nexus
Briefly describe the proposed action. If applicable, include descriptions of both the following actions.
 - 1. Federal action (e.g., issuance of CWA section 404 permit, federal funding, etc.)
 - 2. TxDOT action (e.g., roadway expansion)
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III. Project Description

The BA/BE must include a Project Description Section that addresses the following components. Each lettered item represents a subsection and must be labeled as such in the BA/BE. This section should be approximately five to ten pages in length.

- A. Project Elements
Describe the project and the proposed actions, and explain how they will be conducted. For design builds, provide as much specific information about the project as possible, and supplement that information with general information on similar construction activities. Subdivide the proposed action into project elements (e.g., construction, operation, and maintenance), and describe the details of each element including the following criteria.
 - 1. Where the action will occur
 - 2. When the timing of each action will occur
 - 3. How each action will be carried out (e.g., construction equipment, staging areas, etc.)
 - B. Project Area and Setting
Include a map delineating the location of each project action. Describe the existing infrastructure or setting of the project area.
 - C. Conservation Measures
Identify any conservation measures that will be incorporated into the project design to avoid, minimize, and/or mitigate impacts of the proposed project. This section includes voluntary conservation measures used to offset effects to species (e.g., buying conservation bank credits or building wildlife crossings) and project design elements that avoid impacts (e.g., building on fill versus excavation).
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IV. Action Area

The BA/BE must include an Action Area Section that addresses the following components. Each lettered item represents a subsection and must be labeled as such in the BA/BE. The Geographic Area and Project Action Area Section should be two or more pages, including maps. The Ongoing Activities section should be approximately one to two pages in length.

A. Geographic Area and Project Action Area

Delineate the geographic area that will be affected by the proposed project. This is the area where the physical, chemical, and biotic effects will occur and could potentially affect the species of concern. It must include locations where direct and indirect effects have the potential to affect listed species. Delineate the specific areas that will be affected by each of the project elements.

This action area is not the same as the action area defined by an EA or EIS; this action area does not include the total area studied for indirect impacts for the entire project, only the area specifically related to the species addressed in this consultation.

B. Ongoing Activities

Identify any regularly occurring, ongoing activities that may be affecting the species or habitat. These are not cumulative effects, but do include routine maintenance activities or utility corridor use within the project area (e.g. standard maintenance mowing of a ROW, smaller ongoing activities that are occurring on a regular basis within the project area such as dredging, rail operations, etc.).

V. Species and Critical Habitat Considered

The BA/BE must include a Species and Critical Habitat Considered Section that addresses the following components. Each lettered item represents a subsection and must be labeled as such in the BA/BE.

A. Species

Identify the species that “may be present” within the project area. Each species subsection should be approximately two to four pages in length.

1. Document how the listed resources were identified (e.g., surveys TxDOT conducted, survey protocols used, etc.).
2. Describe the species in terms of overall range and population status.
3. Describe the current population and habitat conditions (e.g., status and trends) in the action area for each protected resource that may be present.
4. Include a table of all species identified, habitat requirements, and whether the species or its habitat occurs within the project action area. Refer to Section X for an example species impact table.
5. Conclude with a short summary of the species that will not be affected by the project. A conclusion of not known to occur here must be justified by explaining the methods used to reach that determination.

B. Critical Habitat Units (CHUs)

Identify any CHUs present within the action area of the proposed project. Then, identify and explain the primary constituent elements (PCE) of each CHU. PCEs are specific elements of



physical or biological features that provide for a species' life-history process and are essential to the conservation of the species. The PCEs will be identified by USFWS in a recovery plan. The CHU section will be approximately two to three pages in length.

C. Other Service Trust Resources

If present, describe any other service trust resources (migratory birds, eagles, national wildlife refuges, mitigation banks, etc.) that may be affected by the action and the effects of those actions. Include any avoidance or minimization measures to be implemented. This section should be approximately one page in length.

VI. Effects Analysis

The BA/BE must include an Effects Analysis Section that outlines the following effects to species and CHUs. Each lettered item represents a subsection and must be labeled as such in the BA/BE. The effect descriptions should be approximately one page in length for each project element of each species.

A. Direct Effects

For each species that will be affected by the project, explain how it will or will not be exposed to the project elements, and analyze the direct effects of the proposed project on the species. Ensure the consideration of effects to all life stages of each species is described.

1. Describe the anticipated response of the species (e.g., none, abandon the area, decrease foraging success, reduced fecundity, injury, death, etc.) from any likely exposure of the PCEs.
2. If effects are determined to be insignificant or discountable, explain how that conclusion was reached and what it was based on.

B. Indirect Effects

For each species, explain any indirect effects of the proposed project on the species caused by or as a result of the action that are reasonably certain to occur in the future (e.g., downstream contamination due to increased impervious cover). Ensure the consideration of effects to all life stages of each species is described.

1. Describe the anticipated response of the species (e.g., none, abandon the area, decrease foraging success, reduced fecundity, injury, death, etc.) from any likely exposure of the PCEs.
2. If effects are determined to be insignificant or discountable, explain how that conclusion was reached and what it was based on.

C. Interrelated and Interdependent Effects

For each interrelated or interdependent effect, describe the action causing the effect; separate the description into individual project components, if appropriate (i.e. PSLs); and state whether the effects to each species would be direct or indirect.

D. Cumulative Effects (This section will only apply to a BA)

Conduct this analysis only for species that have a likely to adversely affect call. Identify all past, present, or future non-federal actions that are reasonably certain to occur for each species being evaluated ([50 CFR 402.02](#)). Describe how such activities have or have not affected these



species. Include any known incidental take authorized for each action.

E. Effects to Critical Habitat Assessment

Explain how the project will or will not affect the PCEs of the CHUs within the action area. If no CHUs are present, make that statement.

VII. Conclusion and Determination

The BA/BE must include a Conclusion and Determination Section that explains the conclusion of the evaluation and the resulting determination and addresses the following components. Each lettered item represents a subsection and must be labeled as such in the BA/BE. The conclusion and determination section should be approximately one to two pages in length.

A. May Affect Not Likely to Adversely Affect Determination

For each protected resource with this effect call, include the rationale for this determination, and reference the Conservation Measures Section (Section III, Letter C) as needed to support the justification for this call.

B. May Affect, Likely to Adversely Affect Determination (This section will only apply to a BA)

For each protected resource with this effect call, include the rationale for this determination, quantify the requested take amount for each species; explain the justification for each amount, and reference the Conservation Measures Section (Section III, Letter C) as needed to support the justification for this call and the requested amount of take.

C. Determination of Effects to Critical Habitat

For each CHU, provide the determination and justification for any impacts to the PCEs.

VIII. Literature Cited

The BA/BE must include a list of all literature cited in the text of this BA/BE.

IX. Appendices

Append relevant information referenced in the text of the BA/BE (e.g., Appendix A — Survey Results and/or Appendix B — Project Drawings and Site Plans).



X. Example: Species Impact Table

The following Example: Species Impact Table was included for reference. If a species table is included in the BA/BE, it must use the layout, colors, fonts, and other stylistic decisions outlined in the TxDOT *Brand Guidelines*, which are applied to the example table.

Species Impact Table

Species	Status	Species Habitat Description	Habitat Present?	Effect/Impact	Pertinent Information
Golden-cheeked Warbler (<i>Dendroica chrysoparia</i>)	FE	Live oak/Ashe juniper woodlands; mature Ashe juniper and high canopy closure needed for nesting material; broad-leafed deciduous species such as lacey oak and Texas Oak necessary for forage; range usually 6 to 20 acres. Restricted to habitats in Hill Country and on Edwards Plateau.	No	No Effect	No habitat identified within the existing ROW.
Whooping Crane (<i>Grus americana</i>)	FE	A potential migrant of the plains areas throughout most of the state and coast line. Commonly winters in coastal marshes of Aransas, Calhoun, and Refugio Counties.	No	No Effect	Could migrate over area, but would not be impacted by the proposed project.



The following table shows the revision history for this document.

Revision History	
Effective Date Month, Year	Reason for and Description of Change
August 2015	Version 2 was released with a modification to the Pertinent Information section of the Example: Species Impact Table.
July 2015	Version 1 was released.