

**BIOLOGICAL ASSESSMENT TEMPLATE
ODOT PROJECT
(KEY ID No.)**

Oregon Highway Projects

**County
HUC
Listed Species**



Prepared for:
Oregon Department of Transportation
Address

Prepared by:
Biologist Name
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Date

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FIGURE X.

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Project Team Leader/District Manager Authorization of Conservation and Mitigation Measures

I have reviewed the **[insert project name and Key ID #]** project description for accuracy. I have also reviewed the conservation and mitigation measures for this project. I agree that the conservation and mitigation measures should be incorporated into this project's contract documents or implementation plans (in the case of use of in-house forces) so that ODOT will be in compliance with the Endangered Species Act and other applicable environmental laws and regulations.

[Project Team Leader or District Manager]

Date

(The specific title of the signatory may vary depending on the nature of the project)

**[Construction Project Manager or
Consultant Project Manager (CPM)]**

Date

(The specific title of the signatory may vary depending on the nature of the project.)

[Certified Biologist & Firm/Organization Name]

Date

(The specific title of the signatory may vary depending on the nature of the project.)

(This signatory sheet must be completed and on file prior to transmittal to NMFS or USFWS.)

1.0 Introduction

1.1 Purpose and Need

The project purpose and need statement is intended to provide a clear purpose for the proposed project, as well as a brief description of proposed actions in relation to the needs discussed.

1.2 Background

This section is intended to provide a summary of the information on which the Biological Assessment is based, and include:

- Project history
- Statement for preparation of the BA
- Discussion of consultation efforts

The following table should be completed:

Project Summary	
Project Name:	
ODOT Key #:	
Location of Project:	Highway name and mile post, or start and stop mile post,
Watershed and HUC Field (5 th and 6 th):	
USGS Quadrangle Map Location:	Quad Name, Township, Range, Section
Size of Action Area:	
City:	
County:	
Project Staff:	Name(s) of individual(s) who conducted the wetland delineation, surveys, etc.
Site Visits:	Date(s) of visit(s)
Site Access Permission:	Granted or not granted by landowner if area exceeds ROW
Current Land Use(s):	Urban, rural residential, agriculture, forest land, open space, etc.
Waterways on Site:	Drainages, creek names, river names or "unnamed tributary"
River Mile:	
Prior Correspondence:	Include dates of meetings and phone correspondence. Also include the names of the individuals involved in the correspondence.

1.3 Species and Critical Habitat

The following species and critical habitat are included in this consultation.

Species and Critical Habitat Included in this Consultation		
Species:		
Common Name	Scientific Name	ESU or Population Segment (if applicable)
Critical Habitat:		
For Species	Waterway or Geographic Extent	

2.0 Evaluation Methods

2.1 Analytical Framework(s) Used

Discuss factors considered in evaluating project impacts, such as:

- Species' dependence on specific habitat components.
- Abundance and distribution of habitat and/or species,
- The degree of impact to habitat and/or species, and
- Potential to mitigate the adverse effect.
- Use of Matrix of Pathways and Indicators (NMFS)
- Draft Framework to Assist in Making Endangered Species Act Determinations of Effect for Individual or Grouped Actions at the Bull Trout Subpopulation Watershed Scale (USFWS)

2.2 Information Gathering

Provide a discussion of how information for the preparation of the BA was gathered (i.e., surveys) and researched.

3.0 Project Description

This section is intended to provide a description regarding all aspects of the project, which should be written to allow the reader the ability to develop a “big picture” concept for describing how and why the development of the Action Area was determined. To help the reader understand what is being proposed for implementation of the project, this section needs to include:

- Proposed construction methods (i.e., construction schedule, types of equipment, staging areas, etc.)
- Operation and maintenance activities after construction
- Discussion of interdependent and interrelated actions
- Proposed mitigation and monitoring (during and after construction activities)

3.1 Project Area and Sequencing

The following section needs to provide a summary of the project description; activities to be authorized, funded, or carried out by the Federal action agency. Include a discussion of the proposed project by providing the following details, such as:

- Construction methods (i.e., grading, pile driving, blasting, concrete pouring, etc.)
- Construction schedule and timeline (including timelines for Inwater work, vegetation clearing, etc.)
- Project footprint (description of all areas where temporary and permanent disturbances/impacts would occur)

Also list project components in a logical order in this section.

3.1.1 [First Project Component]

The description of project components should be broken down by each of its logical elements or components, including specific construction techniques. It is important to discuss in detail the methods, materials, and timing of the proposed project elements. The description of project component should also include a brief introduction to each avoidance, minimization, and conservation measure.

3.1.2 [Second Project Component]

Include the same amount of information for all additional components of the project description. Add additional sections (i.e., 3.1.3; 3.1.4, etc.) as needed.

3.1.3 [Subsequent Project Components]

3.2 Interdependent and Interrelated Actions

This section should be used to clarify (if necessary) the relationship of the proposed action to any underlying actions such as interdependent and/or interrelated actions.

3.3 Mitigation and Monitoring

This section should describe mitigation actions, monitoring, or additional measures that are required by other regulatory mechanisms as part of the proposed action (i.e., Corps wetland mitigation).

3.4 Action Area

The action area should be described and a figure included. The action area is defined as: “...all areas to be affected directly and indirectly by the federal action, and not merely the immediate area involved in the action (ESA 50 CFR 17.11)”

The action area needs to include the geographic extent of physical, biological, and chemical impacts of the project. Consequently, the action area is almost always larger than the project area and sometimes greater than the project vicinity. Defining the action area limits must also include a rationale for defining these limits.

4.0 Natural History and Species Occurrence

The following framework will vary depending on the project.

NOTE: If applicable, please provide general species status, additional critical habitat information, and general biological requirements as an Appendix.

4.1 Species X

4.1.1 Site Specific Biological Requirements and Context

This section should include information on specific populations of the listed species potentially occurring in the project or action area. This should include information such as run timing or timing of species use of the project or action area; local status information; and the presence or absence of suitable habitat or designated critical habitat.

The listed species' biological requirements may be described in a number of different ways as appropriate for each species. Because there is no incidental take for plants under the Federal ESA, the analysis should focus on the relationship of the site population to larger populations.

4.1.2 Site Specific Critical Habitat Context

This section should include the specific primary constituent elements within the action area that are identified in the final critical habitat rule, and any activities which have been identified as having the potential for altering the primary constituent elements.

4.1.3 Site Specific Limiting Factors for Recovery

Include any available information on the limiting factors for the recovery of listed species evaluated within the ESU and the action area.

4.2 Species Y

Repeat subsections above, if applicable.

5.0 Environmental Baseline

This section presents an analysis of the effects of past and ongoing human and natural factors leading to the current status of the species, its habitat (including designated critical habitat), and ecosystem, within the action area. If any of sections 5.2 through 5.4 do not apply, they should be deleted.

5.1 Existing Baseline Conditions

The environmental baseline is a “snapshot” of a species’ health at a specified point in time. The baseline includes State, tribal, local, and private actions already affecting the species or that will occur contemporaneously with the consultation in progress. In this section include a broad description of the action area.

The discussion of environmental baseline conditions needs to also focus on factors which are part of the biological requirements of the species being addressed. Focus on each section below as it relates to the proposed project.

5.2 Fish Species

5.2.1 Watershed or Other Relevant Habitat Unit

Describe the subbasin within your project area (the larger watershed may not be relevant to smaller projects on tributaries). Additional environmental baseline condition subsections may be necessary for additional species as appropriate (Bull Trout, etc.).

5.2.2 Water Quality

This section should include a description and summary of water quality conditions. If there are no effects to this condition, state as so and include reasons why this condition is not applicable or has an affect.

5.2.3 Habitat Access and Connectivity

This section should include a description of habitat access and connectivity conditions. If there are no effects to this condition, state as so and include reasons why this condition is not applicable or has an affect.

5.2.4 Habitat Elements

This section should include a description of habitat element conditions. If there are no effects to this condition, state as so and include reasons why this condition is not applicable or has an affect.

5.2.5 Channel Conditions and Dynamics

This section should include a description of channel conditions and dynamics conditions. If there are no effects to this condition, state as so and include reasons why this condition is not applicable or has an affect

5.2.6 Flow/Hydrology

This section should include a description of flow/hydrology conditions. If there are no effects to this condition, state as so and include reasons why this condition is not applicable or has an affect

5.2.7 Watershed Conditions

This section should include a description of watershed conditions. If there are no effects to this condition, state as so and include reasons why this condition is not applicable or has an affect.

5.3 Terrestrial Species

5.3.1 Watershed or Other Relevant Habitat Unit

Describe the subbasin within your project area (the larger watershed may not be relevant to smaller projects on tributaries). For terrestrial species, a watershed may not be the best habitat unit for this section. Additional environmental baseline condition subsections may be necessary for additional species as appropriate (Bald Eagle, Marbled Murrelet, etc.).

5.3.2 Shelter

This section should include a description of habitat element conditions including information regarding shelter.

5.3.3 Feeding

This section should include a description of the elements necessary for species feeding.

5.3.4 Reproduction

This section should include a description of the elements necessary for species reproduction.

5.3.5 Habitat Connectivity and Migration

This section should include a description of habitat access and connectivity conditions. Include information regarding migration corridors.

5.4 Plant Species

5.4.1 Watershed or Other Relevant Habitat Unit

Describe the subbasin within your project area (the larger watershed may not be relevant to smaller projects on tributaries). For plant species, a watershed may not be the best habitat unit for this section. Instead the Willamette Valley or other ecoregion may be the best choice. Additional environmental baseline condition subsections may be necessary for additional species as appropriate.

5.4.2 *Habitat and Vegetative Community Associations*

This section should include a description of watershed conditions and associated vegetation communities. This section also needs to include a description of habitat connectivity conditions.

5.4.3 *Soil*

This section should include a description of types of soils and specific soil conditions that may be applicable to plant.

5.4.4 *Hydrology*

This section should include a description of flow/hydrology conditions. If applicable also include a description of channel/ floodplain conditions.

5.4.5 *Pollinators*

This section should include a description of pollinators required by the species.

6.0 Analysis of Effect of the Action

This section includes an analysis of the direct and indirect effects of the proposed action on the species and/or critical habitat and its interrelated and interdependent activities. Factors to be considered in the analysis include: proximity of the action; distribution; timing; nature of the effect; duration; and disturbance frequency, intensity, and severity.

In some instances species responses may be similar. If the species responses are similar for multiple species, you may group the effects analysis discussion for these species. Also, please include discussions regarding the interrelated and interdependent effects as related to and under direct and indirect effects.

6.1 Direct Effects

This section needs to discuss, the direct or immediate effects of the project on the species or its critical habitat. The discussion should include:

- Nature of the Effect
- Timing of the Effect
- Proximity of the Effect
- Duration of the Effect
- Disturbance Frequency
- Disturbance Intensity
- Disturbance Severity
- Distribution of the Effects

6.2 Indirect Effects

This section needs to address the indirect effects which are effects caused by or resulting from the proposed action, are later in time, and are reasonable certain to occur. The discussion should include as similar to direct effects the nature, timing, proximity, duration, disturbance frequency, disturbance intensity, disturbance severity, and distribution of effects.

6.3 Effect of the Proposed Action on Tribal Resources or Interests

Discuss any potential interactions of the proposed action with Tribal resources or interests. Include information from any discussion with the Tribes relevant to the proposed action.

6.4 Estimating Take

Use this section to identifying elements of the project that could cause take. This should define how and where take will likely occur in association with the project.

6.5 Cumulative Effects

This section should only be included if the project has multiple project components and multiple species. Detail all “non-Federal” actions reasonably certain to occur in the foreseeable future. (Include state, local, private, and tribal actions (e.g., residential developments, watershed enhancement, etc.). If you have multiple listed species with very similar biology and the cumulative effects on those species are likely to be the same such as UWR Chinook salmon and UWR steelhead, you may choose to group the species together for efficiency rather than repeat the same effects analysis over and over for each species. If the cumulative effects will be different, those differences need to be clearly identified by species.

7.0 Avoidance, Minimization, and Conservation Measures

This section is intended to show how ODOT will be enforcing the application of the avoidance, minimization, and conservation measures during the project.

ODOT Specifications Unit manages standard and special provision specifications. Refer to the following websites for current ODOT Specifications:

- Standard Specifications (<http://www.odot.state.or.us/tsspecs/index.htm>)
- Special Provisions (<http://www.odot.state.or.us/tsspecs/02specials/updates/3-24-05/sp290.pdf>)

7.1 Standard Specifications

- Section 00280 - Erosion and Sediment Control
- Section 00290 – Environmental Protection
- Section 00320 - Clearing and Grubbing
- Section 01040 – Planting

7.2 Amendments to Standard Specifications

Contact an ODOT Biologist or ODOT Specifications Unit for up-to-date environmental special provision language. These special provisions are boilerplate and are not designed nor are appropriate for every project. Delete and add specifications from this outline as appropriate for the project's site specific conditions.

7.3 Non-Contractual Obligations and Agreements

The intent of the content in this sub-section is to outline and summarize the agreements made internally within ODOT as well as any agreements made between ODOT and other agencies that are not part of the ODOT construction contract documentation. Include obligations or agreements between ODOT and:

- Environmental Services
- Construction Section
- ODFW
- DEQ
- monitoring and review of documents, such as a revised ESCP, Planting Plans, etc.

Do not place any agreements or contractual obligations in this section that need to be implemented by the contractor via the contract documentation (plans and specifications). Do not confuse “non-contractual obligations” as discretionary.

7.4 Summary of Avoidance, Minimization and Conservation Measures

This section should include a summary of all avoidance, minimization, and conservation measures developed for the project.

8.0 Finding of Effect

An effect determination or finding of effect should be made for each listed species and designated critical habitat. It is important to justify why the effects determination was reached. Thinking about the relationship of your effects analysis relative to the eventual effects determination to make sure they are tracking consistently through the document.

8.1 Species X

If you have multiple listed species with very similar biology and the projects potential affects on those species are likely to be the same such as UWR Chinook salmon and UWR steelhead, you may choose to group the species together for efficiency rather than repeat the same effects analysis over and over for each species. If the species biology or project effects will be different, those differences need to be clearly identified by species. Repeat section headings and subsections for additional species (i.e., 6.2; 6.3, etc.).

8.1.1 Summary of Effects on Species X

8.1.2 Summary of Effects on Critical Habitat of Species X

8.2 Species Y

Repeat as applicable.

9.0 Essential Fish Habitat Consultation

The intent of this section is to outline and document the Magnuson-Stevens Act, and the requirement that federal agencies must consult with NMFS on all actions, or proposed actions, authorized, funded, or undertaken by the agency, that may adversely affect EFH; NMFS shall provide conservation recommendations for any federal or state activity that may adversely affect EFH.

9.1 Identification of Essential Fish Habitat

9.2 Analysis of Effects

This section may simply reference the effects analysis for fish habitat in Section 6.0 above if the effects to EFH will be the same as those for fish habitat described above. However if EFH for a composite of groundfish or costal pelagics is being analyzed, the project effects are not likely to be the same as those for salmonids. Keep in mind than only effects to EFH itself should be described here and **not** effects to the individual fish.

9.3 Conclusion

Include conservation measures and special provisions described in Section 7.0 that are considered adequate to prevent adverse effects on EFH. You may need to change this if the project will have an adverse affect on EFH for one of the groundfish composites or if coho, Chinook, or pink salmon habitat will be affected.

10.0 References

The author of the BA must have referenced documents on hand to provide to the Services if requested. Please keep a record or copy of all documents referenced in the BA. The consultant may be asked to provide a copy of all documents referenced in the report.