

**PART 1**

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**General Information for Biological Assessment  
Authors**



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## **2.0 Understanding the Biological Assessment Process**

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## 2.0 Understanding the Biological Assessment Process

### Chapter Summary

- Projects with a **federal nexus** require interagency coordination or Endangered Species Act evaluation.
- **Species lists** may be requested by letter as appropriate, or lists may be obtained online. BAs must be started within 90 days of receiving the species list and must be completed within 180 days of receiving the species list.
- **Biological assessments** analyze the potential effects of projects on listed species and critical habitat, and justify particular effect determinations. BAs are used as the technical basis for the consultation and conference processes.
- **Conferences** are required for federal actions likely to jeopardize the continued existence of *proposed* species or adversely modify *proposed* critical habitat.
  - Federal agencies may request a formal conference for a project warranting a conditional effect determination of LTAA.
  - The action agency also may request an informal conference for a project warranting a conditional effect determination of NLTA.
- **Early coordination** includes discussions and meetings with the Services prior to initiating consultation or conferencing, in order to discuss complicated projects during BA development and also to get feedback on preliminary effect determinations. Early coordination can include site visits (commonly used for H&LP projects) or Pre-BA meetings. All early coordination is between the federal action agencies, and should not be conducted or arranged by local agencies without the participation of the H&LP Environmental Engineer.
- Initiation of **informal consultation** must be requested in writing by the federal agency or the nonfederal designee of the federal agency. A BA or other similar documentation submitted with a cover letter serves as the consultation request. Informal consultation culminates in either a concurrence letter from the Services or initiation of formal consultation (in the event that the Services do not concur with effect determinations provided in the BA).
- Initiation of **formal consultation** must be requested in writing by the federal action agency. The request must include project information and

analysis of the impacts potentially resulting from the proposed action. This analysis may be in the form of a BA, an EIS, or an EA. Formal consultation culminates in the issuance of a biological opinion by the Services.

- The WSDOT process consists of eight general phases:
  1. Project development and assignment of project team
  2. Information gathering
  3. Early Coordination/Pre-BA meeting
  4. Project impact analysis
  5. Write BA and internal review
  6. WSDOT BA review to meet FHWA/CORP standards
  7. Federal agency coordination and consultation
  8. Project implementation
  
- The WSDOT Highways and Local Programs (H&LP) process is slightly different than the general WSDOT process, in that local agencies typically develop the project BA (either in-house or using a consultant). H&LP coordinates an internal quality control review prior to submitting the BAs to the Services.

## 2.1 General Information

Interagency coordination, as defined in Section 7 of the Endangered Species Act, requires all federal agencies to consult with the Services if a federal action agency determines that any action it funds, authorizes, or carries out may affect a listed species or designated critical habitat. Section 7 of the ESA applies to transportation projects, including local or state projects that have a federal nexus (i.e., have been funded, authorized, or carried out by a federal agency).

The following types of projects have a federal nexus and must ensure Section 7 interagency coordination:

- A U.S. Army Corps of Engineers permit (e.g., nationwide or individual permit) is required for the project.
- The project requires any another type of federal permit or approval.
- The project is fully or partially federally funded.
- The project is sited on federal land (e.g., Bureau of Land Management [BLM], Forest Service, national wildlife refuge, or military land).

### 2.1.1 Biological Assessments

A BA document is required for any major construction activity. This document analyzes the potential effects of the project on listed species and critical habitat and justifies a particular effect determination for each species and critical habitat addressed (described in PART 2, EFFECT DETERMINATION GUIDANCE). Major construction activity is defined in the ESA Section 7 regulations (50 CFR 402). All federal agencies are responsible for evaluating impacts on listed species resulting from all federal actions, regardless of scope. For listed species and designated critical habitat, this process of evaluation and federal review is termed *consultation*; however, for proposed species or critical habitats, this process is referred to as *conference*. Conferences and consultations are discussed more fully in the subsections below.

The U.S. Army Corps of Engineers uses the term *biological evaluation* (BE) for analyses that merit a *no-effect* (NE) or *not likely to adversely affect* (NLTA) determination and require informal consultation. The Corps uses the term *biological assessment* (BA) for analyses that merit a *likely to adversely affect* (LTA) determination. Despite the different meanings for these two terms, in practice the Corps refers to these two document types interchangeably.

### 2.1.2 Conferences

Conferences are required for federal actions likely to jeopardize the continued existence of proposed species or adversely modify proposed critical habitat. *Jeopardy* and *adverse modification* are defined in the ESA Section 7 regulations (see PART 3, GLOSSARY AND ABBREVIATIONS or in the statute itself, which is included on the reference compact disc).

Federal agencies may request a formal conference for a project warranting a conditional effect determination of LTA for proposed species or critical habitat. As discussed in PART 2 – EFFECT DETERMINATION LANGUAGE and EFFECT DETERMINATION GUIDANCE, an LTA effect determination is not the same as jeopardy or adverse modification. Informal conferences also may be requested by the action agency if a listing is imminent and the project BA reaches a conditional effect determination of NLTA for that species.

Action agencies can request a conference in the BA transmittal or consultation initiation letter for projects that address proposed species and critical habitats in the BA. A conference can also be requested for BAs that have already been submitted (or submitted and concurred on), before the project has been completed, when a species or critical habitat is proposed after BA submittal and is due to be listed or designated before project completion. This is considered a reinitiation. In this case a justification or effects analysis for the proposed species or critical habitat should be submitted instead of resubmitting the entire BA. Enough information should be provided to justify both the conference determination (*will not jeopardize the continued existence* or *will not destroy or adversely modify*) and the conditional ESA determination. Within the information submitted for reinitiation, the project biologist should reference the FWS number and/or the NOAA tracking number.

A conference opinion (for an LTAA project) is prepared by USFWS or NOAA Fisheries and can be adopted as the biological opinion when the species is listed or critical habitat is designated. Incidental *take* provisions in the conference opinion become effective at the time of listing or designation, along with terms and conditions. If a conference is requested for an NLTAA project, the conference report, by request of the action agency, can be turned into a concurrence letter at the time of listing or designation.

### **2.1.3 Early Coordination**

Early coordination between the federal action agency or the non-federal designee and the Services is optional, but can be an effective way to streamline consultations and reduce the likelihood that a proposed project will have significant impacts on listed species or critical habitat. Early consultation, in the form of informal discussions, site visits, or Pre-BA meetings, occurs prior to the filing of an application for a federal permit or license. See the PRE-BA MEETINGS section below to learn more about an early consultation process that is specific to WSDOT.

### **2.1.4 Informal and Formal Agency Consultation**

The federal action agency may initiate either formal or informal consultation with the Services, depending upon the level of impact the project is expected to have upon listed species or designated habitats. Initiation of informal consultation must be requested in writing by the federal agency or the nonfederal designee of the federal agency. A BA or other similar documentation submitted with a cover letter serves as the consultation request. The request must include project information and an analysis of the impacts potentially resulting from the proposed project. The analysis may be in the form of an environmental impact statement (EIS), environmental assessment (EA), or BA.

Some action agencies may give nonfederal designee status to state or local agencies. The local agency may then complete informal consultations and conferences with the Services on behalf of the action agency. Nonfederal designees may not conduct formal consultations on behalf of the action agency, but they may prepare the BA used in the formal consultation. An example of this arrangement is that WSDOT serves as a nonfederal designee for both FHWA and the Corps.

#### ***2.1.4.1 Informal Consultation***

Informal consultation can describe one of two processes:

- The process used to assist the Services in determining if formal or informal consultation is required for review of a project's potential impacts on listed species or designated critical habitat.
- The process through which federal agencies request Services concurrence with a determination of no effect or not likely to adversely affect. This process involves submittal of a BA to the Services for review.

If a federal agency determines (usually through preparing a BA) that a project is *not likely to adversely affect* listed species or critical habitat, the federal agency uses the informal consultation process to request Services concurrence. Concurrence by the Services is required for a *not likely to adversely affect* determination and is granted in a concurrence letter issued by the Services. Normally, projects that have *no effect* determinations will not send any documentation to the Services. However, on rare occasions a federal agency (or the designated nonfederal representative) may initiate informal consultation and request a concurrence letter on a no effect determination from the Services for large, potentially controversial projects.

#### **2.1.4.2 Formal Consultation**

If a federal action agency determines that its proposed project merits a determination of *likely to adversely affect* for a listed species, formal consultation and concurrence is required, in the form of a biological opinion from the appropriate Service(s). Initiation of formal consultation must be requested in writing by the federal action agency. The request must include project information and analysis of the impacts potentially resulting from the proposed action. This analysis may be in the form of a BA, EIS, or EA.

Through the consultation process, the Services may recommend modifications to projects to eliminate or reduce adverse effects. If effects can be reduced to an insignificant or discountable level, then consultation can proceed informally.

If formal consultation is required, the Services should be provided with an electronic version of the BA to assist in the preparation of a biological opinion. Formal consultation ends with the issuance of a biological opinion by the Services. The biological opinion can be a lengthy document and can take a substantial period of time to write. The document identifies whether or not the action is likely to jeopardize the continued existence of a listed species or adversely modify critical habitat. If the proposed action is not likely to jeopardize the continued existence of a species or adversely modify critical habitat, the project may proceed, provided it follows the terms and conditions outlined in the biological opinion. The biological opinion may include the following items:

- Reasonable and prudent alternatives (RPAs) or reasonable and prudent measures (RPMs) – RPA/RPMs include specific actions required to avoid *jeopardy* or *adverse modification* to critical habitat.
- Terms and conditions – These set out the specific methods by which the reasonable and prudent measures are to be accomplished.
- Prior to finalizing the biological opinion, the Services will provide draft terms and conditions to the federal action agency. The federal action agency, along with the project proponent, will review the conditions and provide comments back to the Services before they are finalized.

- Incidental *take* statement – A statement as outlined in Section 10(a) of the ESA that specifies the amount or extent of allowable taking (of listed species) and stipulates required reasonable and prudent alternatives, terms, and conditions.
- Conservation recommendations – These are voluntary measures the action agency can implement to further minimize adverse effects on listed and proposed species.
- Reinitiation clause – A statement requiring that consultation be reinitiated if there are changes to the project or if new information (e.g., additional listings) requires that the project review be revisited.

### 2.1.5 Emergency Agency Consultation

There are some instances that require an abbreviated or accelerated consultation process with the Services, namely projects that are responding to imminent threats or emergencies.

An imminent threat is a situation where there is a high likelihood for structural failure in a natural disaster or emergency situation. Project will likely be constructed many months out – basically, something could happen but has not yet. Sometimes imminent threats become emergencies before corrective actions can occur. Examples of imminent threats include scour projects, sinking foundations, etc.

An emergency involving acts of God, disasters, casualties, national defense, security emergencies, etc. and includes response activities that must be taken to prevent imminent loss of human life or property – basically something has already happened or is happening and we need to do something now. Examples of emergencies include rock falls, bridge collapse, mud slides, etc.

Consultation procedures for an imminent threat are the same as those used for normal consultations, except the BA will need to be completed in a very short timeframe. In addition, the project will be placed high on WSDOT's prioritized list of consultations in an effort to complete the consultation prior to the projected advertisement date for the project. The BA must be submitted before work occurs and standard review times will apply.

It is the responsibility of the action agency to declare whether or not a project is considered an emergency. For emergency projects, USFWS and NMFS should be contacted via email. Specifically John Grettenberger at USFWS and Mike Grady at NMFS should be notified of the situation. A description of the emergency and the proposed action should be provided. This contact should be made even if it is uncertain whether or not there will be a federal nexus for the project. These individuals may assign the task of responding to staff or respond directly. At this stage, the Services offer recommendations to minimize impacts to species and critical habitat. A record of this initial contact should be kept by the project proponent.

The WSDOT project manager will coordinate with WSDOT Environmental Services Office staff to ensure that the consultation tracking sheet is appropriately updated. If it is determined the project does not have a federal nexus, it will not undergo consultation and will later be removed from the tracking database.

If the project has a federal nexus, submit an after-the-fact (or during project construction) biological assessment describing the project and actions taken, justification for expedited or after-the-fact consultation, and an evaluation of the response to and the impacts of the emergency on affected species and habitat. Also include documentation summarizing how the Services' recommendations were implemented and the results of implementation in minimizing take.

It is important to establish the environmental setting accurately when preparing a BA for emergency consultation. Setting conditions are considered to be those conditions that are present after the emergency has occurred, but before the action agency's response actions have been implemented. For example, if a rock slide has occurred that has deposited debris in a fish-bearing stream, the environmental setting condition would not be the condition of the creek prior to the slide, but would describe stream conditions with the slide debris in the channel.

The Services are required to consult on projects, with a federal nexus, which have been deemed an emergency by the action agency (even if the Services do not consider the proposed action an emergency). In the biological opinion that is prepared during project construction or after-the-fact, the Services can recommend additional conservation measures that can be applied to similar future emergency projects. However, these new conservation measures do not apply after the fact. The Services can not hinder the emergency response decisions made by the action agency where human life is at stake.

### **2.1.6 Reinitiation of Consultation**

Federal agencies are requested to reinitiate consultation on previously reviewed actions if any of the following occur:

- The amount or extent of take specified in the incidental take statement is exceeded.
  - For example: In their biological opinion, the USFWS defined take as the entire cross section of a stream, extending a specific distance downstream from project activities (600 feet). During construction, project effects extend beyond this distance (1,200 feet), resulting in an increased area where potential take could occur.
- New information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered.

- For example: A fish passage barrier occurring downstream of the road project is corrected after the road project consultation is complete, but before the project is initiated. Listed fish are now able to access and are utilizing the project area. The project consultation was completed based on a lack of fish presence.
- The identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion.
  - For example: The consultation was completed based on operating from a barge for in-water work. After the consultation is complete, the project design changes and the project now requires temporary work trestles. No in-water pile driving was addressed in the consultation.
- A new species is listed or critical habitat is designated that may be affected by the identified action.
  - For example: A consultation addresses all listed species; however, critical habitat for one of the species is designated after the consultation is complete, but before the bridge is constructed. The project did not consult on the newly designated critical habitat.

If one of these scenarios arises, reinitiation of consultation should occur and may be requested by the WSDOT, FHWA, CORPS, or the Services. Informal consultations are reinitiated by WSDOT, on behalf of the FHWA or the CORPS. Formal consultations must be reinitiated by the federal action agency (i.e., FHWA). The federal action agency (or its non-federal representative, i.e., WSDOT) must stay abreast of project activities throughout construction and remain aware of the listing status of species and critical habitats to determine whether reinitiation is necessary.

Although the consultation process is completed with issuance of a letter of concurrence or a biological opinion, the agency's ESA responsibilities persist until construction of a project is complete. Between the completion of consultation and completion of a project, the status of species or critical habitat can change, as can the design or scope of the proposed project resulting in effects to listed species or designated critical habitats that were not addressed in the initial consultation process and that must be addressed via reinitiated consultation.

WSDOT must ensure that the ESA approval received through consultation is still valid for all listed species and designated critical habitats before and during construction of a project. To ensure this, WSDOT should review the project description, design, and scope to make sure there are no changes, along with species lists at least 6 months prior to project advertisement and at least every 6 months once the project is under construction to determine whether new species have been listed or critical habitats designated that were not addressed in the biological

assessment (BA) submitted for consultation. Updated species lists and critical habitat can be obtained on NMFS and USFWS websites:

#### **2.1.6.1 Species Lists**

- NMFS (<http://www.nwr.noaa.gov/Species-Lists.cfm>)
- USFWS ([http://www.fws.gov/wafwo/speciesmap\\_new.html](http://www.fws.gov/wafwo/speciesmap_new.html))

#### **2.1.6.2 Critical Habitat**

- USFWS Critical Habitat Portal (<http://crithab.fws.gov/>)
- NMFS Critical Habitat (<http://www.nmfs.noaa.gov/pr/species/habitat.htm>)
- NMFS Critical Habitat Maps and Data (<http://www.nmfs.noaa.gov/gis/data/critical.htm>)

Following completion of Section 7 consultation and prior to completion of a project, a change in conditions requiring reanalysis may result in stopping construction or some components of construction under certain circumstances (*e.g.*, marine pile driving injuring marbled murrelets that exceeds the amount of incidental take allowed or results in take when none was granted). In instances where there is a change in the status of a species or critical habitat, resulting in a higher level of protection (*e.g.*, a species undergoes an emergency listing), or where there is a change in scope or design of the proposed project after construction has begun that causes an effect to listed species and/or critical habitat not previously considered, these changes may require some components of construction to be avoided while potential project impacts are reassessed and consultation is reinitiated.

If there is no change in the effect determination to the species and/or critical habitat, consultation does not need to be reinitiated but an update should be sent to the Services informing them of the change in the project design or the change in species status and subsequent reanalysis of the project impacts. In most cases, the Services will not require stopping construction if the initial consultation was done in good faith. However, in instances where the amount or extent of incidental take (specified in the biological opinion) is exceeded, or incidental take occurs when none was granted, any operations causing such take must cease pending reinitiation (USFWS & NMFS 1998).

#### **2.1.6.3 Commonly Asked Questions and Scenarios**

1. What if consultation has been completed and an emergency listing of a species is made (the species could occur in the action area of the project but was not addressed in the original consultation) prior to or during construction of a project?

Consultation should be reinitiated to address this new species, unless there is no effect to the newly listed species and/or designated critical habitat. If there is no effect to a newly listed species or critical habitat, document your analysis in the project file.

2. What if consultation has been completed and a new species or critical habitat that was not addressed in the original consultation but could occur in the action area is proposed for listing or designation, prior to or during construction of a project?

A conference should be requested with the Services to address the newly proposed species and/or critical habitat, unless there is no effect or the project will be completed before listing occurs and/or critical habitat designated.

3. What if a conference for proposed species or critical habitat has been completed and the species is listed or the critical habitat is designated prior to or during construction of a project?

If a proposed species is listed or proposed critical habitat is designated prior to or during construction of a project, the Federal action agency or non-federal designee can formally request that the previously completed conference opinion be converted to the biological opinion for the project (for formal consultations) or the conference report be converted to the concurrence letter for the project (for informal consultations). With this single request, the action agency fulfills its consultation obligations with the Services and receives take coverage for its project. This is considered a re-initiation. The terms and conditions and incidental take statement from the conference opinion are reissued in the biological opinion at the time of listing or designation.

- For example: Listed bull trout and proposed bull trout critical habitat were addressed in a project BA. Bull trout critical habitat was designated after consultation was complete, but before all in-water work was complete.
  - If an informal conference took place for the proposed critical habitat, then the action agency should send a project update to the Services and request to change the conference report to a concurrence letter. If a formal conference took place for the proposed critical habitat, then the action agency should send a project update to the Services and request to change the conference opinion to a biological opinion.

4. What if a project design or scope changes so that the proposed action no longer matches the project description included in the BA submitted for consultation?

The action agency should reanalyze the potential impacts associated with the revised project, and consultation should be reinitiated to address this new information only if there is an effect to the species or critical habitat that was not previously considered or

consulted on. If the effects do not change, then provide the Services with a project update.

- For example: A bank stabilization project that will require work within the OHWM of a stream with listed fish during the in-water work window (which could overlap with the migration season) has undergone consultation. The BA identified that the work was to be conducted in the dry. However, it was later determined that in-water work will occur.
  - Reinitiation is required because the action was modified in a manner that will cause effects to listed fish that were not previously considered. This consultation may go from informal to formal depending upon the proposed work window relative to the anticipated timing and use of the action area by listed species or the presence of critical habitat.
- A bridge repair project that involves riparian impacts is underway following completion of consultation. The project requires a design modification that will result in additional impacts to riparian vegetation on the north side of the bridge, but will result in equally fewer impacts to similar riparian vegetation on the south side.
  - Reinitiation of consultation is not required if the design modification does not cause effects to listed species and critical habitat not previously considered. Send an update to the Services to inform them of the design modification and update the project file.

5. What if a project is delayed from one construction season to the next?

The action agency will need to remain aware of the status of current species listings and critical habitat designations, keep informed of the latest information regarding the interpretation of the impacts on listed species and critical habitats, and ensure that the ESA approval received through consultation is still valid for all listed species and designated critical habitats before beginning construction of the project. If there are no changes to listing status for species and critical habitat, no changes to the scope of the project, or anticipated project effects, provide the Services with an updated project schedule.

- A project has completed consultation and, as described in the BA, was to be conducted during the 2009 construction season. Budget reallocations require a delay until the following season. All other aspects of the project are unchanged including species listings, habitat impacts, construction methods, in-water work windows, etc.

- Reinitiation of consultation is not required if the action is not modified and there is no new information that reveals effects of the action not previously considered. The action agency should inform the Services of the change in the project construction date.

## 2.2 WSDOT Consultation Process

The WSDOT process can be divided into eight general phases:

1. Project development and assignment of project team
2. Information gathering
3. Early Coordination/Pre-BA meeting
4. Project impact analysis
5. Write BA and internal review
6. WSDOT BA review to meet FHWA standards
7. Federal agency coordination and consultation
8. Project implementation

### 2.2.1 Project Development and Assignment of Project Team

Once a project need has been identified, WSDOT or the lead agency will compile a team of project engineers, environmental permit coordinators and designers to develop the project. This internal team will begin generating project concepts and designs and identifying the environmental permitting issues pertaining to the project. Generally, once the project team has 30-percent designs complete, the environmental permitting process, including ESA consultation, begins. The environmental permitting process may begin earlier or later in the project design process depending upon the specific project.

Ideally, a project biologist will be assigned to the project team early on in the design process to provide input to the design process. The project biologist can work with project designers and engineers to identify species of concern in the vicinity of the project, whether surveys for wildlife or plants will be required, in-water work windows, timing restrictions based on wildlife sensitive periods, and other environmental considerations and issues of special concern.

#### 2.2.1.1 Assignment of Project Biologist

To begin the ESA consultation process, the project team contacts the WSDOT regional environmental office to determine the level of ESA review that may be required. The environmental office will assign a biologist to the project. This may be the WSDOT regional biologist, a consultant biologist, or a biologist from ESO in Olympia. Assignment will depend on the project and the workload. The following subsection outlines considerations for working as part of the WSDOT team.

### 2.2.1.2 Working as Part of the WSDOT Team

In order to implement its extensive highway construction program, WSDOT often contracts consultant biologists to help complete the ESA Section 7 analysis.

For most of WSDOT's projects, FHWA serves as the federal nexus. If federal funding is lacking, often a federal permit, usually from the U.S. Army Corps of Engineers (Corps), will be required, resulting in the Corps serving as the federal nexus. Occasionally a project involves more than one federal agency because it occurs on federally owned lands (Forest Service, Bureau of Land Management, etc.), which can result in joint lead agencies for a given project. For all informal FHWA and Corps consultations, WSDOT serves as the federal action agencies' non-federal designee and completes ESA Section 7 consultations with the Services on their behalf.

Though consultant biologists are hired based upon their individual qualifications and expertise, the biological assessments they are contracted to produce are agency documents that must be consistent with both WSDOT and FHWA policies and practices. To this end, consultants preparing biological assessments on behalf of these agencies should think of themselves as **part of the WSDOT project delivery team**, striving to produce documents that are internally consistent, that accurately reflect agency policies, practices and publication styles, and that have been fully coordinated with other team members.

Some basic steps for consultants to ensure the documents they produce reflect WSDOT standards are provided below:

- Coordinate early and often with the WSDOT project manager.
  - An initial meeting, preferably in the field, with the WSDOT project manager and relevant project team members should be organized to review the project.
  - WSDOT project managers review biological assessments for consistency with the agency's policies, practices, and the proposed project description.
- Coordinate early and often with the WSDOT project engineer.
  - WSDOT project engineers review biological assessments for consistency with the agency's policies, practices, and the proposed project description.
- Recognize that it is WSDOT's responsibility to define the action upon which it wishes to consult.
- It is the consultant's responsibility to assess the impacts associated with the action as defined by WSDOT.

- Do not revise the project description, change the project timeline, add project elements, introduce mitigation requirements, suggest design changes, etc. without coordinating with the project manager.
- Do not coordinate directly with the resource agencies (NOAA Fisheries and USFWS). Always contact the project manager and WSDOT regional environmental staff for assistance.
- Do not add minimization measures, BMPs or design changes to the project without coordinating with the project engineer.
- Coordinate early and often with the WSDOT regional biologist.
  - WSDOT regional biologists review biological assessments for consistency with agency policies and practices and also for document quality standards (see PART 1 – WSDOT BA REVIEW TO ENSURE FHWA STANDARDS).
- As the action agency, it is the responsibility of WSDOT, acting on behalf of FHWA, to provide an effect determination for each listed or proposed species or designated critical habitat potentially affected by a project. The consulting biologist provides a tentative effect determination for their approval.
- It is the consultant’s responsibility to coordinate the effect determinations contained in a biological assessment with the WSDOT regional biologist to ensure the analysis and conclusions of the BA are consistent with other projects in the region and with current agency policies.
- It is the consultant’s responsibility to coordinate early and often with the internal or external project team producing the biological assessment and or NEPA/SEPA discipline reports, to ensure clarity and internal consistency in the document (style, logic, analytical approach, terminology, etc.).
- It is the senior biologist’s responsibility to ensure the BA analysis and conclusions of the report are consistent with WSDOT standards.
- Biological assessments that are not consistent with agency policies and practices and do not meet WSDOT’s quality standards for biological assessments, will be considered deficient and referred to WSDOT Headquarters’ Environmental Services Office for secondary review (see PART 1 – WSDOT BA REVIEW TO ENSURE FHWA STANDARDS).

## 2.2.2 Information Gathering Phase

The information-gathering phase is divided into two tasks:

1. Species related information gathering
2. Project related information gathering

### 2.2.2.1 Species Related Information Gathering

The information gathering process for species is divided into three steps:

1. Species list acquisitions (USFWS, NOAA Fisheries)
2. State database requests (Washington Department of Fish and Wildlife [WDFW], Washington Department of Natural Resources [WDNR])
3. Personal communication with local experts (e.g., tribes, WDFW)

#### *Species List Acquisitions*

The project biologist must have a species list to prepare a biological assessment. Species lists identify listed species, proposed species, candidate species, species of concern, and proposed and designated critical habitat in defined geographic areas.

The project biologist should begin researching the species that may potentially occur in the project action area by obtaining species lists from USFWS and NOAA Fisheries websites. BAs must address the listed and proposed species and designated and proposed critical habitat identified on species lists obtained from the Services within 180 calendar days of acquiring species lists from the Services.

The USFWS provides countywide species lists online at [http://www.fws.gov/wafwo/speciesmap\\_new.html](http://www.fws.gov/wafwo/speciesmap_new.html). Because they are not specific to the project area, these countywide lists often include species that do not occur in or near the action area.

To generate a project-specific USFWS species list, the project biologist should request species and habitat information from the WDFW Priority Habitats and Species database and the WDNR Natural Heritage database (described more fully below) for the project site and vicinity. This information can be used to narrow the countywide list provided by USFWS, to better represent the species that could occur in the vicinity of a proposed project. A project biologist can also revisit Federal Register listing decisions to determine the historical and current range for various species and to evaluate whether these ranges coincide with the project area. In Western Washington, if a species list is needed to address a different size area (the project area or a city, for example), the action agency may choose to generate its own list to send to the Services for concurrence.

NOAA Fisheries species lists relevant for Washington state salmonids can be obtained online at <<http://www.nwr.noaa.gov/ESA-Salmon-Listings/Index.cfm>>. Information on additional listed species under the jurisdiction of NOAA can also be obtained online at <<http://www.nwr.noaa.gov/Species-Lists.cfm>>.

The project biologist can generate a site-specific NOAA Fisheries species list by using the NOAA species lists, coupled with information from WDFW, to compile a more specific list of species occurring in the vicinity of a proposed project. The site-specific list generated by the project biologist can be verified with a NOAA Fisheries biologist to ensure the list's accuracy and applicability to the proposed project site.

The BA must be started within 90 days of receiving the species list and must be completed within 180 days of receiving the species list, and must be completed prior to the initiation of construction or contracts. Because the status of species and habitat can change, species lists must be updated every 6 months. Potential impacts on these species should be evaluated in a BA.

The ESA requires all listed species potentially affected by a project to be addressed in the BA written for a project, including any listed species inadvertently omitted from the species list. USFWS and NOAA Fisheries species lists may not always be exhaustive due to constant changes in the local presence of species and because the lists may be generated on a countywide or statewide scale. As a result, these lists may include species that might not occur in the project area, or they may omit species that are, in fact, present in the project vicinity. For these reasons, it is recommended that project biologists supplement federal species lists with information from other state and local agencies and biologists.

### *State Database Requests*

The following agencies manage databases for priority animal species and habitats as well as for sensitive plant species and habitats:

- WDFW—Priority Habitats and Species Program database (PHS database) for information on ESA-listed fish and wildlife species, state priority species, and any habitat associated with these species occurring in the vicinity of the project (data can be requested at <<http://wdfw.wa.gov/conservation/phs/list/>>).
  - Marbled murrelet and spotted owl information must be requested specifically from the PHS database, in addition to a general request.
  - All specific site information is sensitive and confidential and generally should not be included in public documents or the final BA.

- For batched or programmatic BAs that cover a large geographic area, species information can be included in the BA. However, all sensitive information must be shown at a coarse scale. WDFW outlines standards and criteria for exhibiting species information.
- WDNR—Natural Heritage Program database for information on locations of sensitive plant species and rare plant communities occurring in the vicinity of the project (data can be requested at [http://www.dnr.wa.gov/ResearchScience/Topics/NaturalHeritage/Pages/amp\\_nh.aspx](http://www.dnr.wa.gov/ResearchScience/Topics/NaturalHeritage/Pages/amp_nh.aspx)).
- All specific site information is sensitive and confidential and should not be included in public documents or the final BA.

See PART 3, CHAPTER 18, INFORMATION REQUEST CONTACTS AND LETTER SAMPLES, for more information.

#### *Personal Communication with Local Experts*

Personal communication with local experts is highly recommended to acquire additional information on species occurrence and environmental setting conditions in the watershed or project area. Citations for these communications should include the date and the names and available contact information for the local biologists interviewed by the project biologist. Citations should be provided throughout the document as necessary and included in the reference section of the BA. A range of potential resources is available:

- Local tribal biologists
- WDFW area habitat biologists
- WDNR biologists
- Watershed council members
- Researchers from local universities or academic institutions

A list of WDFW regional habitat program managers is provided in CHAPTER 18, INFORMATION REQUEST CONTACTS AND LETTER SAMPLES.

#### **2.2.2.2 Project Related Information Gathering**

When gathering information related specifically to the proposed action, the project biologist must complete two steps:

- Develop an understanding of the proposed action, which involves breaking down the proposed action into its various elements
- Conduct a site visit

*Develop an Understanding of the Proposed Action*

The first step in understanding the proposed action, and also in characterizing the action in the BA, is deconstructing the proposed action into its constituent elements or parts. To do this, the project biologist must review project plans and consult with project engineers, environmental staff and designers to identify all elements of the project.

The project biologist must then develop an understanding of how the various elements fit together and what potential impacts could be generated from them. Again, close coordination with project engineers, environmental permit coordinators and designers will be necessary to ensure the project biologist understands the timing, sequencing, and magnitude of the project elements. The following project conditions should be identified during this phase:

- Project timing and chronology
- Amount and location of clearing and grading
- Amount of new impervious surface
- Proposed treatment of runoff
- Existing impervious surface, treatment, and location of treatment facilities
- Extent of in-water work
- Duration of in-water work
- Amount and type of vegetation to be removed (this may require a site visit)
- Type of equipment to be used
- Locations of material sources that are being developed due solely to the project
- Proposed BMPs
- Extent of the operation of the facility
- Future maintenance requirements

If a project will create new impervious surface, the project biologist can ask project design personnel for the Endangered Species Act Stormwater Design and Erosion Control Checklist (see PART 3, GATHERING INFORMATION FOR A BIOLOGICAL ASSESSMENT) to facilitate gathering all necessary information.

To complete this task and to facilitate the ESA analyses of project impacts, the project biologist should draft a detailed project description for review by the project team. An accurate project description is essential for completing the subsequent ESA analysis and documentation tasks.

### *Conduct a Site Visit*

After developing an understanding of the project elements, the project biologist must conduct a site visit to document existing conditions and to review the proposed action. WSDOT policy requires that the project engineer, project environmental permit coordinator, or other person who is intimately familiar with the project accompany the project biologist on the site visit, particularly for complex projects. During this information-gathering phase, the project biologist should determine and document the following conditions:

- Vegetation
- Topography (immediate and vicinity)
- Stream habitat conditions (water quality, habitat types and features present, site-specific description of habitat characteristics and channel configuration, etc.)
- Riparian conditions (vegetation, large woody debris [LWD], bank condition, watershed conditions, etc.)
- Existing level of disturbance and/or development
- Historical and present land use
- Historical and present species use
- The presence of critical habitat within project area, vicinity, and action area
- The presence of suitable habitat within project area, vicinity, and action area

When in the field, the project biologist should also note the following features:

- What are the locations of significant habitat features (important to species survival or reproductive success) in relation to project? Are they active or inactive? Are they in the line of sight? Will they potentially be affected by construction-related noise? Will they potentially be affected by construction-related sediment impacts?

- Are prey species located in the habitat? Will they be affected by project-related impacts? Will the impacts be great enough to cause an indirect effect on listed species?
- For some species (e.g., murrelet and bull trout), if suitable habitat features or prey species are present in a project action area, the presence of listed species must be assumed.
- Is a survey (according to accepted protocol) necessary to identify the presence of suitable habitat or potential presence of species?

The evaluation of the extent of proposed impacts related to the project action will be based on the project, species, and habitat information gathered in the two steps of the information gathering phase.

## **2.2.3 Early Coordination**

### **2.2.3.1 Pre-BA Meeting**

As part of its efforts to manage or expedite the consultation process WSDOT established a monthly meeting with the Services (NOAA Fisheries and USFWS) where projects can be presented and discussed. These meetings are held in Lacey, and are attended by representatives from USFWS, NOAA Fisheries, WSDOT, and FHWA. For any given project, both project design staff and environmental staff, including the project biologist, should be present. At these meetings, project designs and impact analyses are presented and methods to reduce impacts to listed species are discussed with the Services. Projects should attend a meeting prior to submittal of the project BA to the Services. Large complicated projects may be presented at more than one meeting. The Pre-BA Meeting process is outlined in detail below, based on January 6, 2006 guidance.

Representatives of Washington State Department of Transportation (WSDOT), Federal Highways Administration (FHWA), U.S. Fish and Wildlife Service (USFWS), and National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) attend the Pre-BA meetings. The purpose of the Pre-BA meetings is to allow early involvement of the project proponents and the Services to discuss projects prior to their submittal for Section 7 consultations under the Endangered Species Act (ESA). Project managers, especially those with very complex, multi-year projects may attend very early in the design phase, and then may attend several meetings as the project progresses, while others may only need to attend one time. During the meeting, the project proponent will have an opportunity to explain the project design and the project's limitations, and the Services will have an opportunity to discuss how the project could avoid and minimize its effect on listed species. If practical, project proponents should attend at such a time as there is still flexibility in project design.

The Pre-BA meetings are held monthly at a pre set day and time, which is currently the third Thursday of the month. The meeting day can be changed by the request of any of the participating agencies. These requests should be made as far in advance as possible. When a participating agency representative cannot attend a regularly scheduled meeting, he/she will coordinate with the other three agencies to find a mutually agreeable date, time, and location. Meetings are canceled when there are no projects to present (this can happen during busy summer construction season). Most meetings are about 3 hours long.

Ten days prior to the meeting, a call for agenda items is sent out to all region environmental coordinators, project engineers, Highways and Local Programs personnel, WSDOT headquarter and regional personnel, FHWA, and the Services. Projects that would like to attend the meeting must submit a one page project summary (template will be provided to consultant biologist by WSDOT project manager or regional biologist). They must also provide the project representative's name, email, and phone number to allow for last minute schedule changes if necessary due to inclement weather or emergencies.

In addition to contact information on the presenter, the project summary sheet must include a short description of the project including methods to reduce impacts, a list of the listed species in the action area, the provisional effect determination for each species, and the rational for each effect determination. A vicinity map and aerial photo must also be attached. This document must be brief and the photos must be formatted to insure that the document can be emailed out. The project summary sheets for all attending projects are attached to the meeting agenda that is sent out 3 days before the meeting to allow the Services and FHWA to become familiar with the projects prior to the meeting. FHWA Area Engineers and Team Leaders who have projects from their area being presented will know if they need to attend the meeting or not. The project summary form will provide a record of the presented projects and their ESA issues. Projects which do not provide the project summary sheet in time to go out with the agenda will be scheduled for the next monthly meeting.

The agenda will list the order in which the projects will be presented. Every attempt is made to schedule projects with consideration to distances traveled. Both environmental and engineering staff should be present for the project discussion. Local agency projects must have a representative from both the H&LP Environmental Office and the local agency present during the discussion. Projects that are scheduled later in the agenda are asked to arrive 15 minutes early in case previous projects finish ahead of schedule. Presenters must insure that they can complete their presentation and discuss all their issues in the time allowed. This will require that they focus the project discussion on elements that may affect listed species. Times may range from 30 to 60 minutes depending on the number of projects presenting and the complexity of the project. If a project needs more time, the meeting facilitator will strive to modify the agenda accordingly. If a project decides that they cannot make the scheduled meeting, they are required to call the meeting facilitator to cancel. Attempts will then be made to rearrange the scheduled to avoid 30- to 60-minute gaps in the meeting.

When possible, WSDOT will provide a meeting facilitator to insure that the agenda is adhered to and discussions focus on project-specific issues relevant to the Endangered Species Act. If a

note taker is available they will record for each project the major issues, suggested minimization measures, and commitments made by each agency. If a note taker is not available, each project will be responsible for taking notes and sending them to the meeting facilitator within 48 hours of the meeting. WSDOT's meeting facilitator will then send out one email to all the meeting participants containing all of the meeting notes. This email will serve as a record of the meeting.

The following projects are required to attend a Pre-BA meeting (although all projects with potential impacts to listed species would be allowed to attend):

- All formals, although WSDOT formal consultations with only a Corps nexus should also present their project at the monthly Corps meeting
- All projects that complete in water work in waters where listed fish or killer whales may be present
- All projects that involve in-water pile driving in listed fish bearing waters, including Puget Sound
- All projects which conduct blasting within 1 mile of a point location for northern spotted owl site center, or occupied or suitable marbled murrelet habitat, or within 1/4 mile of a listed fish bearing water
- All projects (that are not conducting blasting) which occur within suitable habitat or within 60 yards of suitable habitat for spotted owls and marbled murrelets during their respective nesting seasons
- All projects, which occur within designated or proposed critical habitat for any plant or animal species and which have the potential to alter the habitat. Projects that do not modify or degrade the critical habitat may not need to attend.

Obviously, not all projects meet one of these criteria so there will be projects that are consulted on that have not attended a Pre-BA meeting.

Projects that should not come to the Pre-BA meeting include:

- Projects that are a no effect for species under the jurisdiction of both NOAA and USFWS
- Projects that fit under the WSDOT Eastern or Western Washington Programmatic Biological Assessment for the USFWS and are a NE for NOAA species
- HLP projects that use the Local Agency Environmental Classification Summary (ECS) form to document their no effect determination

Both H&LP's ECS form and ESA guidance are provided in the Local Programs ECS Guidebook, (available online at: <<http://www.wsdot.wa.gov/NR/rdonlyres/87901EB4-008A-43A0-9DB7-2179E0BC939F/0/ECSGuidebookSecure.pdf>>).

While attendance at Pre-BA meetings is mandatory for all projects that meet the above requirements, Eastern Washington Regions may be able to replace their presentation at a Pre-BA meeting with an acceptable alternative meeting format.

### **2.2.3.2 Site Visits**

H&LP generally relies on field visits with ESA liaisons at the services to meet its early coordination needs for local agency projects. All early coordination site visits for local agency projects are arranged by the H&LP Environmental Engineer.

In the future, a single point person may be established in each region or mode to facilitate the presentation preparation. Each region and mode will be responsible for screening their own projects and insuring that they attend the Pre-BA meeting as required prior to submitting the BA to the Services.

## **2.2.4 Project Impact Analysis Phase**

The project biologist should systematically evaluate the impacts of a proposed project upon species and habitats. The impact analysis phase is divided into two tasks:

1. Environmental Impact Analysis to Determine Project Action Area
2. Analysis of Project Impacts to Species and Critical Habitats

### **2.2.4.1 Environmental Impact Analysis to Determine Project Action Area**

First an analysis of chemical, physical, and biological effects of the project on the environment is completed to determine the geographic extent of the project action area. The following topics are analyzed in this first project impact analysis task:

- Direct effects
- Indirect effects
- Interrelated actions or activities
- Interdependent actions or activities

These topics are discussed more fully in CHAPTER 3, COMPONENTS OF A BIOLOGICAL ASSESSMENT.

Based upon the results of this analysis of all project related effects, the project biologist defines the action area for the proposed project. The action area in turn, defines the scope of the analysis of project impacts to species and critical habitats discussed below.

Impacts of the project can potentially be reduced by incorporating impact minimization measures (MMs), best management practices (BMPs) or performance measures (PMs) into project designs. The project biologist should coordinate with the project team to identify acceptable minimization measures that can be incorporated into project designs and considered in the environmental impact analysis. If new minimization measures are incorporated into the project design, it is essential that the project description is updated to reflect any changes to the project design or proposed construction of project elements.

For projects that require formal consultations due to an adverse effect determination, the BA must address cumulative effects. However, impacts associated with cumulative effects do not influence the effect determination of the project on listed species or critical habitat.

#### ***2.2.4.2 Analysis of Project Impacts to Species and Critical Habitats***

In the second task, the project biologist should systematically evaluate the impacts of a proposed project upon species and habitats occurring within the project action area. One way of thinking about the analysis is to first look at the potential for the species to be exposed to an action, and then to determine what the response of the species could be to that action (i.e., exposure – response analysis).

The exposure part of the analysis should identify whether or not listed species or designated critical habitat will “co-occur” with the effects of the activities under consultation and should characterize the magnitude and spatial and temporal patterns of exposure to species or critical habitats. To determine the potential for exposure of listed species to project-related impacts, the project biologist should consider the characteristics of each anticipated project impact (where, when, length of time, frequency, etc.), environmental setting conditions, and how the timing of or use by a species in the action area could coincide with anticipated impacts resulting in potential exposure. To determine potential for critical habitats to be exposed to project impacts, the project biologist must examine whether project impacts will extend into critical habitat areas and/or will affect any primary constituent element of these habitat areas.

If exposure is likely, the project biologist would complete a response analysis. Response analyses determine how listed resources are likely to respond after being exposed to project-related effects. First identify general responses of species and habitats to anticipated project impacts. Then consider how specific project impacts would be modified by proposed MMs and how in turn they would affect anticipated species’ and habitats’ responses to project impacts. Given the potential for exposure and the influence of BMPs and minimization measures on anticipated project-related effects, the project biologist would characterize the anticipated response of each species or critical habitat attribute associated with each project-related impact.

To make an effect determination that pertains to the project as a whole, these project-element specific impact analyses would be considered in concert for each listed species or designated critical habitat. One of three effect determinations can be made: *No effect*; *May affect*, *Not likely to adversely affect*; and *May affect*, *Likely to adversely affect*.

### **2.2.5 Write BA and Internal Review**

The project biologist documents their analysis and conclusions in one of the following documents: No Effect Letter, Biological Assessment/Biological Evaluation, or Programmatic Biological Assessment Form (WSDOT internal use only). For information on No Effect Letters and Biological Assessments, see PART 3, SUBMITTING A NO EFFECT LETTER OR BIOLOGICAL ASSESSMENT.

Before finishing the draft ESA document, the project biologist should coordinate with the project team, to verify appropriate MMs and BMPs have been included in the document. Prior to submitting the document to WSDOT environmental staff for review, the completed draft document should undergo a rigorous internal review to ensure that the document meets WSDOT standards. Once this internal review has been completed, and appropriate revisions have been made, the revised document should be provided to WSDOT for review.

### **2.2.6 WSDOT BA Review to Ensure FHWA Standards**

Before submitting BAs to the Services (NOAA Fisheries and USFWS) for formal or informal consultation, WSDOT completes an internal sufficiency review of BAs that have been prepared by consultant biologists to ensure that the BAs meet WSDOT and/or FHWA standards. Completed BAs will be submitted by qualified consultants (senior authors) to the appropriate WSDOT regional staff for review. WSDOT reviewers use the BA review checklists to determine whether the documents are complete and compliant with WSDOT policies and guidance. These checklists are available on the WSDOT environmental website at: <http://www.wsdot.wa.gov/Environment/Biology/BA/BAtemplates.htm>. If a document is considered complete, it is forwarded to the Services for consultation. If necessary, the BA will be sent back for correction. BAs can be returned for two reasons: 1) for changes in project description or setting or timing etc., and 2) for deficiencies in meeting WSDOT quality standards and policies, such as incorrectly identifying the action area, incorrectly calculating the extent of project-related noise, or for an overall inconsistent BA.

BAs that have been identified as having policy or quality deficiencies will be referred to WSDOT headquarters, Environmental Services Office, for secondary review. If, after this second review, there is agreement that the BA does not meet WSDOT policies and quality standards, the consultant biologist will be given a warning, notified of deficiencies, and asked to correct the BA. After the submittal of two policy or quality deficient BAs, the biologist will be removed from the roster of qualified on-call Senior and Junior authors and at a minimum must retake the BA qualification seminar and pass the qualification exam again prior to submitting any other BAs.

#### **2.2.6.1 BA Author Qualification Expectations**

To improve the quality of BAs submitted to WSDOT, the agency has implemented a qualification process that includes education, training, testing and experience requirements for

on-call consultants. For detailed information on qualification requirements see the following website: <<http://www.wsdot.wa.gov/Environment/Biology/BA/qualification.htm>>. A detailed description of the responsibilities or expectations for qualified BA authors and for WSDOT to ensure work products meet desired quality criteria is provided in the list below:

#### *Expectations for Qualified BA Authors*

- It is the Qualified BA author's responsibility to stay up to date on the guidance that is posted on the web.
- It is the Qualified BA author's responsibility to be re-qualified every 2 years to maintain their qualification. Since WSDOT has no way of knowing if individuals are still working in the BA field, or working for an on-call consultant, it cannot be WSDOT's responsibility to contact folks to let them know when they need to re-qualify.
- It is the aspiring Qualified BA author's responsibility to provide WSDOT with all the information requested to review their application (proof of degree, resume that follows the required format, and list of BAs completed) within 1 week of the training class they attended. WSDOT has no way of knowing if the individual attending the class is taking it to become qualified or just for their education, and is not interested in being on the qualified authors list.
- It is the Qualified BA author's responsibility to inform WSDOT if they change consulting companies or if they are no longer interested in being on the qualified author list.
- To ensure BAs submitted to WSDOT meet the agency's quality and policy standards, qualified authors will need to implement internal quality assurance and control procedures.
  - Documents should be technically correct and free from cut and paste and grammatical errors.
  - Junior authors may assist the senior author in the preparation of a BA. If a junior author assists the senior author, the senior author is expected to review work and provide quality control.
- It is the Qualified BA Author's responsibility to ensure that all BAs submitted to WSDOT follow the most recent WSDOT guidance and format.
- The Qualified BA Author's name(s) must be included on all BAs and No Effect Letters.

- If a BA is considered deficient by WSDOT, the consultant will be given a warning, notified of deficiencies, and asked to correct the BA.
  - It is expected that the deficiencies identified by WSDOT in this initial review will be addressed in the revised document.
  - Senior authors will be held responsible for document quality and will be removed from the roster if the quality control criteria are not met for two BAs submitted to WSDOT.

*Expectations for WSDOT to ensure BA authors are properly trained*

- It is WSDOT's responsibility to keep the web site up to date.
- It is WSDOT's responsibility to post the dates for the seminar as soon as possible, but at least 2 months prior to the seminar.
- The purpose of the WSDOT Qualified BA authors program is to teach WSDOT's on-call consultant biologists how to write BAs according to WSDOT standards, it is not a certification program. It is also not a general BA writing class.
- It is WSDOT's responsibility to post a list of qualified authors who are on-call consultants with the date of qualification on the web. Lists will be alphabetically by author and by on-call consultant company.
- WSDOT shall provide each individual who attends all days of the qualification seminar a certificate of completion.
- WSDOT shall send each individual who takes the exam a form letter stating their exam score. If the individual works for a consulting company who is on the WSDOT on-call list, the letter will also state whether the individual meets WSDOT qualifications or not.
- WSDOT will teach the BA qualification seminar twice a year as long as there is sufficient need/demand. If the number of individuals interested in attending is low, the seminar will be taught once a year. WSDOT will teach the re-qualification seminar twice a year, as long as there is sufficient need/demand. If the number of individuals interested in attending is low, the seminar will be taught once a year.
- WSDOT will update the qualified on-call BA authors list within 2 weeks of the last exam associated with either the BA qualification seminar or the re-qualification seminar. The list may also be updated by WSDOT as needed to remove authors from the list. It will not be updated each time an

individual changes consulting companies. However, WSDOT will collect requests for changes from authors and will make the changes at their convenience.

- WSDOT will follow the established deficiency BA process when dealing with a deficient BA.
- When authors are removed from the list due to deficiencies, WSDOT shall require that at a minimum they take the Basic BA qualification seminar and exam, and may require additional steps. These may include also attending the BA re-qualification seminar and exam, spending time as a junior author to gain additional experience, and or other steps to insure the individual is sufficiently qualified to write WSDOT documents.

### 2.2.7 Federal Agency Coordination and Consultation Phase

To ensure compliance under Section 7 of the ESA, formal or informal consultation with the Services may be initiated by a federal action agency or by a non-federal designee (for informal consultation only). As is discussed in detail above, the level of impact a project is expected to have on listed species or designated habitats, and therefore the type of effect determination that is anticipated, determines the level of consultation necessary (see Table 2-1). The four types of effect determinations are discussed briefly in PART 1, EFFECTS OF THE ACTION, and more extensively in PART 2, EFFECT DETERMINATION GUIDANCE.

**Table 2-1. Type of effect and level of consultation.**

Type of Effect	Abbreviation	Level of Consultation
<b>No effect</b>	NE	Not needed or informal
<b>May affect, not likely to adversely affect</b>	NLTAA	Informal
<b>May affect, likely to adversely affect</b>	LTAA	Formal
<i>If a project will provide beneficial effect(s)...</i>	NLTAA or LTAA	Informal or formal

If a project will have *no effect* (NE) on listed species or designated critical habitats, consultation is not necessary. Concurrence from the Services is not required or normally obtained, but may be requested for project documentation files.

If a project *may affect* listed species or designated critical habitats, consultation with the Services is required, whether these effects are beneficial or adverse. If it is determined that a project *may affect but is not likely to adversely affect* (NLTAA) listed species or designated habitats, informal consultation is initiated. An effect determination of NLTAA assumes that project-related impacts will be insignificant or discountable. WSDOT submits BAs to the Services for informal consultation once they have been approved by WSDOT.

If it is determined that a project may provide a beneficial effect on listed species and designated critical habitats, informal consultation is permitted, but only if there will be no short- or long-term adverse effects. If there will be no short- or long-term adverse effects, the correct effect determination would be *may affect, not likely to adversely affect* accompanied by a detailed description of anticipated beneficial effects of the project. If there will be short-term adverse effects and long-term beneficial effects, for example, a habitat restoration project that requires in-water work while listed fish may be present, formal consultation is required. For projects that will have short- or long-term adverse effects, the appropriate effect determination is *may affect, likely to adversely affect* accompanied by a detailed description of the anticipated beneficial effects of the project.

If it is determined that a project *may affect and is likely to adversely affect* (LTAA) listed species and designated critical habitats, formal consultation is initiated. For formal consultations, the BA is provided to FHWA by WSDOT. The BA is reviewed by the FHWA Area Engineer and Program Delivery Team Leader as needed and any outstanding project issues are resolved with WSDOT. The BA is submitted to the Services for formal consultation by the FHWA Area Engineer.

Once BAs have been submitted to the Services for review, the documents are reviewed by the Services to determine if clarification of information is necessary to complete consultation. This initial review is completed as soon as possible, but less than 30 days after receipt of the biological assessment and request for consultation. For formal consultations, during this initial review, the Services will also determine whether they agree with the effect determination provided by the action agency.

If additional information or clarification is necessary, coordination between the involved agencies will occur. This may entail meetings, field reviews, or posing and responding to questions in person, via letter, or email. If additional information is requested, WSDOT attempts to return the additional information to the Services within 2 weeks of receiving the request. Project biologists may be tasked with providing this additional information and should be aware of this 2-week timeframe. Responses to information requests for informal consultations will be completed by or coordinated with project biologists by the WSDOT project manager or the WSDOT regional, modal (Washington State Ferries, or WSDOT Rail Office), or Highways and Local Programs biologist. Information requests for formal consultations will be completed by or coordinated with the project biologist by the FHWA Area Engineer and/or Program Delivery Team Leader.

The Services will provide WSDOT and FHWA project staff with their draft incidental take statements, terms and conditions, and reasonable and prudent measures for review. FHWA and WSDOT will prepare a collective response to these draft documents and analyses within 2 weeks of receiving them from the Services (or within a mutually agreed upon timeframe). Once these conditions have been mutually agreed upon and any disputes resolved, the Services' consultation documentation can be completed.

For informal consultation, a letter of concurrence or a letter of non-concurrence is issued to conclude consultation. For formal consultation, issuance of a biological opinion concludes consultation.

### **2.2.8 Project Implementation Phase**

During project implementation, any impact minimization measures included in the BA must be followed.

In some cases, during the time period between receiving concurrence from the Services and completion of the project, a change in conditions may require reanalysis and may result in stopping construction. For example, there may be a change in the status of a species or critical habitat, resulting in a higher level of protection (e.g., a species undergoes an emergency listing). Or there may be a change in scope or design of the proposed project after construction has begun. Changes of this nature may require construction to be stopped while potential project impacts are reassessed and the consultation process is reinitiated.

## **2.3 Highways and Local Programs Process**

Highways and Local Programs is a Division within WSDOT that distributes Federal Highways Administration funding to local agencies for transportation-related projects. The use of FHWA funding provides a federal nexus trigger that subjects the local agency project to the same requirements outlined above. However, the WSDOT HLP process is slightly different, in that the local agency typically develops the project BA (either in-house or using a consultant). HLP coordinates with the Environmental Services prior to submitting the BAs to the Services.

Local agencies and their consultant should follow the guidance outlined within this manual and the Environmental Classification Summary Guidebook. BAs should be developed consistent with FHWA standards and in a manner that addresses the sections and issues outlined in this training document, to the extent that they are applicable.

Under the National Environmental Policy Act (NEPA), coordination with NOAA Fisheries and the U.S. Fish and Wildlife Service must occur prior to FHWA approval of the project.