ESA CONSULTATION INITIATION TEMPLATE

Project Name Biological Assessment

Action Agency

Date

I. Background / History

This section should include a summary of the information on which the biological assessment is based, detailing how the agency action [applicant action] affects the species and critical habitat (Sec 7 (b)(3)(A)).

A. Project History

i. Documentation of Relevant Correspondence The following types of records should be included as appropriate: letters, memoranda, public notices, summaries of meetings and telephone conversations, applicable emails, etc.

ii. Supplemental Information, General Background, Purpose of Project The BA should include a summary of submitted items such as EIS's, spill plans, monitoring plans, etc. Supporting documents should specifically include any rare or difficult to obtain documents.

B. Federal Action History (Discussion of Past Consultations Relevant to the Proposed Project)

This section should include a summary of any informal consultation, prior formal consultations of the action, documentation of the date consultation was initiated, a chronology of subsequent requests for additional data, extensions, and other applicable past or current actions. Conclusions reached in earlier informal and formal consultations on the proposed action also may be relevant. This section may include early consultation efforts with the Services and submittal of species list requests to the federal Services. This provides readers of the BA with evidence that the required documents have been requested and received by the project biologist or action agency.

II. Description of the Action and Action Area

A. Discussion of Federal Action and Legal Authority / Agency Discretion The Act requires action agencies to consult or confer with the Services when there is discretionary Federal involvement or control over the action, whether apparent (issuance of a new Federal permit), or less direct (State operation of a program that retains Federal oversight, such as the National Pollution Discharge Elimination System Program). If there is an applicant for a permit or license related to the Federal action, the applicant may be involved in the consultation process). Formal consultation becomes necessary when: (1) the action agency requests consultation after determining the proposed action may affect listed species or critical habitat [however, if the Service concurs in writing that the proposed action is not likely to adversely affect any listed species or critical habitat (i.e., the effects are completely beneficial, insignificant, or discountable), then formal consultation is not required]; or (2) the Services, through informal consultation, do not concur with the action agency's finding that the proposed action is not likely to adversely affect the listed species or critical habitat.

An action agency shall confer with the Services if the action is likely to jeopardize the continued existence of a proposed species or result in the destruction or adverse modification of proposed critical habitat. The conference process helps determine the likely effect of the proposed action and any alternatives to avoid jeopardy to a proposed species or destruction or adverse modification of proposed critical habitat.

When two or more Federal agencies are involved in an activity affecting listed species or critical habitat, one agency is designated as the lead (50 CFR §402.07), often based on which agency has the principal responsibility for the project (e.g., a dam is maintained to provide a pool for generating electricity - a Federal Energy Regulatory Commission (FERC) responsibility, but the capacity behind the dam also provides flood storage - a Corps responsibility. In this case, FERC has lead for the consultation, as the dam would probably not be there except for the power generation need). Although one agency has the lead, the other still has to provide data for effects analyses and development of reasonable and prudent alternatives and measures if its activities may affect listed species or critical habitat.

B. Description of the Project Purpose and Objectives

The project purpose and need statement should provide a clear statement of purpose for the proposed project, as well as a brief description of proposed actions in relation to the needs discussed. If the project is related to an ongoing series of projects or actions, provide a brief history of the project. This discussion is optional; however, it can provide reviewers with useful insight into the larger picture or context in which the project is situated.

C. Project Descriptions; Activities to be Authorized, Funded, or Carried Out by the Federal Action Agency

The project description section should provide the reader with a clear picture of the proposed action and all its elements, including specific construction techniques. It is important to discuss in detail the methods, materials, and timing of the proposed project elements.

i. Description of Project Activities (construction, O&M, harvest) Describe the type and scope of action proposed and provide a chronology of when activities will occur. Provide detailed information about project components specifically pertinent to the species. Cite any past consultations. If the project is presently being evaluated under NEPA and there is no preferred alternative for the project, each alternative must have a separate BA. ii. Operational Characteristics of the Proposed Project This section should describe relevant operational characteristics of the proposed action (if any). The purpose of this section is to ensure the analysis of potential effects of ongoing operations and maintenance of the Federal Action being proposed.

iii. Description of Proposed Conservation Measures (specific impact avoidance or reduction measures proposed [BMPs])

Describing the proposed action also includes any conservation measures proposed as part of the action. When used in the context of the ESA, "conservation measures" represent actions pledged in the project description that the action agency or the applicant will implement to further the recovery of the species under review. Such measures may be tasks recommended in the species' recovery plan, should be closely related to the action, and should be achievable within the authority of the action agency or applicant.

Descriptions of conservation measures should be clearly worded and describe specific actions that will be adopted or implemented to eliminate or reduce adverse effects of the action in general. Because the Services cannot consult on recommendations, only on project elements or methods that will actually occur, choose language such as will or shall be implemented, instead of may, to the practicable extent possible, frequently, etc.

iv. Description of Mitigation (if any) Required Under Other Federal, State, or Local Permits (e.g. Corps wetland mitigation, WDFW HPA) This section should describe mitigation measures that are required by other regulatory mechanisms as part of the proposed action. The action agency or applicant needs to indicate who the responsible party will be to ensure these measures are implemented including funding sources.

v. Discussion of Underlying Action / Broader Context / 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.

Definition: <u>Interdependent actions</u>: Actions having no independent utility apart from the proposed action [50 CFR §402-02]. Interdependent actions are typically "because of" the proposed action.

Definition: <u>Interrelated actions</u>: Actions that are part of a larger action and depend on the larger action for their justification [50 CFR §402-02]. Interrelated actions are typically "associated with" the proposed action.

D. Discussion of Known Ongoing and Previous Projects in the Action Area, if Available

Include information about previous actions and/or ongoing actions in the action area. The information in this subsection is important for establishing the environmental baseline.

E. '**Project Area' and ' Action Area' Defined** (explain rational [i.e. extent of potential effects resulting from the project])

Determining the project and action area relates only to the action proposed by the action agency. The action area should be determined based on consideration of all direct and indirect effects of the proposed agency action [50 CFR 402.02 and 402.14(h)(2)]. This section should include the rational used to determine the action area (e.g. the furthest potential reach of the mechanisms that may lead to impacts on listed species).

Definition: Project Area: All areas where project activities will occur.

Definition: <u>Action Area</u>: All areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action. [50 CFR §402-02]

Definition: <u>Direct Effects</u>: Direct or immediate effects of the project on the species or its habitat. Direct effects include those resulting from interdependent or interrelated actions.

Definition: <u>Indirect Effects</u>: Those effects that are caused by or will result from the proposed action and are later in time, but still reasonably certain to occur [50 CFR §402-02].

i. Description of Project Footprint and all Areas Potentially Affected Locate the project area as precisely as possible. If the action is stocking a small stock tank, the descriptor should include at least quarter section and preferably quarter/quarter section. For scattered project sites, such as in fish stocking, a location should be given for each site.

ii. HUC, Watershed, Township, Range, Section Include the USGS Hydrological Unit Code (HUC), the Section, Township, Range, and Latitude and Longitude of the proposed action.

iii. Quantification (square footage or acres) of Area Potentially Affected Include acres, square miles, or other relevant measurements of the area included as part of the project area and action area.

F. Maps of Project Area and Action Area

Depict on the location map the species and habitat occurrences. Maps should depict, preferably in large scale, the exact locations of project elements. The maps should include section, township, and range, or latitude and longitude. Topographic maps are preferred, with the action area depicted on them. In addition, include the county and state, and the distance (miles) and direction to the nearest town(s).

III. Status of Species and Critical Habitat

This section can rely extensively on cross-referencing existing documents if appropriate. This section presents the biological or ecological information relevant to completing the biological assessment. Appropriate information on the species' life history, its habitat and distribution, and other data on factors necessary to its survival should be included to provide background for analyses in later sections. When designated critical habitat is affected, a companion analysis should be done for that habitat. This analysis documents the effects of all past human and natural activities or events that have led to the current status of the species.

A. Species Lists from the Services (NOAA Fisheries and USFWS) The project biologist should begin researching the species that may potentially occur in the vicinity of the proposed project by requesting species lists from USFWS and NOAA Fisheries.

The project proponent must request species lists from USFWS in writing. The species list request should include a brief project description, location information (TRS), as well as a vicinity map. USFWS will respond to species requests within 30 days of their receipt of the request. The list received from USFWS will include all listed, proposed, and candidate species and critical habitats that may occur in the vicinity of the project. Some jurisdictions obtain species lists that cover their entire jurisdictional area (county, city, etc.). These listings should be updated every six months thereafter, or in the event of a status change of one of the species.

NOAA Fisheries species lists relevant for Washington State (northwest region species list) can be accessed on-line at http://www.nwr.noaa.gov/esalist.htm.

WDFW has a database for information on fish and wildlife species and locations of sensitive plant species and WDNR has a database containing information on sensitive plant species and rare plant communities. Personal communication with local experts is recommended to acquire additional information on species occurrence and environmental baseline conditions in the watershed or project area.

i. Identification of Listed Species and ESU/DPS Each listed species, relevant ESU/DPS, current legal status, and listing history should be briefly identified in this section.

ii. Identification of Designated Critical Habitat

For critical habitat, the discussion should include the extent of designated critical habitat, the primary constituent elements identified in the final rule, and any activities that have been identified as having the potential for altering the primary constituent elements.

B. Description of Species (biology and distribution, generally available from Status Reviews)

Relevant life history variables include, but are not limited to: longevity; age distribution; age to maturity; reproductive strategy (for example, the number of times mature individuals reproduce in a lifetime, or whether mature individuals reproduce sexually or asexually); recruitment; seasonal distribution patterns; biogeography; food habits; niche; life cycle; hosts and symbionts; predators and competitors; and disease factors. The size of a population and its natural variance over time are important characteristics affecting the species ´ response to disturbance factors. For many species, there is only cursory natural history or status survey information available.

i. Biological Requirements (cross reference if appropriate) The listed species' biological requirements may be described in a number of different ways. For example, they can be expressed in terms of population viability using such variables as a ratio of recruits to spawners, a survival rate for a given life stage (or set of life stages), a positive population trend, or a threshold population size. Biological requirements may also be described as the habitat conditions necessary to ensure the species' continued existence (i.e. functional habitats) and these can be expressed in terms of physical, chemical, and biological parameters. The manner in which these requirements are described varies according to the nature of the action under consultation and its likely effects on the species. Given the current state of the science, usually the best that can be done is to determine the effects an action has on a given habitat component and, since there is a direct relationship between habitat condition and population viability, extrapolate to the impacts on the species as a whole. Thus, by examining the effects a given action has on the habitat portion of the species' biological requirements, one has a gauge of how the action will affect the population variables that constitute the rest of a species' biological requirements and, ultimately, how the action will affect the species' current and future health. (Habitat Approach)

ii. Factors of Decline (cross reference if appropriate)(This was the same guidance as the next section, Historical Pressures on the Species.)a. Historical Pressures on the Species

Historical pressures or reasons for listing: The reasons for listing a species or designating critical habitat are important considerations. For example, a species listed because of commercial exploitation may be less sensitive to habitat loss than a species listed because of habitat loss.

b. Current Pressures on the Species (Natural [e.g. drought, fires] and Anthropogenic [e.g. development])

Current pressures or new threats: Often, factors not considered when a species was first listed can threaten its continued existence, and must be considered when establishing the environmental baseline. For example, the zebra mussel, an exotic species threatening native mussel fauna throughout its range, wasn't considered when most native mussels were listed.

c. Limiting Factors for Recovery of the Species within the ESU/DPS and Within the Action Area

Include any available information on the limiting factors for the recovery of listed species being evaluated. This information is important to relate to the effects of the proposed action in the effects analysis section. For example, further degrading a limiting factor (e.g. spawning habitat) may have a greater impact on a listed species than the removal of a small number of trees in a heavily forested area.

iii. Local Empirical Information (if available)

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.

a. Current Local Population Information (e.g. abundance and distribution by life history stage for watershed/subwatershed and action area

Include as much information as possible on the status of the local populations being evaluated. Relate this information with the populations for the entire ESU/ DPS in question.

When affected species and populations have been identified, NOAA Fisheries considers the relative status of the listed species, as well as the status of populations in the action area. This may include parameters of abundance, distribution, and trends in both. The final rule listing the species or designating its critical habitat is a good example of this type of information. Species' status reviews and factors of decline reports may also provide relevant information for this section.

b. Ongoing Monitoring Programs (if any)

Include any information about ongoing monitoring efforts with respect to the local population. This can include monitoring results or can be tied into conservation measures as a mechanism by which to evaluate success or failure of these measures.

iv. Population Trend of the Species. Decline or Recovery? Range-wide trend: Many listed species are declining throughout their range, therefore the overall population trend of a species has implications for new proposals that could result in additional effects on the species. The trends of the remaining populations of listed species form the basis for evaluating the effects of the proposed action on that species.

C. Critical Habitat Designation for each ESU/DPS (from Federal Register notice)

i. Geographical Extent of Designated Critical Habitat

This section should include the extent of designated critical habitat.

ii. Essential Elements of Designated Critical Habitat (e.g. cover or shelter; sites for breeding, reproduction, and rearing; etc.)

This section should include the primary constituent elements identified in the final rule and any activities that have been identified as having the potential for altering the primary constituent elements.

IV. Environmental Baseline

This section is 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. The environmental baseline is a "snapshot" of a species' health at a specified point in time. It does not include the effects of the action under review in the consultation.

The baseline includes State, tribal, local, and private actions already affecting the species or that will occur contemporaneously with the consultation in progress. Unrelated Federal actions affecting the same species or critical habitat that have completed formal or informal consultation are also part of the environmental baseline, as are Federal and other actions within the action area that may benefit listed species or critical habitat.

The environmental baseline should paint a picture of the habitat for listed or proposed species in the action area and amount of degradation that has occurred to date. Describe the present condition of the habitat elements essential for the listed or proposed species. If the action area includes designated or proposed critical habitat for the listed species, describe the critical habitat and level of degradation.

A. Description of the Action Area and Project Area (Refer to Section II.E.) This discussion can refer to the action and project area defined in Section II. The purpose of the discussion in this section is to define the geographical area for which the environmental baseline is being established.

B. Description of the Environmental Baseline (existing environmental conditions at the time of the proposed action)

This section should include a description of the factors affecting the environment of the species or critical habitat in the action area. One approach is described in the "Habitat Approach" document developed by NOAA Fisheries. The Habitat Approach builds on the "Matrix of Pathways and Indicators" (Matrix Paper). Both NOAA Fisheries and USFWS have developed matrices for assessing and documenting environmental baseline conditions in the action area. Currently these matrices focus on forested watersheds, however, additional matrices are currently under development for a variety of habitats.

i. Include Impacts of Previous Action on Species and Habitat (any completed actions, Section 7, Section 10, Biological Opinions) The environmental baseline includes impacts that resulted from previous actions.

ii. Baseline Conditions Justification (i.e. scientifically supported statements about baseline conditions)

Statements about baseline conditions should be supported by data or scientific rationale. If the matrix is used (i.e. each pathway and indicator is rated as "properly functioning", "at risk", or "not properly functioning"), justification for each rating assigned needs to be provided. This is especially important if pathways or indicators have been modified to more appropriately reflect the action area.

a. Inventories and Surveys for Site-Specific Habitat Types and Quantities in the Action Area (if available)

The environmental baseline information that is presented in the BA needs to be supported by as much specific data as is reasonably available. This would include information from habitat inventories and surveys completed in the action area or project area and what methods were used.

> b. Discussion of the Relationship Between Habitat in the Action Area and the Biological Requirements of the Species

The discussion of environmental baseline conditions should focus on factors that are part of the biological requirements of the species being addressed. However, more distant linkages to the biological requirements of the species being reviewed should not be omitted. For example, biological requirements of prey species may be important to include as well, especially in situations where prey resources may be a limiting factor.

c. Use of Properly Functioning Conditions (PFC) and the Matrix of Pathways and Indicators (MPI) approach, if appropriate The environmental baseline can be established using the Matrix of Pathways and Indicators, which provides a framework for rating these pathways and indicators and

"properly functioning", "at risk", or "not properly functioning". The premise behind this approach is that maintaining "properly functioning conditions" is important to minimize potential impacts to listed species.

iii. Map of Project Area at Appropriate Scale to Show Vegetation Types and Important Biological Features (species habitat, wetlands, unique plant assemblages, etc.)

It is useful to include a map or figures that indicate relevant biological features in relationship to the proposed action (project are and action area).

iv. Photographs Keyed to Locations Labeled on Map Photographs should be included whenever possible to assist in describing the environmental baseline conditions. This would include key features of the environmental baseline within the project and action areas.

C. Detailed Description of Habitat Features that may be Affected by the Proposed Action

Special attention should be focused on the features of the environmental baseline that have the potential to be affected by the proposed action.

V. Effects 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, disturbance intensity, and disturbance severity. Sufficient description of the proposed action should be included so that the subsequent analysis of effects and the scope of the opinion are clear.

A. Direct Effects (on each species and designated critical habitat); Discuss as appropriate: temporal and spatial limits of effects; species tolerances; severity of effect; mortality and other forms of "take" (i.e. harm, harass, capture, etc.); habitat loss.

Discuss the direct or immediate effects of the project on the species or its habitat (e.g. driving an off-road vehicle through the nesting habitat of an endangered mouse). Direct effects resulting from the agency action include the effects of interrelated actions and interdependent actions. Direct effects include all immediate impacts (adverse and beneficial) from project-related actions. According to ESA rules and regulations, direct effects occur at or very close to the time of the action itself. Examples could include construction noise disturbance, loss of habitat, or sedimentation that results from construction activity.

The discussion should include information on the temporal and spatial limits of the effects, species tolerances, severity of effect, mortality and other forms of take, and expected habitat loss as a result of the proposed action. Detailed guidance on each of these topics can be found in the Section 7 Consultation Handbook.

Future Federal actions that are not a direct effect of the action under consideration (and not included in the environmental baseline or treated as indirect effects) should not be considered as part of the biological assessment.

i. Use of Logical Framework for Analysis (e.g. use of MPI or other appropriate framework. Example pathways include: water quality; habitat

access; habitat elements; channel conditions/dynamics; flow and hydrology; watershed conditions)

The effects analysis must use a logical framework for the effects analysis. For example the "Habitat Approach" and the "Matrix of Pathways and Indicators (MPI)" also know as the "Matrix Paper" establish a logical framework for determining the effects of a proposed action.

ii. Provide Explanation of How Conservation Measures Would Eliminate or Reduce the Adverse Effects of the Proposed Action
Discuss any measures included in the proposed action that serve to avoid or minimize potential effects to listed species. Typically these measures include avoidance or preservation measures of some kind, for example, timing restrictions or buffers around sensitive habitat types and habitat features that are important to sensitive species. Best Management Practices (BMPs) are methods, facilities, built elements, and techniques implemented or installed during project construction to reduce short- and long-term project-related impacts.

B. Indirect Effects (same criteria as V.A. Direct Effects)

Indirect effects area caused by or result from the proposed action, are later in time, and are reasonably certain to occur, e.g., predators may follow ORV tracks into piping plover nesting habitat and destroy nests; the people moving into the housing unit bring cats that prey on the mice left in the adjacent habitat. Indirect effects may occur outside of the area directly affected by the action. Indirect effects may include other Federal actions that have not undergone section 7 consultation, but will result from the action under consideration.

C. Effects from Interdependent and Interrelated Actions

Interdependent and interrelated actions need to be evaluated for potential direct and indirect effects. Effects of the action under consultation are analyzed together with the effects of other activities that are interrelated to, or interdependent with that action. An interrelated activity is an activity that is part of the proposed action and depends on the proposed action for its justification or "associated with" the proposed action. An interdependent activity is an activity that has no independent utility apart from the action under consultation or "because of" the proposed action. The analysis of whether other activities are interrelated to, or interdependent with, the proposed action under consultation should be conducted by applying a "but for" test. The biologist should ask whether another activity in question would occur "but for" the proposed action under consultation. If the answer is "no," that the activity in question would not occur but for the proposed action, then the activity is interrelated or interdependent and should be analyzed with the effects of the action. If the answer is "yes," then the activity is not interdependent or interrelated and would not be analyzed with the effects of the action under consultation.

D. Effects from Ongoing Project Activities (e.g. continued Operations and Maintenance)

This section should identify the potential effects of ongoing project activities such as operation and maintenance. This discussion should typically be included as part of the indirect effects discussion or as part of interdependent and interrelated actions.

E. Description of How the Environmental Baseline Would be Affected (can be integrated with V. A-D)

This section should include a description of how effects from the proposed action would alter the environmental baseline (described in Section IV). A logical framework, such as the "Habitat Approach" and the "Matrix of Pathways and Indicators" should be used. Effects from the proposed action should be assessed for each of the pathways and indicators. Ratings such as maintain, restore, or degrade should be used to indicate effects on the environmental baseline.

F. If Critical Habitat is Designated, Discuss Effects of the Action on Essential Elements of Critical Habitat (e.g. cover or shelter; sites for breeding, reproduction, and rearing; etc.) as discussed in Section III.C.ii.

An effects determination must be made for designated critical habitat. Effects on designated critical habitat can be associated with the discussion of effects on the species if appropriate. However, a separate effects determination must be made for each species and any designated critical habitat (see Section V.H.).

G. Use of Best Scientific and Commercially Available Data

The Act requires the action agency to provide the best scientific and commercial data available concerning the impact of the proposed project on listed species or designated critical habitat. If relevant data are known to be available to the agency or will be available as the result of ongoing on imminent studies, the Services should request those data and any other analyses required by the regulations, or suggest that consultation be postponed until those data or analyses are available. Where significant data gaps exist there are two options: 1) if the action agency concurs, extend the due date of the biological opinion until sufficient information is developed for a more complete analysis; or 2) develop the biological opinion with the available information giving the benefit of the doubt to the species.

Giving the benefit of doubt to the species is often called the precautionary principle. If information is not available or is not provided to the Services the precautionary principle will be applied. To avoid delays and maximize the ability of the Services to complete consultation, the action agency or BA preparer should include as much up to date information as possible when analyzing the potential effects to listed species.

H. Effects Determination for Listed Species and Designated Critical Habitat (No Effect, May Affect, Not Likely to Adversely Affect [NLAA], May Affect, Likely to Adversely Affect [LAA])

An effect determination should be made for each listed species and designated critical habitat. The following determinations are valid:

<u>No Effect</u> (NE)- meaning literally no effect whatsoever to the listed species or designated critical habitat.

<u>May Affect, Not Likely to Adversely Affect</u> (NLAA)- effects to the listed species or designated critical habitat are insignificant and/or discountable. A determination of NLAA would be made for those activities that have only a beneficial effect with no short-or long-term adverse impacts.

<u>Likely to Adversely Affect</u> (LAA)- effects will result in a short -or long-term incidental take of the listed species or designated critical habitat.

For proposed species, the finding is either Jeopardy or No Jeopardy.

It is important to justify why the effects determination was reached.

If the effects determination is NLAA, indicate which (if any) minimization/conservation measures are essential to support that effects determination. For example, timing restrictions are incorporated to reduce the chance that certain species are present in the action area during construction. Without timing restrictions, potential effects from the proposed action may rise to the level of LAA.

I. Summary. Provide a quantification of the 'effects analysis' section (include assumptions, areas affected; should be qualitative, quantitative, and include a time frame).

This section should provide a summary of the Effects of the Action section including any assumptions used to reach the determinations. The summary should succinctly quantify the area affected and include statements about the timeframe of effects identified (i.e. short-term versus long-term). When appropriate, quantitative or qualitative descriptions should be used to support the effects determinations made.

J. 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.

VI. Cumulative Effects (for Formal Consultation only; LAA determinations)

Detail all non-Federal actions reasonably certain to occur in the action area in the foreseeable future. Include state, local, private, and tribal actions (e.g. residential developments, watershed enhancement, etc.)

Section 7 regulations require the Federal action agency to provide an analysis of cumulative effects, along with other information, when requesting initiation of formal consultation.

Cumulative effects include effects of future State, tribal, local, and private actions, not involving a Federal action, which are reasonably certain to occur within the action area under consideration.

i. Do Not Use NEPA Cumulative Effects

One of the first places to seek cumulative effects information is in documents prepared for the NEPA analyses for the action. The broader NEPA discussion of cumulative effects should be narrowed to accurately address the Act's narrower cumulative effects definition.

- ii. Include Information from:
 - a. Planning Documents
 - b. Land-use Agencies
 - c. Transportation Plans
 - d. Economic Trend Information

VII. Conclusions

Provide a recap of what has been examined in the BA. A summary of the project and effects determination.

VIII. References

A. Citations and Appropriate Current Literature

B. Index/Copies of Pertinent Documents (e.g. permits, NEPA documents, key literature if not readily available, etc.)

IX. Essential Fish Habitat

Essential Fish Habitat (EFH) is broadly defined by the Act (now called the Magnuson-Stevens Act or the Sustainable Fisheries Act) to include "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity". This language is interpreted or described in the 1997 Interim Final Rule [62 Fed. Reg. 66551, Section 600.10 Definitions] -- Waters include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include historic areas if appropriate; substrate includes sediment, hard bottom, structures underlying the waters, and associated biological communities; necessary means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and "spawning, breeding, feeding, or growth to maturity" covers a species' full life cycle.

Additional guidance for EFH analyses can be found at the NOAA Fisheries web site under the Sustainable Fisheries Division.

A. Description of the Proposed Action (may refer to BA project description)

B. Addresses EFH for Appropriate Fisheries Management Plans (FMP),

C. Effects of the Proposed Action

i. Effects on EFH (groundfish, coastal pelagic, and salmon EFH should be discussed separately)

ii. Effects on Managed Species (unless effects to an individual species are unique, it is not necessary to discuss adverse effects on a species-by species basis)

iii. Effects on Associated Species, Including Prey Species

iv. Cumulative Effects

D. Proposed Conservation Measures

- E. Conclusions by EFH (taking into account proposed conservation measures)
- F. Appropriate References (see Section VIII above)