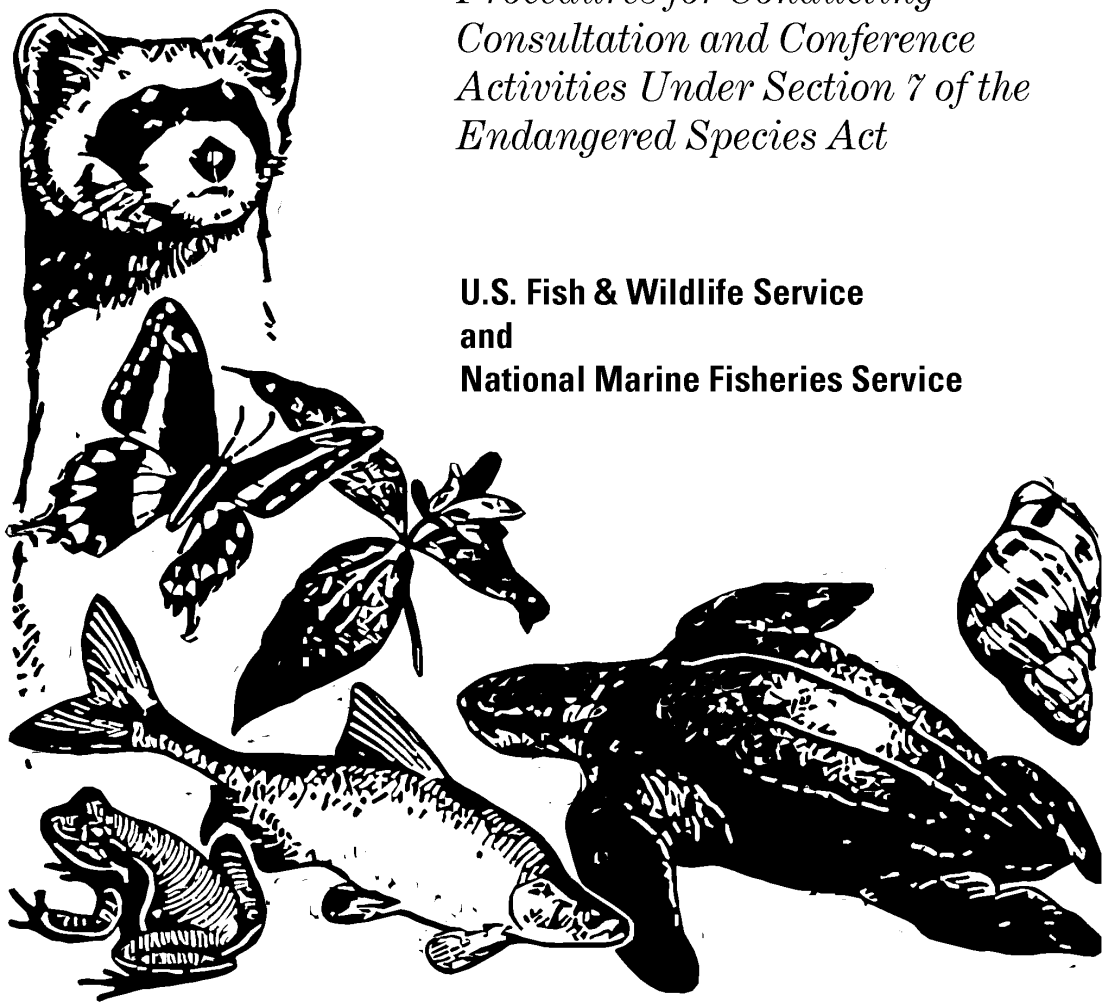
November 2026
The annotations and comments added to this document by Section 7 Training, LLC, do not represent legal advice or the official views of the U.S. Fish and Wildlife Service or the National Marine Fisheries Service. The final word on policy interpretation and practice remains with experts and officials at those agencies.
For accuracy - always check original source documents.

The comments below are accurate as of November 2026. They include recent changes related to the regulatory definition of harm and the March 30, 2026 decision on the regulations from the United States District Court Northern District of California. If in doubt about a particular issue check with your local Service representative or resources at https://section7training.com/

Consultation Handbook

Procedures for Conducting Consultation and Conference Activities Under Section 7 of the Endangered Species Act



U.S. Fish & Wildlife Service
and
National Marine Fisheries Service

March 1998

Final

1998 Consultation Handbook Errata – November 2026 from Section 7 Training, LLC

The 1998 handbook represents the current policy/guidance for completing consultation under section 7 of the ESA. The original handbook contained eight appendices (A-H). This document only includes Appendix E which was described as “U.S. Fish and Wildlife Service Intra-Service Consultation Handbook”

There are several electronic versions of the 1998 Handbook that have circulated on-line and are found on various websites. Not all versions have accurate page numbering when compared to their table of contents. This copy is paginated correctly.

Shortly after hard copies of the 1998 handbook were shipped to field offices, an unattributed errata sheet dated “9/25/98” and titled “Consultation Handbook -- What we didn’t catch…” was circulated. I have included the remarks from that errata sheet in this document.

In addition, during the decades of use, additional typographical errors, template language errors, and misquoted or paraphrased definitions and phrases have been discovered. And, since its release 28 years ago, there have been court opinions, guidance revisions, and regulatory revisions that have occurred and changed some areas of practice.

Recognizing all that, I have taken the original document and annotated those areas that are wrong or where I know that practice or interpretation has changed. This should not be considered a comprehensive review. Just because items may not be noted in this annotation, does not mean additional oversights are not be present.

An internal, revised Handbook has existed in draft form since late 2020, but I'm not aware of a specific time table for release to the public for review. I'm doubtful it will be finalized.

Doug Laye - Chief Instructor, Section 7 Training, LLC.

FOREWORD

It gives us great pleasure to introduce the final Section 7 Handbook. It is the culmination of much hard work by dedicated U.S. Fish and Wildlife Service and National Marine Fisheries Service employees. The Handbook provides internal guidance and establishes national policy for conducting consultation and conferences pursuant to section 7 of the Endangered Species Act of 1973, as amended. The purpose of the Handbook is to promote efficiency and nationwide consistency within and between the Services. The Handbook addresses the major consultation processes, including informal, formal, emergency, and special consultations, and conferences.

Through the section 7 consultation program, the Services strive to meet the consultation needs of all Federal Agencies. The Services work with their Federal partners to emphasize the identification and informal resolution of potential species conflicts in the early stages of project planning. They also provide information about listed, proposed, and candidate species and critical habitats to Federal agencies planning projects, and those applying for Federal permits and licenses. The Services work with Federal agencies on any action that is federally funded, authorized, or carried out that may affect a listed species and designated critical habitats. The Services advise the Agencies and applicants on how to avoid adversely impacting these species and habitats, and, where appropriate, the Services provide incidental take statements that allow take of threatened or endangered species that is incidental to an otherwise legal activity.

The Handbook will ensure consistent implementation of consultation procedures and development of associated documents by those biologists responsible for carrying out section 7 activities and provide the Services guidance necessary to assist other Federal agencies in meeting their responsibilities under section 7 of the Act. Although primarily targeted toward employees of the Services, other groups participating in the consultation process, including other Federal agencies, State, local, and tribal governments, private individuals, consultants, and industry groups should find the Handbook helpful in explaining section 7 processes and providing examples of various types of consultations.

We would like to take this opportunity to express our heartfelt thanks for the hard work and dedication of all those who have made the development of this Handbook possible. We especially want to thank those entities that have become conservation partners with our Agencies through this process. This document will be an important tool in threatened and endangered species conservation for our Nation.

Jamie Rappaport Clark

Rolland A. Schmitten

Director
U.S. Fish and Wildlife Service

Assistant Administrator for Fisheries
National Marine Fisheries Service

ENDANGERED SPECIES ACT CONSULTATION HANDBOOK

PROCEDURES FOR CONDUCTING

SECTION 7

CONSULTATIONS AND CONFERENCES

U.S. FISH AND WILDLIFE SERVICE
NATIONAL MARINE FISHERIES SERVICE

March 1998
Final

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Unfortunately many terms in this glossary are not entirely accurate when compared to the actual regulatory definitions. In some cases these are harmless errors, but the practitioner should strive to use the exact definition when representing it as the legal definition. Also many definitions have changed and words have been added to the practice of consultation in the 28 years since the handbook was published.

At section7training.com on the library page, there is a much more complete and up to date compilation of terms used in section 7. I highly recommend downloading it to your electronic devices.

Glossary of Terms used in Section 7 Consultations

Act - the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 *et seq.*

Action - all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies in the United States or upon the high seas. Examples include, but are not limited to: (a) actions intended to conserve listed species or their habitat; (b) the promulgation of regulations;(c) the granting of licenses, contracts, leases, easements, rights-of-way, permits, or grants-in-aid; or (d) actions directly or indirectly causing modifications to the land, water, or air. [50 CFR §402.02]

Action area - 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]

Affect/effect - to affect (a verb) is to bring about a change ("The proposed action is likely to adversely affect piping plovers nesting on the shoreline"). The effect (usually a noun) is the result ("The proposed highway is likely to have the following effects on the Florida scrub jay"). **"Affect"** appears throughout section 7 regulations and documents in the phrases "may affect" and "likely to adversely affect." **"Effect"** appears throughout section 7 regulations and documents in the phrases "adverse effects," "beneficial effects," "effects of the action," and "no effect." [Proper grammatical usage]

Anticipated/allowable/authorized - in incidental take statements, the Services determine the amount or extent of incidental take "anticipated" (expected) due to the proposed action or an action modified by reasonable and prudent alternatives. When writing incidental take statements, use only the phrase "anticipated" rather than "allowable" or "authorized," as the Services do not allow or authorize (formally permit) incidental take under section 7. [Clarification of usage]

Applicant - any person (an individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the Federal Government, of any State, municipality, or political subdivision of a State, or of any foreign government; any State, municipality, or political subdivision of a State; or any other entity subject to the jurisdiction of the United States) [ESA §3(12)] who requires formal approval or authorization from a Federal agency as a prerequisite to conducting the action. [50 CFR §402.02]

Appreciably diminish the value - to considerably reduce the capability of designated or proposed critical habitat to satisfy requirements essential to both the survival and recovery of a listed species. [Clarification of usage]

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Best available scientific and commercial data - to assure the quality of the biological, ecological, and other information used in the implementation of the Act, it is the policy of the Services to: (1) evaluate all scientific and other information used to ensure that it is reliable, credible, and represents the best scientific and commercial data available; (2) gather and impartially evaluate biological, ecological, and other information disputing official positions, decisions, and actions proposed or taken by the Services; (3) document their evaluation of comprehensive, technical information regarding the status and habitat requirements for a species throughout its range, whether it supports or does not support a position being proposed as an official agency position; (4) use primary and original sources of information as the basis for recommendations; (5) retain these sources referenced in the official document as part of the administrative record supporting an action; (6) collect, evaluate, and complete all reviews of biological, ecological, and other relevant information within the schedules established by the Act, appropriate regulations, and applicable policies; and (7) require management-level review of documents developed and drafted by Service biologists to verify and assure the quality of the science used to establish official positions, decisions, and actions taken by the Services during their implementation of the Act. [59 FR 34271 (July 1, 1994)]

Biological assessment - information prepared by, or under the direction of, a Federal agency to determine whether a proposed action is likely to: (1) adversely affect listed species or designated critical habitat; (2) jeopardize the continued existence of species that are proposed for listing; or (3) adversely modify proposed critical habitat. Biological assessments must be prepared for "major construction activities." See 50 CFR §402.02. The outcome of this biological assessment determines whether formal consultation or a conference is necessary. [50 CFR §402.02, 50 CFR §402.12]

Biological opinion - document which includes: (1) the opinion of the Fish and Wildlife Service or the National Marine Fisheries Service as to whether or not a Federal action is likely to jeopardize the continued existence of listed species, or result in the destruction or adverse modification of designated critical habitat; (2) a summary of the information on which the opinion is based; and (3) a detailed discussion of the effects of the action on listed species or designated critical habitat. [50 CFR §402.02, 50 CFR §402.14(h)]

Candidate species - plant and animal taxa considered for possible addition to the List of Endangered and Threatened Species. These are taxa for which the Fish and Wildlife Service has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposal to list, but issuance of a proposed rule is currently precluded by higher priority listing actions. [61 FR 7596-7613 (February 28, 1996)]

Conference - a process of early interagency cooperation involving informal or formal discussions between a Federal agency and the Services pursuant to section 7(a)(4) of the Act regarding the likely impact of an action on proposed species or proposed critical habitat. Conferences are: (1) required for proposed Federal actions likely to jeopardize proposed

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species, or destroy or adversely modify proposed critical habitat; (2) designed to help Federal agencies identify and resolve potential conflicts between an action and species conservation early in a project's planning; and (3) designed to develop recommendations to minimize or avoid adverse effects to proposed species or proposed critical habitat. [50 CFR §402.02, 50 CFR §402.10]

Conservation - the terms "conserve," "conserving" and "conservation" mean to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to [the] Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking. [ESA §3(3)]

Conservation measures - are actions to benefit or promote the recovery of listed species that are included by the Federal agency as an integral part of the proposed action. These actions will be taken by the Federal agency or applicant, and serve to minimize or compensate for, project effects on the species under review. These may include actions taken prior to the initiation of consultation, or actions which the Federal agency or applicant have committed to complete in a biological assessment or similar document.

Conservation recommendations - the Services' non-binding suggestions resulting from formal or informal consultation that: (1) identify discretionary measures a Federal agency can take to minimize or avoid the adverse effects of a proposed action on listed or proposed species, or designated or proposed critical habitat; (2) identify studies, monitoring, or research to develop new information on listed or proposed species, or designated or proposed critical habitat; and (3) include suggestions on how an action agency can assist species conservation as part of their action and in furtherance of their authorities under section 7(a)(1) of the Act. [50 CFR §402.02]

Constituent elements - physical and biological features of designated or proposed critical habitat essential to the conservation of the species, including, but not limited to: (1) space for individual and population growth, and for normal behavior; (2) food, water, air, light, minerals, or other nutritional or physiological requirements; (3) cover or shelter; (4) sites for breeding, reproduction, rearing of offspring, germination, or seed dispersal; and (5) habitats that are protected from disturbance or are representative of the historic geographic and ecological distributions of a species. [ESA §3(5)(A)(i), 50 CFR §424.12(b)]

Critical habitat - for listed species consists of: (1) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of the Act, on which are found those physical or biological features (constituent

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elements) (a) essential to the conservation of the species and (b) which may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of the Act, upon a determination by the Secretary that such areas are essential for the conservation of the species. [ESA §3 (5)(A)] Designated critical habitats are described in 50 CFR §17 and 226.

Cumulative effects - are those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation. [50 CFR §402.02] This definition applies only to section 7 analyses and should not be confused with the broader use of this term in the National Environmental Policy Act or other environmental laws.

Designated non-Federal representative - the person, agency, or organization designated by the Federal agency as its representative to conduct informal consultation or prepare a biological assessment. The non-Federal representative must be designated by giving written notice to the Director. If a permit or license applicant is involved and is not the designated non-Federal representative, then the applicant and the Federal agency must agree on the choice of the designated non-Federal representative. [50 CFR §402.02, 50 CFR §402.08]

Destruction or adverse modification of critical habitat - a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical. [50 CFR §402.02]

Director - the Assistant Administrator for Fisheries for the National Oceanic and Atmospheric Administration; or the Fish and Wildlife Service Regional Director; or their respective authorized representative. [50 CFR §402.02]

Distinct Population Segment - "population," or "distinct population segment," are terms with specific meaning when used for listing, delisting, and reclassification purposes to describe a discrete vertebrate stock that may be added or deleted from the list of endangered and threatened species. The use of the term "distinct population segment" will be consistent with the Services' population policy. [61 FR 4722-4725 (February 7, 1996)]

Early consultation - a preliminary consultation requested by a Federal agency on behalf of a prospective permit or license applicant prior to the filing of an application for a Federal permit or license. [50 CFR §402.11]

Effects of the action - the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with

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that action. These effects are considered along with the environmental baseline and the predicted cumulative effects to determine the overall effects to the species for purposes of preparing a biological opinion on the proposed action. [50 CFR §402.02] The environmental baseline covers past and present impacts of all Federal actions within the action area. This includes the effects of existing Federal projects that have not yet come in for their section 7 consultation.

Endangered species - any species which is in danger of extinction throughout all or a significant portion of its range. [ESA §3(6)]

Environmental baseline - the past and present impacts of all Federal, State, or private actions and other human activities in an action area, the anticipated impacts of all proposed Federal projects in an action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions that are contemporaneous with the consultation in process. [50 CFR §402.02]

ESA - the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 et seq.

FWS - the U.S. Fish and Wildlife Service.

Federal agency - any department, agency, or instrumentality of the United States. [ESA §3(7)]

Fish or wildlife - any member of the animal kingdom, including without limitation any mammal, fish, bird (including any migratory, nonmigratory, or endangered bird for which protection is also afforded by treaty or other international agreement), amphibian, reptile, mollusk, crustacean, arthropod or other invertebrate, and includes any part, product, egg, or offspring thereof, or the dead body or parts thereof. [ESA §3(8)]

Formal consultation - a process between the Services and a Federal agency or applicant that: (1) determines whether a proposed Federal action is likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat; (2) begins with a Federal agency's written request and submittal of a complete initiation package; and (3) concludes with the issuance of a biological opinion and incidental take statement by either of the Services. If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required (except when the Services concur, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat). [50 CFR §402.02, 50 CFR §402.14]

Habitat Conservation Plan - Under section 10(a)(2)(A) of the Act, a planning document that is a mandatory component of an incidental take permit application, also known as a Conservation Plan.

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Incidental take - take of listed fish or wildlife species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by a Federal agency or applicant. [50 CFR §402.02]

Indirect effects - those effects that are caused by or will result from the proposed action and are later in time, but are still reasonably certain to occur. [50 CFR §402.02]

Informal consultation - an optional process that includes all discussions and correspondence between the Services and a Federal agency or designated non-Federal representative, prior to formal consultation, to determine whether a proposed Federal action may affect listed species or critical habitat. This process allows the Federal agency to utilize the Services' expertise to evaluate the agency's assessment of potential effects or to suggest possible modifications to the proposed action which could avoid potentially adverse effects. If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required (except when the Services concur, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat). [50 CFR §402.02, 50 CFR §402.13]

Interdependent actions - actions having no independent utility apart from the proposed action. [50 CFR §402.02]

Interrelated actions - actions that are part of a larger action and depend on the larger action for their justification. [50 CFR §402.02]

Is likely to adversely affect - the appropriate finding in a biological assessment (or conclusion during informal consultation) if any adverse effect to listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not: discountable, insignificant, or beneficial (see definition of "is not likely to adversely affect"). In the event the overall effect of the proposed action is beneficial to the listed species, but is also likely to cause some adverse effects, then the proposed action "is likely to adversely affect" the listed species. If incidental take is anticipated to occur as a result of the proposed action, an "is likely to adversely affect" determination should be made. An "is likely to adversely affect" determination requires the initiation of formal section 7 consultation. [Clarification of usage]

Is likely to jeopardize proposed species/adversely modify proposed critical habitat - the appropriate conclusion when the action agency or the Services identify situations where the proposed action is likely to jeopardize the proposed species or adversely modify the proposed critical habitat. If this conclusion is reached, conference is required. [Clarification of usage]

Is not likely to adversely affect - the appropriate conclusion when effects on listed species are expected to be discountable, insignificant, or completely beneficial. **Beneficial effects**

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are contemporaneous positive effects without any adverse effects to the species. **Insignificant effects** relate to the size of the impact and should never reach the scale where take occurs. **Discountable effects** are those extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur. [Clarification of usage]

Jeopardize the continued existence of - to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species. [50 CFR §402.02]

Letter - refers to all written correspondence, such as letters, memoranda, or electronic mail messages, relating to a formal or informal consultation. [Clarification of usage]

Listed species - any species of fish, wildlife or plant which has been determined to be endangered or threatened under section 4 of the Act. [50 CFR §402.02]

Major construction activity - a construction project (or other undertaking having similar physical effects) which is a major Federal action significantly affecting the quality of the human environment as referred to in the National Environmental Policy Act (NEPA, 42 U.S.C. 4332(2)(C)). [50 CFR §402.02]

May affect - the appropriate conclusion when a proposed action may pose **any** effects on listed species or designated critical habitat. When the Federal agency proposing the action determines that a "may affect" situation exists, then they must either initiate formal consultation or seek written concurrence from the Services that the action "is not likely to adversely affect" [see definition above] listed species. [Clarification of usage]

Minor change rule - when preparing incidental take statements, the Services must specify reasonable and prudent measures and their implementing terms and conditions to minimize the impacts of incidental take that do not alter the basic design, location, scope, duration, or timing of the action, and that involve only minor changes. [50 CFR §402.14(i)(2)]

NMFS - the National Marine Fisheries Service.

No effect - the appropriate conclusion when the action agency determines its proposed action will not affect a listed species or designated critical habitat. [Clarification of usage]

Occupied critical habitat - critical habitat that contains individuals of the species at the time of the project analysis. A species does not have to occupy critical habitat throughout the year for the habitat to be considered occupied (e.g. migratory birds). Subsequent events affecting the species may result in this habitat becoming unoccupied. [Clarification of usage]

Plant - any member of the plant kingdom, including seeds, roots, and other parts thereof. [ESA §3(14)]

Population - "population," or "distinct population segment," are terms with specific meaning when used for listing, delisting, and reclassification purposes to describe a discrete vertebrate stock that may be added or deleted from the list of endangered and threatened species. The term "population" will be confined to those distinct population segments officially listed, or eligible for listing, consistent with section 4(a) of the Act and the Services' population policy. [61 FR 4722-4725 (February 7, 1996)]

Preliminary biological opinion - the opinion issued as a result of early consultation. [50 CFR §402.02]

Programmatic consultation - consultation addressing an agency's multiple actions on a program, regional or other basis. [Clarification of usage]

Proposed critical habitat - habitat proposed in the Federal Register to be designated as critical habitat, or habitat proposed to be added to an existing critical habitat designation, under section 4 of the Act for any listed or proposed species. [50 CFR §402.02]

Proposed species - any species of fish, wildlife or plant that is proposed in the Federal Register to be listed under section 4 of the Act. [50 CFR §402.02]

Reasonable and prudent alternatives - recommended alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purpose of the action, that can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that the Director believes would avoid the likelihood of jeopardizing the continued existence of listed species or the destruction or adverse modification of designated critical habitat. [50 CFR §402.02]

Reasonable and prudent measures - actions the Director believes necessary or appropriate to minimize the impacts, i.e., amount or extent, of incidental take. [50 CFR §402.02]

Recovery - improvement in the status of listed species to the point at which listing is no longer appropriate under the criteria set out in section 4(a)(1) of the Act. [50 CFR §402.02]

Recovery unit - management subsets of the listed species that are created to establish recovery goals or carrying out management actions. To lessen confusion in the context of section 7 and other Endangered Species Act activities, a subset of an animal or plant species that needs to be identified for recovery management purposes will be called a "recovery unit" instead of a "population." [Clarification of usage]

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Section 4 - the section of the Endangered Species Act of 1973, as amended, outlining procedures and criteria for: (1) identifying and listing threatened and endangered species; (2) identifying, designating, and revising critical habitat; (3) developing and revising recovery plans; and (4) monitoring species removed from the list of threatened or endangered species. [ESA §4]

Section 7 - the section of the Endangered Species Act of 1973, as amended, outlining procedures for interagency cooperation to conserve Federally listed species and designated critical habitats. Section 7(a)(1) requires Federal agencies to use their authorities to further the conservation of listed species. Section 7(a)(2) requires Federal agencies to consult with the Services to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Other paragraphs of this section establish the requirement to conduct conferences on proposed species; allow applicants to initiate early consultation; require FWS and NMFS to prepare biological opinions and issue incidental take statements. Section 7 also establishes procedures for seeking exemptions from the requirements of section 7(a)(2) from the Endangered Species Committee. [ESA §7]

Section 7 consultation - the various section 7 processes, including both consultation and conference if proposed species are involved. [50 CFR §402]

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Section 9 - the section of the Endangered Species Act of 1973, as amended, that prohibits the taking of endangered species of fish and wildlife. Additional prohibitions include: (1) import or export of endangered species or products made from endangered species; (2) interstate or foreign commerce in listed species or their products; and (3) possession of unlawfully taken endangered species. [ESA §9]

Section 10 - the section of the Endangered Species Act of 1973, as amended, that provides exceptions to section 9 prohibitions. The exceptions most relevant to section 7 consultations are takings allowed by two kinds of permits issued by the Services: (1) scientific take permits and (2) incidental take permits. The Services can issue permits to take listed species for scientific purposes, or to enhance the propagation or survival of listed species. The Services can also issue permits to take listed species incidental to otherwise legal activity. [ESA §10]

Service(s) - the Fish and Wildlife Service or the National Marine Fisheries Service (or both).

Species - includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature. [ESA §3(16)]

Survival - For determination of jeopardy/adverse modification: the species' persistence as listed or as a recovery unit, beyond the conditions leading to its endangerment, with sufficient

resilience to allow for the potential recovery from endangerment. Said another way, survival is the condition in which a species continues to exist into the future while retaining the potential for recovery. This condition is characterized by a species with a sufficient population, represented by all necessary age classes, genetic heterogeneity, and number of sexually mature individuals producing viable offspring, which exists in an environment providing all requirements for completion of the species' entire life cycle, including reproduction, sustenance, and shelter. [Clarification of usage]

Take - to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct. [ESA §3(19)] **Harm** is further defined by FWS to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. **Harass** is defined by FWS as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. [50 CFR §17.3]

Threatened species - any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. [ESA §3(20)]

Unoccupied critical habitat - critical habitat not occupied (i.e., not permanently or seasonally occupied) by the listed species at the time of the project analysis. The habitat may be suitable, but the species has been extirpated from this portion of its range. Conversely, critical habitat may have been designated in areas unsuitable for the species, but restorable to suitability with proper management, if the area is necessary to either stabilize the population or assure eventual recovery of a listed species. As recovery proceeds, this formerly unoccupied habitat may become occupied.

Some designated, unoccupied habitat may never be occupied by the species, but was designated since it is essential for conserving the species because it maintains factors constituting the species' habitat. For example, critical habitat may be designated for an upstream area maintaining the hydrology of the species' habitat downstream. [Clarification of usage]

Wildlife - See "fish or wildlife".

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EXECUTIVE SUMMARY

Section 7

Section 7 of the Endangered Species Act (Act) [16 U.S.C. 1531 *et seq.*] outlines the procedures for Federal interagency cooperation to conserve Federally listed species and designated critical habitats.

Proactive Conservation Efforts by Federal Agencies

Section 7(a)(1) directs the Secretary (Secretary of the Interior/Secretary of Commerce) to review other programs administered by them and utilize such programs to further the purposes of the Act. It also directs all other Federal agencies to utilize their authorities in furtherance of the purposes of the Act by carrying out programs for the conservation of species listed pursuant to the Act.

This section of the Act makes it clear that all Federal agencies should participate in the conservation and recovery of listed threatened and endangered species. Under this provision, Federal agencies often enter into partnerships and Memoranda of Understanding with the Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS) for implementing and funding conservation agreements, management plans, and recovery plans developed for listed species. Biologists for the Services should encourage the development of these types of partnerships and planning efforts to develop pro-active approaches to listed species management.

Avoiding Adverse Effects of Federal Actions

Section 7(a)(2) states that each Federal agency shall, in consultation with the Secretary, insure that any action they authorize, fund, or carry out is not likely to **jeopardize** the continued existence of a listed species or result in the destruction or **adverse modification** of designated critical habitat. In fulfilling these requirements, each agency must use the best scientific and commercial data available. This section of the Act defines the consultation process, which is further developed in regulations promulgated at 50 CFR §402.

The Handbook

This handbook was primarily developed to aid FWS and NMFS biologists implementing the section 7 consultation process. The purpose of the handbook is to provide information and guidance on the various consultation processes outlined in the regulations. Additionally, the handbook will ensure consistent implementation of consultation procedures by those biologists responsible for carrying out section 7 activities. Chapters of the handbook deal

with major consultation processes, including Informal, Formal, Emergency, and Special Consultations; and Conferences.

Standardized language is provided for incorporation into Biological Opinion documents to achieve consistency and to ensure that all consultation documents are complete from a regulatory standpoint. Background information and example documents are provided in Appendices. Although primarily targeted towards employees of the Services, other groups participating in the consultation process, including other Federal agencies; State, local, and tribal governments; and private individuals, consultants, and industry groups should find the handbook helpful in explaining section 7 processes and providing examples of various types of consultations.

This handbook will be updated periodically as new regulations and policies are developed affecting implementation of the section 7 regulations, or as new consultation or assessment techniques evolve, and as additional examples or graphics become available.

The Washington Offices of the Services have the lead for preparation of the handbook. Regional offices are encouraged to develop example documents appropriate for their geographical area and individual situations, and to coordinate with other Federal and State agencies in distributing these documents.

Consultation Framework

Use of Sound Science

An overriding factor in carrying out consultations should always be the use of the best available scientific and commercial data to make findings regarding the status of a listed species, the effects of a proposed action on the species or critical habitat, and the determination of **jeopardy/no jeopardy** to listed species or destruction or **adverse modification**/**no** destruction or **adverse modification** to designated critical habitats.

The Services have jointly published a policy on Information Standards Under the Endangered Species Act [59 FR 34271 (July 1, 1994)]. This policy calls for review of all scientific and other information used by the Services to prepare biological opinions, incidental take statements, and biological assessments, to ensure that any information used by the Services to implement the Act is reliable, credible, and represents the best scientific and commercial data available.

Flexibility and Innovation

The section 7 process achieves greatest flexibility when coordination between all involved agencies and non-Federal representatives, and the Services, begins early. Often, proposed

actions can be modified so there is no need for formal consultation. The Services should ensure that all information needed to make an informed decision is made available. It is particularly critical when formal consultation begins that all parties are fully involved in providing information and discussing project options. Although it is the responsibility of the Services to make the determination of **jeopardy** or **destruction/adverse modification** in the biological opinion, action agencies and applicants should be fully informed and involved in the development of Reasonable and Prudent Alternatives, Reasonable and Prudent Measures, and Terms and Conditions to minimize the impacts of incidental take. Biologists should be creative in problem solving and look for ways to conserve listed species while still accommodating project goals.

Coordination

The Services have a policy to ensure coordination with State Agencies for gathering information in implementing the consultation program. [59 FR 34274-34275 (July 1, 1994)] The Services have a joint policy on coordination with tribal governments. Secretarial Order #32306 (June 5, 1997) entitled "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" recognizes that the consultation process should include input from affected tribal governments. State and tribal government biologists often have information available that is pertinent to the description of the action area or to the species of interest in the consultation.

Shortening Timeframes

Recently, the Services have been implementing measures to streamline consultation processes. Examples include projects reviewed under the Northwest Forest Plan and nationwide Timber Salvage Program. These procedures have been able to effectively shorten consultation timeframes without giving up any protection for listed species/designated critical habitats or the use and review of the best available information. This has been achieved through enhanced interagency coordination, development of guidelines for implementation of a larger program (i.e. timber salvage) which can tier to an individual project (timber sale), and by providing consultation simultaneously with project analysis under the National Environmental Policy Act (NEPA). Biologists for the Services are encouraged to review examples of these streamlined consultations and to look for ways to incorporate streamlining techniques into other consultation procedures.

CHAPTER 1 - GENERAL INFORMATION

1.1 INTRODUCTION TO SECTION 7 CONSULTATION

Section 7 of the Endangered Species Act (Act) provides some of the most valuable and powerful tools to conserve listed species, assist with species' recovery, and help protect critical habitat. It mandates all Federal agencies to determine how to use their existing authorities to further the purposes of the Act to aid in recovering listed species, and to address existing and potential conservation issues.

A review of the legislative history of the Act and its amendments makes it clear the drafters of the legislation were designing a law with the strength to protect species, while at the same time creating a mechanism encouraging a productive dialogue between project proponents and the agencies charged with implementing the Act.

Section 7(a)(1) directs the Secretary (Secretary of the Interior/Secretary of Commerce) to review other programs administered by them and utilize such programs to further the purposes of the Act. It also directs all other Federal agencies to utilize their authorities in furtherance of the purposes of the Act by carrying out programs for the conservation of species listed pursuant to the Act.

This section of the Act makes it clear that all Federal agencies should participate in the conservation and recovery of threatened and endangered species. Under this provision, Federal agencies often enter into partnerships and Memoranda of Understanding with the Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS) for implementing and funding conservation agreements, management plans, and recovery plans developed for listed species. Biologists for the Services should encourage the development of these types of partnerships and planning efforts to develop pro-active approaches to listed species management, rather than reacting when a conflict occurs.

Section 7(a)(2) states that each Federal agency shall, in consultation with the Secretary, insure that any action they authorize, fund, or carry out is not likely to **jeopardize** the continued existence of a listed species or result in the destruction or **adverse modification** of designated critical habitat. In fulfilling these requirements, each agency is to use the best scientific and commercial data available. This section of the Act sets out the consultation process, which is further implemented by regulation (50 CFR §402).

This handbook was developed to aid Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS) biologists implementing the section 7 consultation process. Throughout the handbook, the term "Services" will be used to generically refer to both agencies together. However, this is not meant to imply that all actions discussed herein are

taken by the Services jointly. If a particular section applies to only one agency, the acronyms FWS or NMFS will be used.

By law, section 7 consultation is a cooperative effort involving affected parties engaged in analyzing effects posed by proposed actions on listed species or critical habitat(s). This handbook demonstrates the latitude available within section 7 to work with applicants and agencies during this analytical process.

The following thoughts are offered as an expression of the philosophy guiding section 7 work.

- The biology comes first. Know the facts; state the case; and provide supporting documentation. Keep in mind the FWS's ecosystem approach to conservation of endangered and threatened species [59 FR 34273-34274 (July 1, 1994)].

- Base the determination of **jeopardy/no jeopardy** on a careful analysis of the best available scientific and commercial data. Never determine the conclusion of a biological opinion before completing the analysis of the best available data.

- Clarity and conciseness are extremely important. They make consultation documents more understandable to everyone. A biological opinion should clearly explain the proposed project, its impacts on the affected species, and the Services' recommendations. It should be written so the general public could trace the path of logic to the biological conclusion and complete enough to withstand the rigors of a legal review.

- Strong interpersonal skills serve section 7 biologists well. Establishing a positive working relationship with action agencies enhances the Services' ability to do the job successfully. Remember, you are trying to assist the agency in meeting their section 7 responsibilities under the Act.

- Present a positive image as a representative of your Service.

- Section 7 consultation is a cooperative process. The Services do not have all the answers. Actively seek the views of the action agency and its designated representatives, and involve them in your opinion preparation, especially in the development of reasonable and prudent alternatives, reasonable and prudent measures, terms and conditions to minimize the impacts of incidental take, and conservation recommendations.

- Use all aspects of section 7, especially opportunities for informal consultation where solutions can be worked out prior to the structured process mandated by formal consultation. Be creative, and make the process work to the species' advantage.

- It is important to be consistent throughout a species' range when implementing section 7. Be flexible but not inconsistent. Study the law, the regulations and this handbook. Know the authorities and be flexible when it is prudent, but always stand firm for maintaining the substantive standards of section 7.

- Take advantage of professional support within and outside the Services. For example, the FWS Division of Engineering can provide valuable technical review of development proposals. Attorneys in the Regional and field offices of the FWS Solicitor/NMFS General Counsel can offer advice on section 7 regulations and the latitude within which to conduct consultation. Similarly, the Services' law enforcement personnel may be able to answer questions about direct or incidental take.

- Strive to solve problems locally.

- An effective section 7 biologist is a good teacher and a good student. Seek every opportunity to teach the section 7 process within and outside the Services in an informative and non-threatening way. Learn all you can about other Services' programs, Federal action agency's mandates and procedures, and State/tribal/private agency's/client's needs and expectations.

1.2 AGENCY RESPONSIBILITIES

(A) Lead Regions for Consultation

Fish and Wildlife Service

When a proposed action takes place in more than one FWS Region, a lead FWS Region is assigned responsibility for the consultation. Generally, the lead FWS Region is the one in which the greatest impact or the largest number of affected species occur. The Regions involved agree on the appropriate lead Region to prepare and sign the biological opinion. If agreement cannot be reached, the matter is referred to the FWS Director.

Coordination between the FWS consultation lead Region and the FWS recovery lead Region becomes necessary when a FWS Region consults on a species for which it does not have recovery lead. The level of coordination is mutually agreed to and the lead FWS recovery Region may release other FWS Regions from responsibility for coordinating on **no jeopardy** or **no adverse modification** opinions. The FWS Regional Director signing the biological

opinion is responsible for its contents, and has final authority to make any **jeopardy** or other finding. However, any changes the lead Region may make in **jeopardy** or **adverse modification** determinations initially made by other Regions must be coordinated before multi-Region opinions are finalized.

Requests for consultation from agencies addressing geographically broad-based or extensive programs are referred to the FWS's Washington Office Division of Endangered Species. This Division coordinates with the Regions to decide whether to recommend formation of a national team or assign the consultation to a lead FWS Region for coordination with other involved Regions. A national team may report to a designated Regional Director or the Assistant Director for Ecological Services (AES). AES submits a recommendation to the FWS Director for consideration. The Director's decision will be communicated to the involved Regions.

National Marine Fisheries Service

Generally, the NMFS Regions are responsible for conducting consultations on activities occurring within their Region. If the activity occurs in more than one Region or the species covered by the consultation occurs in more than one Region, the Regions mutually decide upon a lead Region. If there is no agreement on a lead Region, then the Assistant Administrator for Fisheries (AA) designates a lead Region. The Endangered Species Division in the Office of Protected Resources (F/PR) conducts programmatic consultations and those with a national scope (e.g. EPA's Multisector general permit for stormwater). Currently, all formal biological opinions, with the exception of those conducted by the Southwest and Northwest Regions for anadromous species, are forwarded to the Headquarters Endangered Species Division for review and final clearance. For activities that the Southwest or Northwest Regional Director (RD) considers controversial, the RD must consult with the Director, Office of Protected Resources (Office Director), and advise the AA before the final action is taken.

(B) Signature Authority

Fish and Wildlife Service

The FWS's responsibility for implementing section 7 consultation and conference procedures generally rests with the Regional Directors. The Assistant Director for Ecological Services is the responsible official if the biological opinion or conference opinion is to be signed in the Washington Office. FWS Regional Directors and the Assistant Director for Ecological Services can delegate responsibility and signature authority on non-jeopardy biological opinions and conference opinions to subordinate line officers. For example, FWS Field Office supervisors have been given signature authority on non-jeopardy biological opinions for intra-Service (internal FWS) consultations (see Appendix E for the Intra-Service

Consultation Handbook). However, signatory authority for biological opinions finding **jeopardy** or **adverse modification** has not been delegated below the Regional Director/Assistant Director level.

National Marine Fisheries Service

The NMFS Director, Office of Protected Resources, has signature authority for all formal consultations except where this authority has been delegated to the Regions. In 1995, as a result of an increasing number of consultations concerning listed salmon, the Southwest and Northwest Regional Directors were delegated authority to sign all biological opinions for anadromous species, unless the opinion concerns an activity of the Department of Commerce (e.g., fishery harvests). All opinions concerning a Department of Commerce activity are signed by the Office Director.

The Office Director also signs biological opinions related to issuance of section 10 research permits, section 10 incidental take permits (except for anadromous species) or activities such as issuance of regulations. NMFS Regional Directors have signature authority for most informal consultations. However, the Office Director has signature authority for informal consultations on activities that cross regional boundaries or have national significance.

(C) Intra-Service Section 7 Consultation

Fish and Wildlife Service

Intra-Service consultations and conferences will consider effects of the FWS's actions on listed, proposed and candidate species. Candidate species are treated as if they are proposed for listing for purposes of conducting internal FWS conferencing. Although including candidate species is not required by law, it is Service policy to consider candidate species when making natural resource decisions. Therefore, candidate species will be considered during internal FWS conferencing. FWS units will consult or confer with the appropriate FWS Ecological Services field office on actions they authorize, fund, or carry out that may affect listed, proposed or candidate species or designated or proposed critical habitat. These actions include refuge operations, public use programs, private lands and federal aid activities, as well as promulgating regulations and issuing permits. A Service office requesting formal consultation provides the data required by the regulations at 50 CFR §402.14(c) and is treated as any other action agency (see Appendix E for a copy of the Intra-Service Consultation Handbook). Formal intra-Service consultation should occur on the proposed issuance of any section 10 permit.

National Marine Fisheries Service

NMFS conducts consultations on all activities that it authorizes, funds or permits that may affect listed species. Conferencing is conducted on proposed species. While NMFS does not consult on candidate species, they are considered when making natural resource decisions. Actions that warrant consultation includes fishery management plans, amendments to plans, permits issued under section 10 of the Act and the Marine Mammal Protection Act (MMPA) for research or incidental taking, and regulations issued under the Act, MMPA and Magnuson Fishery Conservation and Management Act. Biological opinions on these activities as well as other Commerce activities are reviewed and signed by the Director, Office of Protected Species.

(D) Information Standards and Sources

Best available scientific and commercial 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 or imminent studies, the Services should request those data and any other analyses required by the regulations at 50 CFR §402.14(c), or suggest that consultation be postponed until those data or analyses are available as outlined in section 4.4(A) of this handbook.

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. These alternatives must be discussed with the action agency and the applicant, if any. Based on this discussion, a decision regarding the preparation of the biological opinion should be made and documented in the administrative record of that opinion. This subsequent analysis may have minor or major consequences (worst case scenario) depending on the significance of the missing data to the effects determination. The action agency also should be advised that if and when additional data become available, reinitiation of consultation may be required.

If the action agency, or the applicant, insists consultation be completed without the data or analyses requested, the biological opinion or informal consultation letter should document that certain analyses or data were not provided and why that information would have been helpful in improving the data base for the consultation. In formal consultation, this statement usually appears in the "effects of the action" section. The Services are then expected to provide the benefit of the doubt to the species concerned with respect to such gaps in the information base (H.R. Conf. Rep. No. 697, 96th Cong., 2nd Sess. 12 (1979)). This

subsequent analysis may have minor or major consequences (worst case scenario) depending on the significance of the missing data to the effects determination. The action agency also should be advised that if and when further data become available, the need for reinitiation of consultation may be triggered.

Section 7 biologists should seek out available information from credible sources such as listing packages, recovery plans, active recovery teams, species experts, State/tribal wildlife and plant experts, universities, peer-reviewed journals and State Heritage programs. Prior consultations on the species also can provide information on baseline and cumulative effects on the species and its habitat, and should provide the species status and environmental baseline data upon which subsequent consultations are based.

An overriding factor in carrying out consultations should always be the use of the best available scientific and commercial data to make findings regarding the status of a listed species, the effects of a proposed action on the species or critical habitat, and the determination of **jeopardy/no jeopardy** to listed species or destruction or **adverse modification**/**no** destruction or **adverse modification** to designated critical habitats.

The Services have jointly published a policy on Information Standards Under the Endangered Species Act [59 FR 34271 (July 1, 1994)] (see copy in Appendix A). This policy calls for review of all scientific and other information used to prepare biological opinions, incidental take statements, and biological assessments, to ensure that any information used by the Services to implement the Act is reliable, credible, and represents the best scientific and commercial data available.

Writing and bibliographic style

- In section 7 consultation documents, keep the first letter of the word "section" lower cased, except when it begins a sentence.

- Write and edit consultation documents according to:

  (1) the Council of Biology Editors, Inc. (CBE) Style Manual, 6th edition, (1994), which outlines prose style for scientific writing;

  (2) the Department of the Interior's rules of plain English as found in:

  (a) "Readable Regulations: Eleven Models" for Department of the Interior bureaus written by The Murawski Group, Washington DC (1995)

(b) "How to Write Regulations and Other Legal Documents in Clear English" by the American Institute for Research, Document Design Center, Washington, DC (1991)

(c) "Plain English, a Better Way to Write Our Rules", memo from FWS Assistant Director for Ecological Services to Assistant Regional Directors (June 12, 1996)

- Letters and memoranda on non-technical issues should be edited according to the conventions established by the Government Printing Office Style Manual.

- Citations included in text should comply with the CBE Style Manual. Bibliographic references should use the following formats:

1. Single author book.

   Tobin, R. 1990. The expendable future: U.S. politics and the protection of biological diversity. Duke University Press; Durham, North Carolina.

2. Multiple author book.

   Pickett, S.T.A. and P.S. White. 1985. The ecology of natural disturbance and patch dynamics. Academic Press, Inc.; New York, New York.

3. Scientific papers (spell out the entire name of the journal).

   Ahlgren, I.F. and C.E. Ahlgren. 1960. Ecological effects of forest fires. Botanical Review 46:304-310.

4. Unpublished reports (biological assessments, status surveys, section 6 reports, etc.). Cite the document as unpublished. Also include the author's name and the group it was prepared for, as well as their location.

   Helms and Associates. 1992. Results of a diving mussel survey conducted at the Pattison Brothers, Inc. and Ag Products Co. facilities near Clayton, Iowa. Unpublished report prepared for Pattison Brothers, Inc.; Clayton, Iowa.

5. Personal communication. Include title, company, office, city and state.

   Campbell, T. 1992. Personal communication. Biologist. Environmental Project Office, Naval Air Weapons Station. China Lake, California.

6. Personal observation. Include title, company, office, city and state.

   Bransfield, R. 1987. Personal observation. Fish and Wildlife Biologist. Ecological Services Ventura Field Office, U.S. Fish and Wildlife Service, Ventura, California.

(E) Early Alerts

Fish and Wildlife Service

The FWS Regional Directors provide the FWS Washington Office with an early alert to inform the Director of both draft and final biological opinions, preliminary biological opinions (early consultation), and conference opinions of regional or national significance likely to result in findings of **jeopardy** or **adverse modification**. The Region submits such alerts as soon as the Services' have completed the necessary analysis to determine if a jeopardy biological opinion or conference opinion is warranted and consultation with the federal agency/applicant has been unsuccessful in avoiding the jeopardy determination. Additionally, Regional Directors are encouraged to advise the Director of potentially controversial consultations before an early alert is required.

Submit the early alert to the Chief, Division of Endangered Species. The Division of Endangered Species will prepare a cover memo and forward the early alert to the Assistant Director for Ecological Services, who will forward it to the Director. Allow 10 days in Washington to be sure the alert has been reviewed by the Director. Regional Directors must first send in an early alert to Washington and obtain approval from the Director before signing any draft and final biological opinions, preliminary biological opinions (early consultation), and conference opinions of regional or national significance likely to result in findings of **jeopardy** or **adverse modification**.

Use the following format:

Exhibit 1-1. Format for an early alert

EARLY ALERT

Prepared for: Director State(s):
Date submitted:

ISSUE: Draft/Final [jeopardy/adverse modification] [opinion/conference] for the [name of the project]

CONSULTING AGENCY/APPLICANT:

DATE CONSULTATION INITIATED:

DATE COMPLETION OF CONSULTATION IS DUE:

DATE OF ANY EXTENSIONS: (explain reason for extension)

PROJECT DESCRIPTION: (provide a brief summary)

EFFECT ON SPECIES/CRITICAL HABITAT: (provide a brief summary of effect on [species/critical habitat])

I. REASONABLE AND PRUDENT ALTERNATIVES: (list)

A . HAVE YOU COORDINATED WITH THE AGENCY/APPLICANT TO DEVELOP THE REASONABLE AND PRUDENT ALTERNATIVES? (yes) (no) **EXPLAIN.**

B. HAVE YOU COORDINATED WITH ALL AFFECTED TRIBAL GOVERNMENTS TO DEVELOP THE REASONABLE AND PRUDENT ALTERNATIVES PER SECRETARIAL ORDER #3206?

(yes) (no) **EXPLAIN.**

C. IF NOT, HAVE THE PROPOSED REASONABLE AND PRUDENT ALTERNATIVES BEEN DISCUSSED WITH THE ACTION AGENCY/APPLICANT? WHAT WAS THEIR REACTION?

D. IS THE AGENCY/APPLICANT WILLING TO INCORPORATE THE REASONABLE AND PRUDENT ALTERNATIVES AND AMEND THEIR PROJECT DESCRIPTION TO AVOID A JEOPARDY/ADVERSE MODIFICATION OPINION? (yes) (no) **EXPLAIN WHY/WHY NOT.**

E. IF THERE ARE NO REASONABLE AND PRUDENT ALTERNATIVES, WHAT IS THE SCHEDULE FOR COORDINATING WITH THE AGENCY/APPLICANT TO DEVELOP THEM? EXPLAIN.

II. REASONABLE AND PRUDENT MEASURES: (list)

A. HAVE YOU COORDINATED WITH THE AGENCY/APPLICANT TO DEVELOP THE REASONABLE AND PRUDENT MEASURES? (yes) (no) **EXPLAIN.**

B. IF NOT, HAVE THE PROPOSED REASONABLE AND PRUDENT MEASURES BEEN DISCUSSED WITH THE ACTION AGENCY/APPLICANT? WHAT WAS THEIR REACTION?

C. IS THE AGENCY/APPLICANT WILLING TO IMPLEMENT THE REASONABLE AND PRUDENT MEASURES TO MINIMIZE THE IMPACTS OF INCIDENTAL TAKE? (yes) (no) **EXPLAIN WHY/WHY NOT.**

D. IF THERE ARE NO REASONABLE AND PRUDENT MEASURES, WHAT IS THE SCHEDULE FOR COORDINATING WITH THE AGENCY/APPLICANT TO DEVELOP THEM? EXPLAIN.

III. CONGRESSIONAL DISTRICTS AFFECTED:
(list the Senators/Representatives and their Congressional district)

IV. EXPECTED REACTION OF AGENCY/APPLICANT/OTHER INTERESTED PARTIES (tribes, States, NGOs):

REGIONAL OFFICE CONTACT: (name, office, phone number)

National Marine Fisheries Service

The NMFS Regions must provide the Chief of the Endangered Species Division and the Director, Office of Protected Resources, advance notice of any biological opinions that may result in a **jeopardy** or **adverse modification** conclusion and any biological opinion that is potentially controversial whether or not it results in a **jeopardy** or **adverse modification** conclusion.

(F) Release of Draft Documents

Providing action agencies or applicants an opportunity to discuss a developing biological opinion, preliminary opinion, or conference may result in productive discussions that may reduce or eliminate adverse effects. If an action agency asks to review a draft opinion or a draft conference report or opinion, the Services should provide a draft. The section 7 regulations do not specify how an action agency should ask for this review. Generally, a telephone request from the equivalent of a field supervisor or higher official, documented in the administrative record, is sufficient.

Applicants can request draft opinion/conference documents through the action agency. When an action agency then requests this document for the applicant, the Services must inform the action agency that, once released to an applicant, the document may no longer be considered an interagency memorandum exempt from the disclosure requirements of the Freedom of Information Act (5 USC §552(b)(5)).

If an action agency or an applicant has comments on a draft opinion or conference document, the action agency must provide those comments to the Services in writing for the record. An applicant may copy the Services with the comments it provides to the action agency. The Services will consider an applicant's comments or concerns when they are officially transmitted by the action agency. [50 CFR §402.14(g)(5)]

(G) Maintaining the Administrative Record

A good administrative record documenting and supporting a consultation and the resulting biological opinion is important, especially if a biological opinion is challenged or questions are raised concerning how or why certain conclusions were reached. At a minimum, administrative records for significant informal consultations, concurrences, conferences, and formal consultations should contain the following types of records as appropriate:

- letters, memoranda, public notices, or other documents requesting the consultation;

- summaries of meetings held, including dates, attendees, purpose, and results or conclusions;

- summaries of field trips or site inspections, including dates, attendees, and photos of the site;
- summaries of personal contacts between the biologist, the Federal agency, State or tribal biologists, applicant, consultant, private citizens or interest groups;
- summaries of telephone conversations pertaining to the consultation, recorded on a standard telephone conversation record form;
- written correspondence pertaining to the consultation, including correspondence from or to a prospective permit or license applicant;
- electronic mail messages addressing meetings, field trips, personal contacts or correspondence referenced above that are pertinent to the decision-making process;
- published material used in developing the consultation except bulky material, which can be referenced; and
- other information used in the consultation process.

An example of the types of records that can be documented in an Administrative Record can be found in Appendix C.

CHAPTER 2 - COORDINATION

2.1 COORDINATION WITH OTHER ENDANGERED SPECIES ACT FUNCTIONS

(A) Listing

Section 7 compliance may become necessary as soon as a species is proposed for listing or critical habitat is proposed for designation. Conferences are required if a proposed action is likely to jeopardize the continued existence of a proposed species, or adversely modify or destroy proposed critical habitat. Conferences generally base analyses of effects on the species status, distribution and threat data included in proposed listing rules and/or constituent elements described in proposed critical habitat rules. Other reliable data, such as published studies, species accounts, and peer-reviewed journal articles are also considered. Conferences conducted during the proposal period provide listing biologists with information to help refine the analysis of threats, and species or habitat data collected during these conferences. The final listing or critical habitat designation packages provide a primary data source for consultations until recovery plans and recovery-related research become available.

(B) Recovery Planning and Implementation

The 1988 amendments to the Act require comprehensive recovery plans that include ***"a description of such site-specific management actions as may be necessary to achieve the plan's goal for the conservation and survival of the species."*** This required segment of recovery plans should at a minimum, include the following:

- numbers and distribution of recovery units;
- basic life history of the species and its relationships to its supporting habitat;
- natural and human-related factors affecting the species or its habitat, including elements of the species' critical habitat (e.g., requirements for cover; nutriment; effects of fire, flooding, and climatic features; symbionts, including pollinators; effects of predators, competitors, and other limiting factors such as the need for isolation from human-related activities or commensals), whose alteration can lead to the species' decreased capability for survival;
- any distinction in species' behavior or required habitat needs if the species has a different core area or need for another life cycle period (breeding, nonbreeding, migrating or over wintering period); and

- tolerance of the species or essential elements of its habitat to human activities (Exhibit 2-1).

Interrelationships exist between management actions outlined in recovery plans and the consultation process. It is important for the section 7 biologist to be familiar with species' recovery plans and to coordinate with the appropriate species recovery coordinator while ensuring any reasonable and prudent alternatives or any reasonable and prudent measures developed through the consultation process are consistent with recovery plan goals. Further, management actions identified in a recovery plan can be used as Terms and Conditions of an incidental take statement as long as they have the effect of minimizing the impact of incidental take from the project, and are limited to minor changes. If recovery plans identify specific habitats as essential for species' survival and recovery, close attention should be given to actions that may affect that habitat. It is generally appropriate to use management actions outlined in recovery plans as Conservation Recommendations.

Exhibit 2-1. Discussion of species' tolerance to disturbance (from the draft management plan for the Pawnee montane skipper

Populations in both the South and North Forks are needed to buffer against a single event or combination of events eliminating the butterfly from one of the areas. Only activities with negligible effects should be allowed without limit, and those with moderate effects should be kept at or below some reasonable upper limit. Activities with major effects should be avoided altogether. Activities of varying impact have been identified as follows:

1. Activities with no effect or slight effect:

   (a) activities on the water or on the water's edge would have negligible effect on the skipper's habitat, including, but are not limited to, fishing, boating, piers, and boat docks; and (b) rights-of-way for power lines if less than 730 m, not treated with herbicides, and if maintained for host and nectar plants.

2. Activities with moderate effects:

   (a) campgrounds not located in the densest subpopulation areas (1-4), not located in areas of major Liatris (principal food supply) density (150+ flowering stems/acre), and without large areas covered with parking lots, lawns, ball fields, or scraped areas. Campsites should be widely spaced and heavy foot traffic should be confined to designated paths; (b) narrow (1 lane with pullouts) paved or improved roads that avoid areas of major Liatris concentrations, road verges and adjacent berms and cuts should be managed to encourage growth of skipper nectar plants, and adjacent "brown-out" herbicided strips should be avoided; and (c) low density housing or commercial development that results in an aggregate of 5 percent or less of the suitable habitat of any subpopulations rendered unsuitable by roads, structures, lawns, plantings, parking lots, or associated activities.

3. Activities with major effects:

   (a) any activity or combination of activities that eliminates more than 5 percent of any subpopulation's habitat areas; (b) any habitat-displacing activity located in an area of Liatris with 150 or more flowering stems/acre; and (c) any activity or development that creates large blocks of unsuitable habitat -- large paved parking lots, wide paved roads with broad graveled shoulders and adjacent herbiciding, wide power line rights-of-way treated with herbicides, subdivisions with large lawns, cultivated plots, or heavily grazed habitat.

(C) Section 10 Coordination

Endangered and threatened species permits - section 10(a)(1)(A)

Section 10 of the Act provides exceptions for activities otherwise prohibited by section 9. Section 10(a)(1)(A) authorizes the Services to issue permits for scientific purposes or to enhance the propagation or survival of listed species. The permitted activity must not operate to the disadvantage of the species and must be consistent with the purposes and policy set forth in section 2 of the Act. Formal intra-Service consultation is required for the issuance of FWS Regional blanket permits. Section 7 consultation (see Appendix E for the FWS intra-Service consultation handbook) must also be conducted prior to issuance of a section 10(a)(1)(A) permit or a subpermit under the Regional blanket permit. Section 10(a)(1)(A) permits are also required:

- when a reasonable and prudent alternative calls for scientific research that will result in take of the species (this includes scientific research carried out by the Services);

- when the agency, applicant or contractor plans to carry out additional research not required by an incidental take statement that would involve direct take (if this is part of the action and direct take is contemplated, a permit is not needed); and

- for species surveys associated with biological assessments (usually developed during informal consultation) that result in take, including harassment.

Habitat conservation planning - section 10(a)(1)(B)

Section 10(a)(1)(B) of the Act allows non-Federal parties planning activities that have no Federal nexus, but which could result in the incidental taking of listed animals, to apply for an incidental take permit. The application must include a habitat conservation plan (HCP) laying out the proposed actions, determining the effects of those actions on affected fish and wildlife species and their habitats (often including proposed or candidate species), and defining measures to minimize and mitigate adverse effects. The Services have developed a handbook for Habitat Conservation Planning and Incidental Take Permit Processing, which should be referenced for further information.

In some HCP planning areas, parties may strive to find a Federal nexus to avoid the HCP process altogether. These parties should be advised of the differences between incidental take capabilities under sections 7 and 10. Although the issuance of an incidental take permit under section 10 must not jeopardize the continued existence of a listed species, section 10 expressly authorizes the Services to minimize and mitigate, to the maximum extent practical, the adverse impacts to the species (supplying some benefit to the species such as land

acquisition or habitat restoration or enhancement to offset unavoidable effects of the action). Mitigation may or may not reduce the actual number of individuals the Services' anticipate to be taken as a result of project implementation. For incidental take considerations under section 7, minimization of the level of take on the individuals affected is required. Also, the incidental take statement in a section 7 biological opinion does not provide a "No Surprises assurances" guarantee. The action agency is responsible for reinitiating consultation should their actions result in exceeding the level of incidental take.

Whenever practical, consideration should be given to programmatic or ecoregion consultation with Federal agencies having major programs in the HCP areas to facilitate overall consultation and recovery actions for the species involved (see section 5.3).

Experimental populations - section 10(j)

Section 10(j) of the Act authorizes listed species to be released as experimental populations outside their currently occupied range, but within probable historic habitat, to further species conservation. Before making a release, the Services determine by rulemaking whether that population is "essential" or "nonessential." An "essential experimental population" is a reintroduced population whose loss would be likely to appreciably reduce the likelihood of the survival of the species in the wild. A "nonessential experimental population" is a reintroduced population whose loss would not be likely to appreciably reduce the likelihood of survival of the species in the wild. For section 7 consultation purposes, section 10(j) requires the following:

- any nonessential experimental population located outside a National Park or National Wildlife Refuge System unit is treated as a proposed species (conference may be conducted);

- any nonessential experimental population located within a National Park System or National Wildlife Refuge System unit is treated as a threatened species (standard consultations are conducted);

- any essential population is treated as a threatened species (standard consultations are conducted, and special rules may allow take);

- critical habitat may be designated for essential experimental populations (standard consultations are conducted), but not for nonessential experimental populations; and

- all populations of the species (including populations designated as experimental) are considered to be a single listed entity when making **jeopardy** determinations or other analyses in a section 7 consultation.

By definition, a "nonessential experimental population" is not essential to the continued existence of the species. Therefore no proposed action impacting a population so designated could lead to a **jeopardy** determination for the entire species.

A listed species that is reintroduced into its historic range without experimental population status receives full protection under the Act.

2.2 COORDINATION WITH THE ACTION AGENCY AND APPLICANT

(A) Formal Consultations and Conferences

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 (see section 2.2(E)).

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) Commitment of Resources during Consultation

> ***"(d) After initiation of consultation required under subsection (a)(2), the Federal agency and the permit or license applicant shall not make any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures which would not violate subsection (a)(2)."***
>
> **Section 7(d) of the Endangered Species Act**

Section 7(d) was added to the Act in 1978 as part of the package that created the exemption process. Congress intended this provision to avoid future Tellico Dam scenarios by forbidding certain irreversible and irretrievable resource commitments during consultation, thus keeping open all opportunities to develop reasonable and prudent alternatives.

Not all irreversible and irretrievable commitments of resources are prohibited. The formulation or implementation of any reasonable and prudent alternative must be foreclosed by the resource commitment to violate section 7(d). Thus, resource commitments may occur as long as the action agency retains sufficient discretion and flexibility to modify its action to allow formulation and implementation of an appropriate reasonable and prudent alternative. Destroying potential alternative habitat within the project area, for example, could violate section 7(d).

This section 7(d) restriction remains in effect from the determination of "may affect" until the action agency advises the Services which reasonable and prudent alternative will be implemented if the biological opinion finds **jeopardy** or **adverse modification** (Figure 2-1). Failure to observe this provision can disqualify the agency or applicant from seeking an exemption under section 7.

The action agency may choose not to implement the Services' reasonable and prudent alternative; instead, the action agency can choose to develop an alternative based on what they perceive as the best available scientific and commercial data. It is the responsibility of the action agency, not the Services, to determine the validity of the action agency's alternative. If the agency's alternative is challenged in court, the standard for review will be whether the decision was arbitrary and capricious under the Administrative Procedures Act. The validity of the action agency's decision will determine whether section 7(a)(2) has been satisfied and whether section 7(d) is applicable. If it is determined that the action agency's decision is not valid, that agency would be taking the risk of noncompliance with the Act (51 FR 19940 (June 3, 1986)).

The Services do not provide an opinion on the question of resource commitments. Under the exemption process, that question is ultimately referred to the Endangered Species Committee for resolution. However, the Services will notify Federal agencies of the section 7(d)

prohibition when formal consultation is initiated. Similarly, under section 7(c), biological assessments must be completed for "major construction activities" before any contracts are entered into or construction is begun.

Figure 2-1. Application of section 7(d): irreversible or irretrievable commitment of resources

Agency requests consultation, either formal or informal

I	"May affect" situation exists; formal consultation is required	section 7(d) prohibition begins
II	If:	
	A. The Services concur with a "not likely to adversely affect" finding	section 7(d) not applicable
	B. The Services issue a **no jeopardy/adverse modification** biological opinion, or the action agency chooses a reasonable and prudent alternative from a **jeopardy/adverse modification** opinion	section 7(d) obligation expires
	C. Action agency chooses to disagree with the Services' **jeopardy/adverse modification** determination, or chooses to implement an alternative that has not been prescribed by the Services; and	
	1. The best available scientific and commercial data support the agency decision	section 7(d) obligation expires
	2. The action agency decision is not justified by available data	section 7(d) applies
III	Reinitiation of consultation is required under 50 CFR §402.16 (Return to step II)	section 7(d) applies

(C) Dealing with Nonresponsive Agencies

Agencies that refuse to consult or confer

When an action agency disagrees or does not respond to the Services' informal suggestions for consultation or conference, the Services should send a letter requesting the agency to initiate such action. The letter notifies the agency of its responsibilities under the Act, and presents a clear case for the Services' determination of "may affect" for listed species or "likely to **jeopardize**" for proposed species. Possible **adverse modification** of designated or proposed critical habitat is treated similarly. If the agency still refuses to consult, the issue should be elevated to the Regional Office of either the FWS or the NMFS, depending upon the species involved. For the FWS, the elevation would be to the appropriate Regional Director. For the NMFS, the elevation would be to either the appropriate Regional Director, or the Director - Office of Protected Resources at the headquarters office.

The Regional Director can pursue the need to consult with the action agency. The Services cannot force an action agency to consult. However, if the proposed action results in take of a listed fish or wildlife species, the matter should be referred to either the FWS Law Enforcement Division and the Office of the Solicitor, or the NMFS Office of Law Enforcement and the Office of General Counsel - depending upon which species are involved. Additionally, if the action agency requests consultation after-the-fact, that consultation cannot eliminate any section 9 liability for take that has occurred already (Appendix D, Solicitor's opinion #SO-5).

Generally, the Services do not provide an opinion or conference report until the agency has identified a "may affect" situation; such an opinion or report could be challenged as incomplete where no consultation (discussion) with the agency took place. However, in some cases the Services and the action agency may have an agreement allowing consultations to be conducted without the agency determining that there is a may affect situation.

Agencies that refuse to reinitiate consultation

When consultation needs to be reinitiated but the action agency neither agrees nor responds, the Services should send a letter clearly outlining the change of circumstances supporting the need for reinitiation. The letter notifies the agency of its responsibilities under the Act, and presents a clear case for why the Services' have determined that one or more of the four general conditions for reinitiating consultation have been triggered (50 CFR 402.16). If the agency still refuses to consult, the issue should be elevated to the Regional Office of either the FWS or the NMFS, depending upon the species involved. For the FWS, the elevation would be to the appropriate Regional Director. For NMFS, the elevation would be to either the appropriate Regional Administrator, or the Director - Office of Protected Resources at the

headquarters office. They can pursue the need to reinitiate consultation with the action agency.

Although the Services' can not require Federal agencies to reinitiate consultation if they choose not to do so, any unauthorized "take" should be referred to either the FWS Law Enforcement Division and the Office of the Solicitor, or the NMFS Office of Law Enforcement and the Office of General Counsel - depending upon which species are involved.

(D) Compliance with Section 7(a)(2)

The action agency determines whether and how to proceed with its proposed action in light of the Services' biological opinion, even though the terms and conditions of incidental take statements are non-discretionary. Nevertheless, the Services' biological opinion is traditionally afforded substantial deference by any reviewing court, and action agencies must give great weight to the Services' biological opinion before deciding on a proposed action. Failure to explain in the administrative record how the agency addressed the Services' biological opinion could expose the action agency to a judicial challenge under both the Act and the Administrative Procedure Act.

No jeopardy and/or no adverse modification finding

The action agency may proceed with the action as proposed, provided no incidental take is anticipated. If incidental take is anticipated, the agency or the applicant must comply with the reasonable and prudent measures and implementing terms and conditions in the Services' incidental take statement to avoid potential liability for any incidental take.

Jeopardy/adverse modification finding

If a **jeopardy** or **adverse modification** determination results from the consultation, the action agency may:

- adopt one of the reasonable and prudent alternatives for eliminating the **jeopardy** or **adverse modification** of critical habitat in the opinion;
- decide not to grant the permit, fund the project, or undertake the action;
- request an exemption from the Endangered Species Committee (see Appendix G);
- reinitiate the consultation by proposing modification of the action or offering reasonable and prudent alternatives not yet considered; or

- choose to take other action if it believes, after a review of the biological opinion and the best available scientific information, such action satisfies section 7(a)(2).

The action agency must notify the Services of its final decision on any proposed action that receives a **jeopardy** or **adverse modification** biological opinion (50 CFR §402.15(b)).

Incidental take statements

Violation of the section 9 taking prohibition results in liability unless the terms and conditions of the incidental take statement are followed. The agency must undertake the required actions to minimize incidental take, or require these actions as conditions of the permit or grant. The agency has a continuing duty to regulate the activity covered by the incidental take permit; otherwise the protective coverage of section 7(o)(2) may lapse.

(E) Role of the Permit or License Applicant

Identification of an applicant

The Services do not determine formally whether or who is an applicant for a Federal agency action, although the regulations and their preamble provide guidance. For purposes of this discussion, the Federal action involves the approval of a permit or license sought by the applicant, together with the activities resulting from such permission. The action agency determines applicant status, including requests arising from prospective applicants in early consultations. The action agency also determines how the applicants are to be involved in the consultation, consistent with provisions of section 7(a)(3), (b) and (c) of the Act and the section 7 regulations.

Users of public resources (e.g. timber companies harvesting on National Forests) are not parties to programmatic section 7 consultations dealing with an agency's overall management operations, including land management planning and other program level consultations. However, users who are party to a discrete action (i.e., where they are already the successful bidder on a timber sale that becomes the subject of later consultation or reinitiation when a new species is listed or new critical habitat is designated) may participate as applicants in the section 7 process.

If an agency supports an "applicant" who does not meet the criteria described above, the Services nonetheless should try to work with that party, although the procedural opportunities afforded to applicants will not apply to that party.

Applicant's role in the consultation process

If the Federal agency identifies an applicant, the Services and the action agency meet their obligations to that party as outlined in 50 CFR§402 through the following:

- the action agency provides the applicant an opportunity to submit information for consideration during the consultation;
- the applicant must be informed by the action agency of the estimated length of any extension of the 180-day timeframe for preparing a biological assessment, along with a written statement of the reasons for the extension;
- the timeframes for concluding formal consultation cannot be extended beyond 60 days without the applicant's concurrence;
- the applicant is entitled to review draft biological opinions obtained through the action agency, and to provide comments through the action agency;
- the Services will discuss the basis of their biological determination with the applicant and seek the applicant's expertise in identifying reasonable and prudent alternatives to the action if likely **jeopardy** or **adverse modification** of critical habitat is determined; and
- the Services provide the applicant with a copy of the final biological opinion.

The Services do not work directly with or take comments directly from the applicant without the knowledge or consent of the action agency [50 CFR 402.14(g)(5)].

(F) Role of the Non-Federal Representative

Non-Federal representatives may be involved in the informal consultation process and may request and receive species lists, prepare the biological assessment, and provide information for the formal consultation. However, the Services require the action agency to designate formally the non-Federal representative in writing. Moreover, the action agency must be informed that the ultimate responsibility for section 7 obligations remains with the action agency.

2.3 COORDINATION BETWEEN FWS AND NMFS

The NMFS and the FWS are individually responsible for consultation on listed species under each of their respective jurisdictions. However, the FWS and NMFS also have joint jurisdiction over some listed species. Consultation on these shared listed species requires a joint effort between the FWS and the NMFS. Use of this joint handbook will help to ensure that FWS and NMFS will approach section 7 consultation in a consistent manner. Increasingly, consultations on listed species administered by FWS overlap with those administered by the NMFS and vice versa. In these instances, the FWS should strive to coordinate informal and formal consultations with their NMFS counterparts and vice versa. Also, when formal consultations may affect species under NMFS jurisdiction, the FWS needs to remind the action agency, through early correspondence and/or as a footnote to the formal consultation package, of the need to consult with NMFS and vice versa.

Coordination between FWS and NMFS is critical to ensure any reasonable and prudent alternatives prescribed by both the Services (e.g., the conservation of sea turtles) are compatible. The terms and conditions of incidental take statements must be compatible so the action agency can implement both opinions without further consultation.

Currently, NMFS listed species that may require joint coordination include several whales, the Hawaiian monk seal, several runs of salmon in the Northwest and California, the shortnose sturgeon, and sea turtles while in the water. Recent joint FWS/NMFS consultations have included actions on the Gulf sturgeon in the Gulf of Mexico, Corps of Engineers dredging impacts to sea turtles in Florida, programmatic consultations on salmon and owls in the Pacific Northwest, and oil exploration in Alaska.

2.4 COORDINATION WITH OTHER FEDERAL AGENCIES

Consultations with other Federal agencies follow 50 CFR §402 unless counterpart regulations (explained in 50 CFR §402.04) are approved for that agency. Although no counterpart regulations have been issued to date, field stations may consider entering into optional procedures that provide better working relationships with other agencies at a local level consistent with 50 CFR §402. Other agencies may wish to consult on all or a subset of their activities on a local or regional programmatic basis.

Examples of specific agency programs and their relationship to section 7 follow:

Bureau of Indian Affairs (BIA): All actions funded, permitted, or undertaken by BIA for the benefit of Indian tribes or other tribal entities will involve BIA when Federal agency decisions or other actions are required. The affected tribe/entity shall be treated as the designated non-Federal representative or applicant, entitled to full participation in the

consultation process, but does not have standing as a Federal agency for consultation purposes.

Office of Hearings and Appeals (OHA): A January 8, 1993, memorandum (Appendix D, #S-1) from the Secretary of the Interior clarified that OHA has no authority to review the merits of the Services' biological opinions. That review is limited to the Federal courts.

Corps of Engineers (Corps), Bureau of Reclamation (Reclamation), Federal Energy Regulatory Commission (FERC): Ongoing operations, relicensing and reauthorizations for water projects that predate the Act are subject to consultation if the agency retains any discretion in continuing project operations. Development of new water or power production projects funded with Federal monies will require section 7 consultation.

Environmental Protection Agency (EPA): Programs delegated to States for operation are subject to consultation pursuant to 50 CFR 402 and supplemental guidance provided in existing MOAs tailored to program-specific needs. The Services are working with EPA to develop a MOA specific to section 7 consultations for programs which have been delegated to the States under the Clean Water Act. Before entering into consultation with the EPA, check on whether the MOA has been signed. Once signed, the MOA will be considered an addendum to this handbook.

Federal Emergency Management Agency (FEMA): All of FEMA's actions are subject to the Act, although the nature of many of their programs may call for greater use of the emergency consultation process. Improving the Services' working relationships with FEMA counterparts can help develop appropriate responses to categories of emergencies before a crisis occurs.

Housing and Urban Development (HUD): Most parties seeking HUD grants have completed project planning before applying for the grant. Knowing early on about developments being considered in a species' range can help with project direction. If HUD monies are likely to be sought, the applicant can be encouraged to use the early consultation process. If there is no Federal nexus, a section 10(a)(1)(B) permit may be appropriate.

Natural Resource Conservation Service (NRCS) (formerly the Soil Conservation Service): implements Federal mandates to maintain and enhance natural resources through local or regional sponsors. These sponsors may be designated as non-Federal representatives by written documentation from NRCS.

2.5 COORDINATION WITH STATE AGENCIES

The term State agency means any State agency, department, board, commission, or other governmental entity that is responsible for the management and conservation of fish, plant, or wildlife resources within a State. (ESA § 3(17))

The Services' policy regarding the role of State agencies in activities under the Act [59 FR 34274-34275 (July 1, 1994)] (see copy in Appendix A), calls for cooperation with States as follows:

As part of the consultation program, it is the policy of the Services to:

- inform State agencies of any Federal agency action that is likely to adversely affect listed or proposed species or designated or proposed critical habitat, and request relevant information from them, including the results of any related studies, in analyzing the effects of the action and cumulative effects on the species and habitat.

- request an information update from State agencies prior to preparing the final biological opinion to ensure that the findings and recommendations are based on the best scientific and commercial data available.

- recommend to Federal agencies that they provide State agencies with copies of the final biological opinion unless the information related to the consultation is protected by national security classification or is confidential business information. Decisions to release such classified or confidential business information shall follow the action agency's procedures. Biological opinions not containing such classified or confidential business information will be provided to the State agencies by the Services, if not provided by the action agency, after 10 working days. The exception to this waiting period allows simultaneous provision of copies when there is a joint Federal-State consultation action.

2.6 COORDINATION WITH TRIBAL GOVERNMENTS

The unique and distinctive political relationship between the United States and Indian tribes is defined by treaties, statutes, executive orders, judicial decisions, and agreements, and differentiates tribes from other entities that deal with, or are affected by, the Federal government. This relationship has given rise to a special Federal trust responsibility, involving the legal responsibilities and obligations of the United States toward Indian tribes and the application of fiduciary standards of due care with respect to Indian lands, tribal trust resources, and the exercise of tribal rights.

Indian lands are not federal public lands or part of the public domain, and are not subject to federal public land laws. They were retained by tribes or were set aside for tribal use pursuant to treaties, statutes, judicial decisions, executive orders or agreements. These lands are managed by Indian tribes in accordance with tribal goals and objectives, within the framework of applicable laws.

On June 28, 1994, the FWS issued its Native American policy entitled "The Native American Policy of the U.S. Fish and Wildlife Service." On March 30, 1995, the Department of Commerce issued its tribal policy entitled "American Indian and Alaska Native Policy of the Department of Commerce." On June 5, 1997, the Departments of Interior and Commerce (Departments) signed joint Secretarial Order #3206 entitled "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" as a further refinement of these Native American policies to foster partnerships with tribal governments in activities under the Act.

Under this Secretarial Order, the Departments recognize the importance of tribal self-governance and the protocols of a government-to-government relationship with Indian tribes. Long-standing Congressional and Administrative policies promote tribal self-government, self-sufficiency, and self-determination, recognizing and endorsing the fundamental rights of tribes to set their own priorities and make decisions affecting their resources and distinctive ways of life. The Departments recognize and respect, and shall consider, the value that tribal traditional knowledge provides to tribal and federal land management decision making and tribal resource management activities.

The Departments recognize that Indian tribes are governmental sovereigns. Inherent in this sovereign authority is the power to make and enforce laws, administer justice, manage and control Indian lands, exercise tribal rights and protect tribal trust resources. The Departments shall be sensitive to the fact that Indian cultures, religions, and spirituality often involve ceremonial and medicinal uses of plants, animals, and specific geographic places.

Because of the unique government-to-government relationship between Indian tribes and the United States, the Departments and affected Indian tribes need to establish and maintain effective working relationships and mutual partnerships to promote the conservation of sensitive species (including candidate, proposed and listed species) and the health of ecosystems upon which they depend. Such relationships should focus on cooperative assistance, consultation, the sharing of information, and the creation of government-to-government partnerships to promote healthy ecosystems.

In facilitating a government-to-government relationship, the Departments may work with intertribal organizations, to the extent such organizations are authorized by their member tribes to carry out resource management responsibilities.

This Secretarial Order clarifies the responsibilities of the component agencies, bureaus and offices of the Departments when actions taken under authority of the Act and associated implementing regulations affect, or may affect, Indian lands, tribal trust resources, or the exercise of American Indian tribal rights. This Order further acknowledges the trust responsibility and treaty obligations of the United States toward Indian tribes and tribal members and its government-to-government relationship in dealing with tribes.

Accordingly, the Departments will carry out their responsibilities under the Act in a manner that harmonizes the Federal trust responsibility to tribes, tribal sovereignty, and statutory missions of the Departments, and that strives to ensure that Indian tribes do not bear a disproportionate burden for the conservation of listed species, so as to avoid or minimize the potential for conflict and confrontation.

Under the Secretarial Order, tribal governments can play a role in the consultation process when agency actions may affect tribal trust resources or tribal rights. The Services shall coordinate with affected Indian tribes in order to fulfill the Services' trust responsibilities, shall encourage meaningful tribal participation in the section 7 consultation process and shall:

- Facilitate the Services' use of the best available scientific and commercial data by soliciting information, traditional knowledge, and comments from, and utilizing the expertise of, affected Indian tribes in addition to data provided by the action agency during the consultation process. The Services shall provide timely notification to affected tribes as soon as the Services are aware that a proposed federal agency action subject to formal consultation may affect tribal rights or tribal trust resources.

- Provide copies of applicable final biological opinions to affected tribes to the maximum extent permissible by law.

- When the Services enter formal consultation on an action proposed by the Bureau of Indian Affairs (BIA), the Services shall consider and treat affected tribes as license or permit applicants entitled to full participation in the consultation process. This shall include, but is not limited to, invitation to meetings between the Services and BIA, opportunities to provide pertinent scientific data and to review data in the administrative record, and to review biological assessments and draft biological opinions. In keeping with the trust responsibility, tribal conservation and management plans for tribal trust resources that govern activities on Indian lands, including for purposes of this paragraph, tribally-owned fee lands, shall serve as the basis for developing any reasonable and prudent alternatives, to the extent practicable.

- When the Services enter into formal consultations with an Interior Department agency other than the BIA, or an agency of the Department of Commerce, on a proposed action which may affect tribal rights or tribal trust resources, the Services shall notify the affected Indian tribe(s) and provide for the participation of the BIA in the consultation process.

- When the Services enter into formal consultations with agencies not in the Departments of the Interior or Commerce, on a proposed action which may affect tribal rights or tribal trust resources, the Services shall notify the affected Indian tribe(s) and encourage the action agency to invite the affected tribe(s) and the BIA to participate in the consultation process.

- In developing reasonable and prudent alternatives, the Services shall give full consideration to all comments and information received from any affected tribe, and shall strive to ensure that any alternative selected does not discriminate against such tribe(s). The Services shall make a written determination describing (i) how the selected alternative is consistent with their trust responsibilities, and (ii) the extent to which tribal conservation and management plans for affected tribal trust resources can be incorporated into any such alternative.

- When FWS or NMFS actions may affect the reserved lands or the exercise of reserved rights of tribal governments, the Services will cooperate with affected tribal governments to encourage and facilitate tribal participation in the consultation process. Where the Services are aware of a proposed Federal agency action that may affect the reserved lands or the exercise of reserved rights under the jurisdiction of tribal governments, the Services will strongly recommend to the Federal action agency that they work with and encourage affected tribal governments to participate in the consultation process.

CHAPTER 3 - INFORMAL CONSULTATION

3.1 THE INFORMAL CONSULTATION PROCESS

Most consultations are conducted informally with the Federal agency or a designated non-Federal representative. Informal consultations:

- o clarify whether and what listed, proposed, and candidate species or designated or proposed critical habitats may be in the action area;
- o determine what effect the action may have on these species or critical habitats;
- o explore ways to modify the action to reduce or remove adverse effects to the species or critical habitats;
- o determine the need to enter into formal consultation for listed species or designated critical habitats, or conference for proposed species or proposed critical habitats; and
- o explore the design or modification of an action to benefit the species.

When used in the context of consultation, the term "informal" suggests an unstructured approach to meeting section 7 requirements. Such consultation includes phone contacts, meetings, conversations, letters, project modifications and concurrences that occur prior to (1) initiation of formal consultation or (2) the Services' concurrence that formal consultation is not necessary. Participation in informal consultation may include (1) the action agency, (2) a designated non-Federal representative, (3) an applicant or permittee, or (4) consultants working on behalf of any of the first three. The informal consultation process may uncover data gaps which may complicate the section 7 analysis. In such situations, additional studies may be necessary to document the species' status in the action area to improve the data base upon which a biological assessment or, if formal consultation is warranted, a biological opinion is developed.

While there is no overall timetable for informal discussions, timeframes are established for some individual elements of informal consultation (Figure 3-1). The biological assessment, including the effects of the action, must be submitted within 180 calendar days of receipt of a species list from the Services. The current accuracy of the species list needs to be verified if it is more than 90 days old and preparation of the biological assessment has yet to begin [50 CFR §402.12(e)]. Dialogue can continue as long as both parties are willing to participate and are actively working to complete the informal consultation. Although not required by

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section 7, many agencies request species lists, or concurrence with submitted species lists, for projects that are not "major construction activities." Although a timeframe for responding to these requests is not mandated by regulation, the Services will respond within 30 calendar days when possible. See Exhibit 3-1 for an example of a species list.

Documentation of the steps in the informal consultation process is essential to its continued utility and success. The administrative file should contain records of phone contacts, including name of the caller, the purpose of the call as it relates to the proposed action or action area, and any advice or recommendations provided by the Services' biologist. A meeting can be easily documented by letter to appropriate parties that summarizes the meeting results, particularly any Services' concerns and recommendations.

Figure 3-1. Informal consultation process

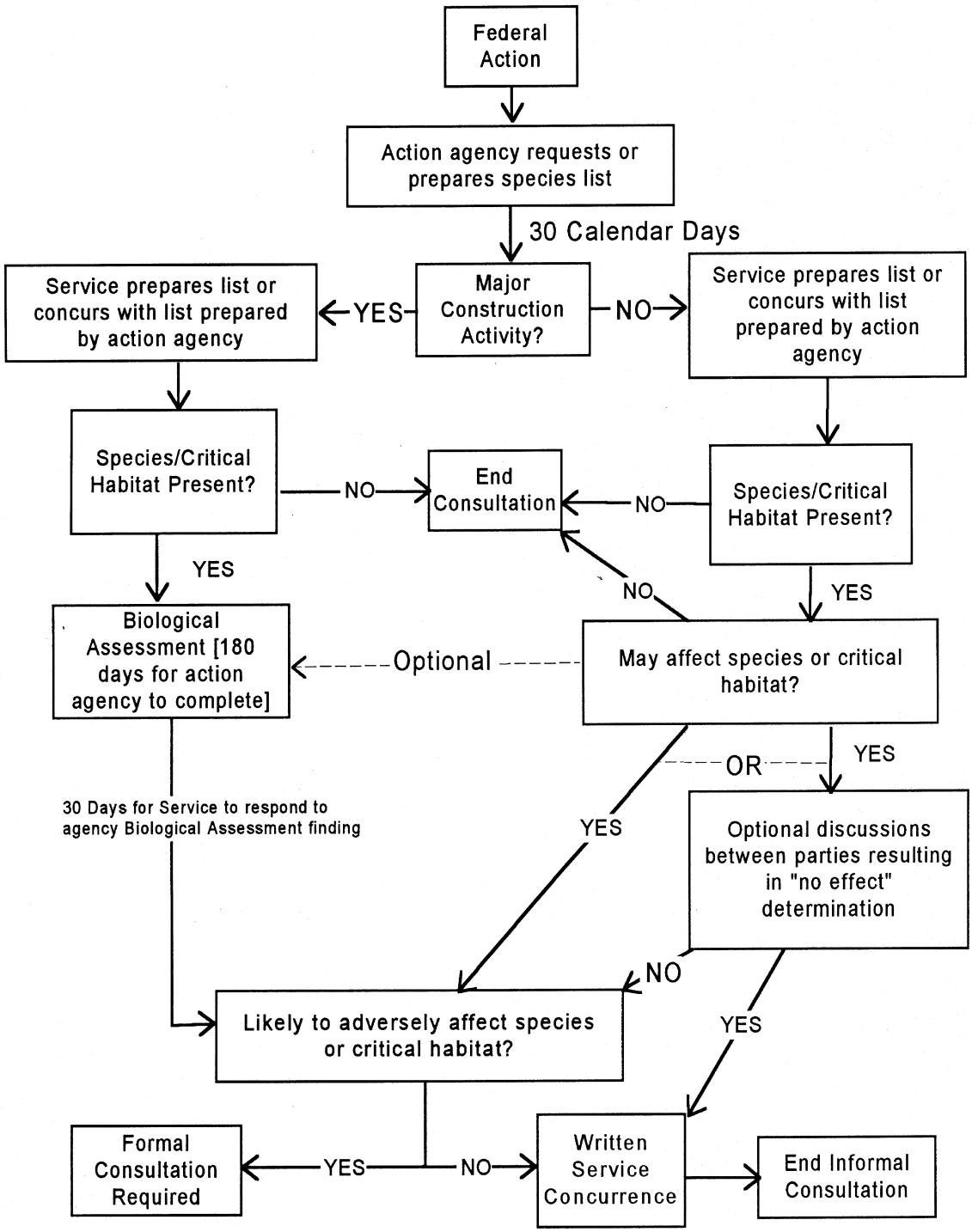


Exhibit 3-1. Example of a species list

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
C/o CCSU, Campus Box 338
6300 Ocean Drive
Corpus Christi, Texas 78412

(date)

Consultation No: x-xx-xx-x-xxx

Dear _____:

This responds to your letter dated _____, regarding the effects of the proposed replacement of sections of pipe on species Federally listed, proposed for Federal listing, and candidate species occurring in Goliad County, Texas. In addition your project was evaluated with respect to wetlands and other important fish and wildlife habitat.

It is our understanding that the proposed project would involve the replacement of five (5) sections of 6" pipe totaling 119 feet. Associated construction activities would be within the existing right-of-way located in the Cabeza Creek Field. This project is intended to maintain efficient operations of United's pipeline system.

Our data indicates that the following species and critical habitat may occur in the project area.

(1) Listed species
Attwater's prairie chicken (Tympanuchus cupido attwateri) - E
bald eagle (Haliaeetus leucocephalus)- E

(2) Proposed species
(give common name, scientific name, and status - PE or PT)

(3) Candidate species
(give common name and scientific name of species)

(4) Designated critical habitat for

(give common name and scientific name of species)

(5) Proposed critical habitat for
(give common name and scientific name of species)

Our data indicate that Federally listed species, proposed species, candidate species, and designated and proposed critical habitat are not likely to be impacted by the proposed project action. With respect to wetlands and other important fish and wildlife habitat, it appears that the proposed action will not significantly impact these resources. If project plans change or portions of the proposed project were not evaluated, it is our recommendation that the changes be submitted for our review. If you require additional information, please contact ____(name)_____ of this office at _____(phone)_____.

Sincerely yours,

Field Supervisor

3.2 IDENTIFICATION, RESOLUTION, AND CONSERVATION

Except in those cases where the need for formal consultation is clear from the start, the Services will encourage all action agencies entering into the consultation process to start with informal consultation rather than formal consultation. This will allow for early consideration of listed species concerns, similar to the early scoping process of NEPA. Many consultations can and should be handled informally. This gives the Services an opportunity to be involved early and to resolve problems as they are identified.

Informal consultation determines the likelihood of adverse effects on a listed species or critical habitat. Informal consultations (1) identify adverse effects and suggest ways to avoid them, (2) resolve project conflicts or differences of opinion between the Services and the action agency or applicant as to the nature and extent of adverse effects, (3) provide the action agency with opportunities for carrying out conservation activities pursuant to section 7(a)(1), and (4) help monitor cumulative effects on a species or ecosystem.

Service biologists must be well informed about species' status, distribution, threats, and recovery objectives to carry out the informal consultation process effectively. All decisions reached during the consultation process must be based on sound science. The logical place to start data gathering is the field station's species files. Other reliable sources are State and tribal fish and wildlife agencies, Federal land management agencies, State Natural Heritage Programs, species experts, cooperative research units, recovery teams, The Nature Conservancy, and private consultants. All may provide or verify information, and should be used as needed.

Conflict resolutions during informal consultation may involve changes in construction scheduling, engineering design, pesticide formulation or application method, location, emission or discharge levels and many other changes. All possible options to eliminate adverse effects should be discussed freely with the action agency, and they should be encouraged to recommend their own options. The Services do not offer "not likely to adversely affect" concurrences unless the project's dimensions are defined clearly at the informal stage. Finally, informal consultation offers action agencies an opportunity to address their conservation responsibilities under section 7(a)(1). Recovery plans often identify tasks benefiting listed species that may be carried out on or near the project site. Examples include habitat protection, modification or improvement; predator control; and survey work.

3.3 TECHNICAL ASSISTANCE

A telephoned or written inquiry about the presence or absence of listed and/or proposed species in a project area usually initiates informal consultation. Service biologists may respond in several ways. If species are not likely to be present, the consultation requirement is met, and the Services may advise the agency, applicant or consultant of this in writing. If historical records

or habitat similarities suggest the species may be in the area, then some survey work may be recommended to make a more precise determination. If the species is definitely in the project area, but the Services determine it will not be adversely affected, the Services may notify the agency of that finding (e.g., bald eagles fly over but do not feed, roost, or nest in the area, and are not expected to be adversely affected).

Technical assistance from the Services may take a variety of forms; it includes the species list provided by the Service, information on listed, proposed, and candidate species, as well as names of contacts having information on other sensitive species or State listed species. The Services may alert State or tribal agencies, or other Services offices of the project. See Exhibit 3-2 for a letter on the need for a survey.

The Services may recommend that the action agency conduct additional studies on species' distribution in the area affected by the action. Normally, Services biologists only request additional survey work, but sometimes monitoring impacts of the action on aspects of the species' life cycle may be agreed upon during informal consultation. Monitoring may be recommended when incidental take is not anticipated but might possibly occur, thus triggering the need for formal consultation. In this situation, the action agency should be notified of the consequences of an unauthorized taking and be encouraged to enter formal consultation if take is anticipated. The action agency has no legal obligation to conduct or pay for these studies, but Service biologists should point out the advantages of doing them during informal consultation, particularly if the data gathered may preclude formal consultation. Also, Service biologists can remind action agencies of their responsibilities under section 7(a)(1) of the Act to aid in conservation of listed species.

While candidate species have no legal protection, Service biologists should notify agencies of candidate species in the action area, and may recommend ways to reduce adverse effects and/or request studies as appropriate. These may be added as conservation recommendations. Legally, the action agency does not have to implement such recommendations. However, candidate species may later be proposed for listing, making conference necessary in the future if proposed actions are likely to jeopardize the continued existence of such species. Service biologists should urge other Federal agencies to address candidate species in their Federal programs. The Services are eager to work with other Federal agencies to conserve candidate species. Addressing candidate species at this stage of consultation provides a focus on the overall health of the local ecosystem and may avert potential future conflicts.

Only technical assistance can be provided to agencies conducting actions outside the United States (e.g., in Canada), but knowledge of such actions should be considered in the "status of the species" analysis if consultations arise on impacts proposed to the species (e.g., whooping crane) in the U.S.

Exhibit 3-2. Example of a need for survey

January 26, 1993

Dear _____ :

This responds to your letter dated December 28, 1992 requesting information on the presence of Federally listed and proposed endangered or threatened species in relation to the proposed Portland, Maine to Canada Natural Gas Pipeline for the Portland Natural Gas Transmission System.

Based on information currently available to us, the Federally listed endangered small whorled pogonia (Isotria medeoloides) is known to occur in several of the towns in southern Maine through which the proposed transmission lines may pass. The small whorled pogonia occurs both in fairly young forests and in maturing stands. Although varying in their composition, the mixed-deciduous or mixed deciduous/coniferous forests in which the small whorled pogonia grows are generally in second or third-growth successional stages. The ages of the older trees forming the canopy at some of the sites has been estimated to be about 75 years old in New Hampshire.

The soil in which the shallowly-rooted small whorled pogonia grows is usually covered with leaf litter. The substrate in which it is rooted may be a variety of different textures, from extremely stony glacial till, to stone-free sandy loams, to sterile duff. The common soil factor at most sites is the highly-acidic, nutrient-poor quality of the soil in which this orchid grows.

The majority of Isotria medeoloides sites generally share several common characteristics. These include only sparse to moderate ground cover in the microhabitat of the orchids (except when among ferns), a relatively open understory canopy, and nearness to logging roads, streams, or other features that create long persisting breaks in the forest canopy. For example, in New Hampshire, the small whorled pogonia has been found growing in and adjacent to recently abandoned, above ground telephone transmission lines.

Inasmuch as distributional information on many rare species is incomplete or imprecise, it is not currently possible to provide a definitive finding relative to small whorled pogonia in the permit area. Therefore, in situations such as this, where an endangered species is known to occur in similar habitats nearby, a qualified botanist should survey the following proposed alignments prior to construction activities: alignment sections with corresponding numbers 11 - 20 (no Figure identified) and Nos. 37 - 39 (Fig. 35). A survey for the small whorled pogonia should be conducted by a botanist familiar with this species and should occur in July or August to ensure best survey conditions.

In addition for the potential of small whorled pogonia populations occurring within the project area, the candidate species, ___(common and scientific name)____ is known to occur at several locations near Portland. While candidate species are not afforded protection under the Endangered Species Act, the U.S. Fish and Wildlife Service encourages their consideration in environmental planning. If unnecessary impacts to candidate species can be avoided, the likelihood that they will require the protection of the Act in the future is reduced. We recommend that the alignment in the vicinity of Portland and Falmouth he surveyed for the ____(common name of candidate species)____.

One portion of the proposed alignment near Willoughby, Vermont (Figure 11) passes within five miles of a nest site of the Federally listed endangered peregrine falcon (Falco peregrinus anatum). However, based on the proposed project's distance from the nest (approximately 5 miles), we do not expect any impacts to occur to the resident peregrine falcons.

No other Federally listed or proposed threatened and endangered species under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area, with the exception of occasional transient endangered bald eagles (Haliaeetus leucocephalus) or peregrine falcons.

For further information about or assistance with surveys for the small whorled pogonia or the ___(common name of candidate species)___, we suggest that you contact the Maine Natural Heritage Program, State House Station 130, Augusta, Maine 04333, 207-289-6800.

Please notify this office with the results of any surveys for the small whorled pogonia or the ___(common name of candidate species)___, so that we may determine whether there may be any impacts to these species. A list of Federally designated endangered and threatened species in Maine, New Hampshire and Vermont is included for your information. Thank you for your cooperation and please contact _____(name)____ of this office at ____(phone)____ for further coordination regarding this project.

Sincerely yours,

Field Supervisor

3.4 BIOLOGICAL ASSESSMENTS

> ***"(c)(1) To facilitate compliance with the requirements of subsection (a)(2) each Federal agency shall . . . request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action. If the Secretary advises, based on the best scientific and commercial data available, that such species may be present, such agency shall conduct a biological assessment for the purpose of identifying any endangered species or threatened species which is likely to be affected by such action. Such assessment shall be completed within 180 days after the date on which initiated (or within such other period as is mutually agreed by the Secretary and such agency, except that if a permit or license applicant is involved, the 180-day period may not be extended unless such agency provides the applicant, before the close of such period, with a written statement setting forth the estimated length of the proposed extension and the reasons therefor) and before any contract for construction is entered into and before construction is begun with respect to such action. Such assessment may be undertaken as part of a Federal agency's compliance with the requirements of section 102 of the National Environmental Policy Act of 1969 (42 U.S.C. 4332).***
> ***(2) Any person who may wish to apply for an exemption under subsection (g) of the section for that action may conduct a biological assessment to identify any endangered species or threatened species which is likely to be affected by such action. Any such biological assessment must, however, be conducted in cooperation with the Secretary and under the supervision of the appropriate Federal agency."***
>
> Section 7(c) of the Endangered Species Act

By regulation, a biological assessment is prepared for "major construction activities" considered to be Federal actions significantly affecting the quality of the human environment as referred to in the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 et seq.). A major construction activity is a construction project or other undertaking having similar physical impacts, which qualify under NEPA as a major federal action. Major construction activities include dams, buildings, pipelines, roads, water resource developments, channel improvements, and other such projects that modify the physical environment and that constitute major Federal actions. As a rule of thumb, if an Environmental Impact Statement is required for the proposed action and construction-type impacts are involved, it is considered a major construction activity.

A biological assessment is required if listed species or critical habitat may be present in the action area. It is optional if only proposed species or proposed critical habitat is involved. However, if both proposed and listed species are present, a biological assessment is required and must address both proposed and listed species. An assessment also may be

recommended for other activities to ensure the agency's early involvement and increase the chances for resolution during informal consultation.

If a biological assessment is required, formal consultation cannot be initiated until the biological assessment is completed. Some agencies submit an assessment early, benefitting from the informal consultation process; some need to be advised to do so. When Service biologists advise an action agency of the need for a biological assessment, the letter should indicate the importance of completing the assessment before letting contracts or beginning construction.

The Federal action agency may designate the applicant or a non-Federal representative (often a consultant) to prepare the biological assessment, although the action agency takes responsibility for the content of the assessment and for the findings of effect. The contents of the assessment are discretionary, but generally include results of on-site inspections determining the presence of listed or proposed species, and an analysis of the likely effects of the action on the species or habitat based on biological studies, review of the literature, and the views of species experts. The assessment also describes any known unrelated future non-Federal activities ("cumulative effects") reasonably certain to occur within the action area that are likely to affect the species. Sometimes information in other environmental analysis documents can substitute or be easily modified to produce the assessment.

The biological assessment should address all listed and proposed species found in the action area, not just those listed and proposed species that are likely to be affected. One of the purposes of the biological assessment is to help make the determination of whether the proposed action is "likely to adversely affect" listed species and critical habitat. To make such a determination, all species must be addressed. Such an assessment may help determine the need for conference as well as formal consultation. A biological assessment may be prepared (50 CFR §402.12(b)(1)) if the agency or the applicant may wish later to seek a permanent exemption from the Endangered Species Committee.

The agency is not required to prepare a biological assessment for actions that are not major construction activities, but, if a listed species or critical habitat is likely to be affected, the agency must provide the Services with an account of the basis for evaluating the likely effects of the action. The Services use this documentation along with any other available information to decide if concurrence with the agency's determination is warranted.

Sometimes, biological assessments are confused with environmental assessments. The contents of biological assessments prepared pursuant to the Act are largely at the discretion of the action agency although the regulations provide recommended contents (50 CFR §402.12(f)). Biological assessments are not required to analyze alternatives to proposed actions. Environmental assessments are prepared pursuant to the National Environmental Policy Act.

3.5 CONCURRENCE/NONCONCURRENCE LETTERS

Following review of the biological assessment or other pertinent information, another informal effort may be appropriate to try to eliminate any residual adverse effects. If that effort results in elimination of potential impacts, the Services will concur in writing that the action, as revised and newly described, is not likely to adversely affect listed species or designated critical habitat. Since concurrence depends upon implementation of the modifications, the concurrence letter must clearly state any modifications agreed to during informal consultation. If agreement cannot be reached, the agency is advised to initiate formal consultation.

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Although not required, an action agency may request written concurrence from the Services that the proposed action will have no effect on listed species or critical habitat. This concurrence is useful for the administrative record. When the biological assessment or other information indicates that the action has no likelihood of adverse effect (including evaluation of effects that may be beneficial, insignificant, or discountable), the Services provide a letter of concurrence, which completes informal consultation. The analysis, based on review of all potential effects, direct and indirect, is documented in the concurrence letter. If the nature of the effects cannot be determined, benefit of the doubt is given to the species. Do not concur in this instance. After evaluating the potential for effect, one of the following determinations is made:

Listed species/designated critical habitat

- **No effect** - the appropriate conclusion when the action agency determines its proposed action will not affect listed species or critical habitat (see Exhibit 3-3).

- **Is not likely to adversely affect** - the appropriate conclusion when effects on listed species are expected to be discountable, or insignificant, or completely beneficial. **Beneficial effects** are contemporaneous positive effects without any adverse effects to the species. **Insignificant effects** relate to the size of the impact and should never reach the scale where take occurs. **Discountable effects** are those extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur (see Exhibits 3-4 and 3-5).

- **Nonconcurrence** - if the Services do not agree with the action agency's determination of effects or if there is not enough information to adequately determine the nature of the effects, a letter of nonconcurrence is provided to the action agency (see Exhibit 3-6).

- **Is likely to adversely affect** - the appropriate conclusion if any adverse effect to listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not: discountable, insignificant, or beneficial (see definition of “is not likely to adversely affect”). In the event the overall effect of the proposed action is beneficial to the listed species, but also is likely to cause some adverse effects, then the proposed action "is likely to adversely affect" the listed species. An "is likely to adversely affect" determination requires formal section 7 consultation.

Proposed species/proposed critical habitat

A fourth finding is possible for proposed species or proposed critical habitat:

- **Is likely to jeopardize proposed species/adversely modify proposed critical habitat** - the appropriate conclusion when the action agency or the Services identify situations in which the proposed action is likely to jeopardize the continued existence of the proposed species or adversely modify the proposed critical habitat. If this conclusion is reached, conference is required.

Exhibit 3-3. Example of a no effect response

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Field Offices
400 Ralph Pill Marketplace
22 Bridge Street, Unit #1
Concord, New Hampshire 03301-4901

RE: Nationwide Wetlands Permit
Drakes Island, Wells, Maine

January 20, 1993

Dear _____ :

We have reviewed your request for information about endangered and threatened species and their habitats for the above referenced project. The Federally listed threatened piping plover (Charadrius melodus) is known to occur on Laudholm Beach, near the proposed project. However, based on the project description and location, the Fish and Wildlife Service concurs with your determination that no impacts to Federally listed species will occur as a result of the proposed action. Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

See comment on
regarding "no effe
determinations ar
Services' concurr

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While it is not required for your Federal permit, we suggest that you contact the Maine Natural Heritage Program, State House Station 130, Augusta, Maine 04333, 207-289-6800 for information on state listed species that may be present.

A list of Federally designated endangered and threatened species in Maine is enclosed for your information. If you have further questions, please contact _____(name)____ of this office at ____(phone)____.

Sincerely yours,

Field Supervisor

Exhibit 3-4. Example of a concurrence letter

Re: Blanket clearance for minor construction projects

Dear _____ :

This responds to your request of November 18, 1992, for our concurrence with your approach to handling endangered species review of minor construction projects falling into the following categories specified in your letter:

1. Construction, abandonment, or relocation of points of delivery (PODs). We understand to establish a new POD, an existing pipeline is tapped at a point along a previously disturbed and maintained Right-Of-Way (ROW), and no more than 20 feet of small diameter pipe is installed. Limited aboveground facilities such as valves, separators, meters and small shelters may also be installed. To relocate or abandon a POD, an existing pipeline is cut and capped adjacent to the existing pipeline as previously described at a different location.

2. Construction and/or maintenance projects within existing, previously disturbed, and generally fenced compressor and measuring and regulatory (M&R) stations.

3. Construction and/or maintenance projects along existing, previously disturbed and maintained ROW. We understand from your letter that these minor projects are less than 100 feet in length and include projects for erosion and sedimentation control, cathodic protection installations and repairs to or replacement of facilities.

A Biological Assessment is required for "major construction activities" if listed species "may be present" in the action area - regardless of the likelihood or significance of the effects. However, since the above projects are not "major construction activities" and no listed species "may be present" in the action area, no Biological Assessment or further Section 7 Consultation pursuant to the Endangered Species Act of 1973 is required with the Fish and Wildlife Service for these particular activities. We concur that the types of activities described above will not adversely affect endangered or threatened species. Should additional information on listed or proposed species become available, this determination may be reconsidered.

The above comments are provided in accordance with the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.). Our comments regarding compliance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), and the Migratory Bird Treaty Act (40 Stat. 755, as amended; 16 U.S.C. 703 et seq.) were provided in our letter of February 11, 1992 Those comments remain valid.

We appreciate your conscientious efforts to comply with Federal requirements. If you have any questions regarding this letter, please contact ____(name)____ of this office at ____(phone)____.

Sincerely yours,

Field Supervisor

Exhibit 3-5. Example of a concurrence letter on a beneficial effect

Dear _____ :

This letter responds to your Biological Assessment [or other title], received on [date], and your request for concurrence that all effects of the proposed [name and location of the action] on [name of listed species] will be beneficial.

The Fish and Wildlife Service [or National Marine Fisheries Service] (Service) has reviewed the submitted project description and evaluation of project effects, and concurs with your determination that all project effects on [name of listed species] will be beneficial.

[choose one of the following closings]

This concludes section 7 consultation on [name of action]. If you have any questions or concerns about this consultation or the consultation process in general, please feel free to contact me or [name of staff member] at [number].

[OR]

No further consultation on the effects of [project name] on [name of listed species] is required. However, since your BA [other title] also identified potential adverse effects from the project on [name of listed species], the formal consultation process will continue for those species that may be adversely affected. Section 7 allows the Service up to 90 calendar days to conclude formal consultation with your agency and an additional 45 calendar days to prepare our biological opinion (unless we mutually agree to an extension). Therefore, we expect to provide you with our biological opinion no later than [date = 135 calendar days after receipt of a complete initiation package].

As a reminder, the Endangered Species Act requires that after initiation of formal consultation, the Federal action agency may not make any irreversible or irretrievable commitment of resources that limits future options. This practice insures agency actions do not preclude the formulation or implementation of reasonable and prudent alternatives that avoid jeopardizing the continued existence of endangered or threatened species or destroying or modifying their critical habitats.

If you have any questions or concerns about this consultation or the consultation process in general, please feel free to contact ____(name)___ of this office at ____(phone)____.

Sincerely yours,

Field Supervisor

Exhibit 3-6. Example of a nonconcurrence letter

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chesapeake Bay Field Office
1825 Virginia Street
Annapolis, Maryland 21401

January 11, 1993

Re: Endangered Species Act concerns relative to CENAB-OP-RP (CHESAPEAKE BEACH, TOWN OF)90-04126-1

Dear _____ :

We are writing to express our concerns regarding impacts of the referenced project on the Federally threatened Puritan tiger beetle (Cicindela puritana). Our comments are provided in accordance with Section 7 of the Endangered Species Act (87 stat. 884 as amended; 16 U.S.C. 1531 et seq.).

The project involves construction of a stone revetment and wooden walkway along the Chesapeake Bay at the Town of Chesapeake Beach a short distance north of a bayside cliff that supports a Puritan tiger beetle population. This population represents the northern limit of this beetle on the western shore of the Chesapeake Bay. In 1991, The Corps initiated informal consultation with the Service to determine whether the revetment/walkway project, due to its potential for increasing public access to tiger beetle habitat, might adversely affect the Puritan tiger beetle. As a result of the informal consultation process, it was agreed that the Town would construct and maintain a chain link fence at the northernmost limit of the cliffs supporting this threatened species. The fence was to be tied in to the cliff face and to extend 30 feet channelward of mean high water. The Service concurred that such a fence would decrease public access to the tiger beetle cliffs sufficiently to compensate for the increase in human use of the beach area, thus resulting in a net “no effect” to the beetles. The permit, issued May 14, 1991, was conditioned upon the construction and maintenance of this structure.

On December 15, 1992, we received information from your office indicating that the applicant had requested permission to re-locate the fence some 400 feet to the south of the originally proposed location. On January 7, 1993, the project location was inspected by _____(name)_____ , endangered species biologist from our office, _____(name)___

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of your staff, and _____(name)_____ of the Maryland Natural Heritage Program. The fence had been constructed at the revised location, leaving a 400 foot section of cliff that is potential Puritan tiger beetle habitat on the public access side of the fence. Due to this change in the project, we can no longer concur with the "no effect" determination. In order to ensure compliance with the Endangered Species Act, we suggest one of the following courses of action be taken:

(a) The applicant should move the fence to the location specified in the existing permit. Compliance with this original permit condition would satisfy the previously established criterion for "no effect" and would conclude the consultation process for this project.

(b) Alternatively, the Corps should re-examine the project in its present form to determine whether it may affect any endangered or threatened species. If the possibility of an effect cannot be eliminated, the Corps is required to initiate formal consultation with the Service.

If you have any questions regarding this project, please contact ____(name)____ of this office at ____(phone)____. Thank you for your cooperation in the effort to protect endangered and threatened species.

Sincerely yours,

Field Supervisor

CHAPTER 4 - FORMAL CONSULTATION

"Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency...is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined...to be critical.... In fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available."

Section 7(a)(2) of the Endangered Species Act

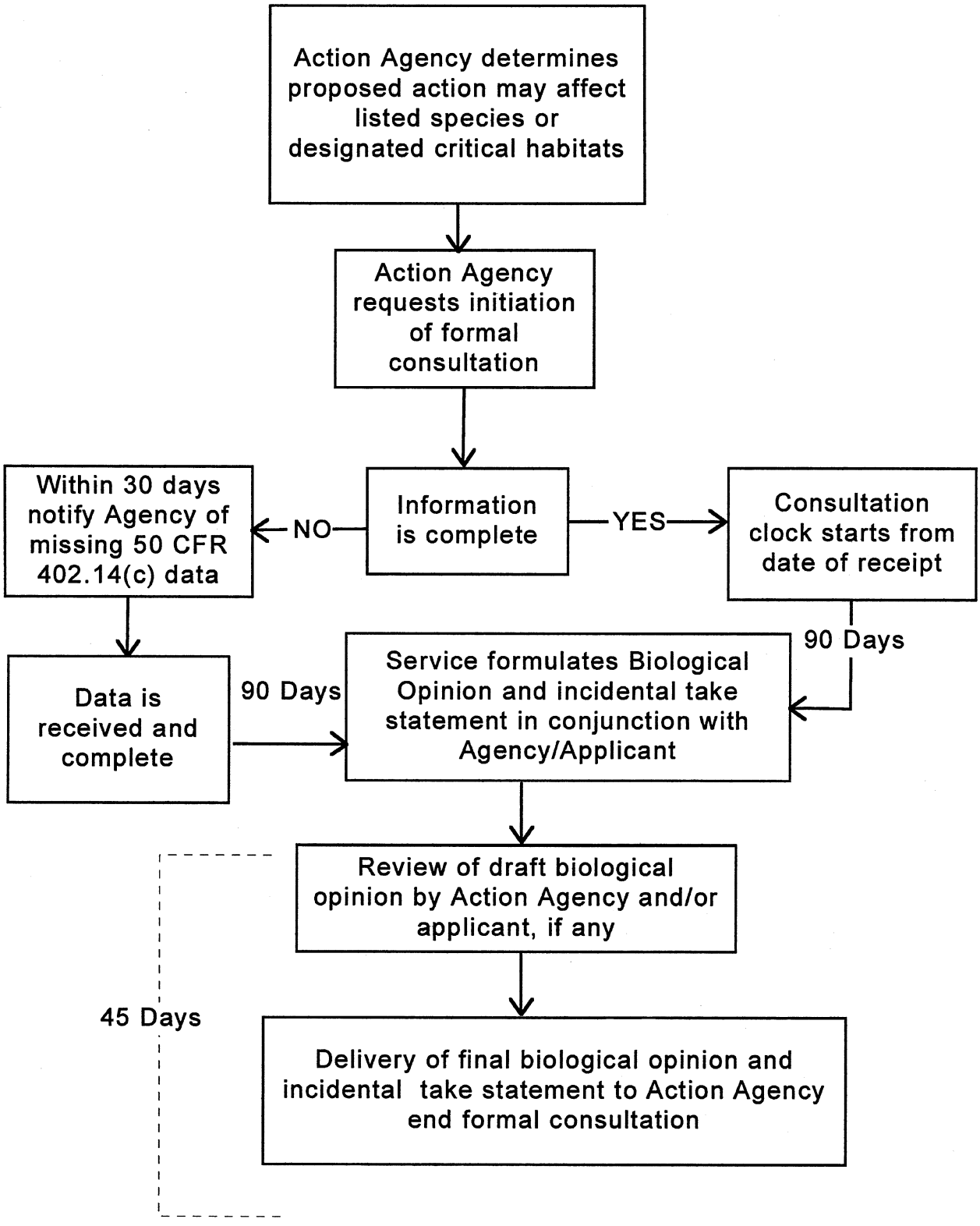
4.1 THE FORMAL CONSULTATION PROCESS

Formal consultations determine whether a proposed agency action(s) is likely to jeopardize the continued existence of a listed species (**jeopardy**) or destroy or adversely modify critical habitat (**adverse modification**) (Figure 4-1). They also determine the amount or extent of anticipated incidental take in an incidental take statement. Formal consultations perform several other functions: they (1) identify the nature and extent of the effects of Federal (agency) actions on listed species and critical habitat; (2) identify reasonable and prudent alternatives, if any, when an action is likely to result in **jeopardy** or **adverse modification**; (3) provide an exception for specified levels of "incidental take" otherwise prohibited under section 9 of the Act; (4) provide mandatory reasonable and prudent measures to minimize the impacts of incidental take to listed species; (5) identify ways the action agencies can help conserve listed species or critical habitat when they undertake an action; and (6) provide an administrative record of effects on species that can help establish the species' environmental baseline in future biological opinions.

If an action agency determines a proposed action "may affect" listed species or designated critical habitat, formal consultation is required. (For procedures to be taken when the action agency determines that a proposed action "may jeopardize the continued existence" of a proposed species or "may adversely modify" proposed critical habitat see Chapter 6, Conference). No formal consultation is required if the action agency finds, with the Services written concurrence that the proposed action "may affect, but is not likely to adversely affect" listed species or critical habitat (see Chapter 3, Informal Consultation). This finding can be made only if ALL of the reasonably expected effects of the proposed action will be beneficial, insignificant, or discountable. The action agency must request concurrence, in writing, from the Service for this finding. When action agencies request formal consultation on actions not likely to adversely affect listed species or designated critical habitat, the Services should explain that informal consultation/concurrence letters are adequate to complete section 7 compliance, but that they will enter into formal consultation if the action agency desires.

Although the formal consultation process must result in a biological opinion reaching either a **jeopardy** or **no jeopardy** to listed species (or **adverse** or **no adverse modification** of critical habitat) finding, the process is flexible and can be adapted at any point to respond to project modifications agreed to by the action agency or the applicant. Moreover, in locations where numerous actions impact a species, changes in the baseline due to successive effects can be addressed on a continuing basis using biological opinions. Such a series of biological opinions can be used like building blocks to first establish a concern, then warn of potential impacts, and finally result in a **jeopardy** call. Successive biological opinions can be used to monitor trends in the species' baseline, making predictions of the impacts of future actions more reliable. Extrapolation of a diminishing baseline can help show where future **jeopardy** thresholds may be reached.

Figure 4-1. Formal consultation process.



4.2 INITIATING FORMAL CONSULTATION

Action agencies initiate formal consultation through a written request to the Services. For a major construction activity, the action agency is required to submit a biological assessment if listed species or designated critical habitat may be present in the action area. This biological assessment, including a description of the effects of the action, must be submitted within 180 days of receipt of a species list from the Services. The accuracy of the species list needs to be verified if it is more than 90 days old and work on preparing the assessment has not begun. Formal consultation is necessary even when the action is not a major construction activity if a "may affect" situation exists. Although there is no specific timeframe within which the action agency must submit an initiation package, agencies must review their actions "at the earliest possible time" to determine whether formal consultation is required. If a "may affect" situation exists, formal consultation must be initiated promptly. To comply with the section 7 regulations (50 CFR §402.14(c)), the initiation package is submitted with the request for formal consultation and must include all of the following:

- a description of the action being considered;
- a description of the specific area that may be affected by the action;
- a description of any listed species or critical habitat that may be affected by the action;
- a description of the manner in which the action may affect any listed species or critical habitat, and an analysis of any cumulative effects;
- relevant reports, including any environmental impact statements, environmental assessments, biological assessment or other analyses prepared on the proposal; and
- any other relevant studies or other information available on the action, the affected listed species, or critical habitat.

The action agency can initiate formal consultation on a number of similar actions within the same geographic area (see section 5.3, Regional or Ecosystem Consultations) or a portion of a comprehensive plan of action (see section 5.5, Incremental Step Consultations), as long as the effects of the entire action are considered. The information provided by an action agency must include the best scientific and commercial data available.

4.3 EVALUATING INITIATION PACKAGES

An action agency's package initiating consultation needs to be reviewed promptly by the Services to determine if: (1) all of the information required by the regulations has been provided;

and (2) whether the information includes the best scientific and commercial data available. The "other relevant information" requirement gives the Services an opportunity to determine what project-specific information is needed to develop the biological opinion. The action agency is obligated to submit the best data available or "which can be obtained during the consultation ...." (50 CFR §402.14(d)). Although not required by 50 CFR §402.14, a topographic map showing the affected area is a useful addition to the initiation package.

4.4 FORMAL CONSULTATION PROCEDURES

(A) Timeframes for Formal Consultation

> ***"(1)(A) Consultation under subsection (a)(2) with respect to any agency action shall be concluded within the 90-day period beginning on the date on which initiated or, subject to subparagraph (B), within such other period of time as is mutually agreeable to the Secretary and the Federal agency;***
> ***(B) in the case of an agency action involving a permit or license applicant, the Secretary and the Federal agency may not mutually agree to conclude consultation within a period exceeding 90 days unless the Secretary, before the close of the 90th day referred to in subparagraph (A) -***
> ***(i) if the consultation period proposed to be agreed to will end before the 150th day after the date on which consultation was initiated, submits to the applicant a written statement setting forth -***
> ***(I) the reasons why a longer period is required;***
> ***(II) the information that is required to complete the consultation; and***
> ***(III) the estimated date on which consultation will be completed; or***
> ***(ii) if the consultation period proposed to be agreed to will end 150 or more days after the date on which consultation was initiated, obtains the consent of the applicant to the extension."***
>
> **Section 7(b) of the Endangered Species Act**

The Act and the section 7 regulations require that formal consultation be concluded within 90 calendar days (all further references to days in this Handbook mean calendar days) of initiation, and the regulations require that the biological opinion be delivered to the action agency within 45 days after the conclusion of formal consultation. The Services strive to issue all biological opinions within the 90-day period; however, the Services may use the additional 45 days when circumstances warrant.

Formal consultation is "initiated" on the date the request is received, if the action agency provides all the relevant data required by 50 CFR §402.14(c). If all required data are not initially submitted, then formal consultation is initiated on the date on which all required information has

been received. Within 30 working days of receipt of an initiation package, the Services should provide written acknowledgment of the consultation request, advise the action agency of any data deficiencies, and request either the missing data or a written statement that the data are not available. Exhibits 4-1 and 4-2 are examples of letters for situations with and without all required data. This acknowledgement process is optional, but it is highly recommended that either a letter or phone conversation record be placed in the administrative record to document the actual initiation date, particularly if the need to acquire additional data extends the consultation time frame beyond 90 days from the initial receipt of a consultation request.

During the initial 90-day formal consultation period, the Services should meet or communicate with the action agency and an applicant, if any, to gather any additional information necessary to conduct the consultation. The 90-day period should be used to:

- assess the status of the species and/or critical habitat involved;
- verify the scope of the proposed action, which includes identifying the area likely to be affected directly and indirectly by the proposed action, and cumulative effects;
- identify adverse effects likely to result in **jeopardy** to the species and/or **adverse modification** of critical habitat;
- develop reasonable and prudent alternatives to an action likely to result in **jeopardy** or **adverse modification**;
- identify adverse effects not likely to jeopardize listed species, but which constitute "take" pursuant to section 9 of the Act;
- develop reasonable and prudent measures, and terms and conditions for the incidental take statement as appropriate; and
- identify conservation recommendations, as appropriate.

These actions should be undertaken cooperatively with the action agency and any applicant, thus allowing the Services to develop a better understanding of direct and indirect effects of a proposed action and any cumulative effects in the action area. Action agencies also have the project expertise necessary to help identify reasonable and prudent alternatives, and reasonable and prudent measures. Other interested parties (including the applicant, and affected State and tribal governments) should also be involved in these discussions. However, before contacting other interested parties, contact the action agency to assess the level of direct involvement they will allow other interested parties to assume. These cooperative efforts should be documented for the administrative record.

The Services ensure the biological opinion, including an incidental take statement, is prepared and delivered within 135 days of initiation of formal consultation. The consultation timeframe cannot be "suspended." If the Services need more time to analyze the data or prepare the final opinion, or the action agency needs time to provide data or review a draft opinion, an extension may be requested by either party. Both the Services and the action agency must agree to the extension. Extensions should not be indefinite, and should specify a schedule for completing the consultation. If an applicant is involved in the project, extension must follow the procedures outlined by section 7(b)(1)(B) of the Act (Exhibit 4-3). In accordance with 50 CFR §402.14(e), a consultation involving an applicant cannot be extended for more than 60 days without the consent of the applicant.

No final biological opinion will be issued before the 135th day if the action agency is still reviewing the draft. Once the Services receive comments on the draft, the biological opinion is finalized and delivered to the action agency and applicant, if any. Do not release or distribute the draft biological opinion. If comments on the draft opinion result in major changes or clarifications, the Services can seek an extension. When the Services have not received the action agency's comments by the 125th day, the Services should check with the action agency (by telephone or in writing) to negotiate an extension. If the Services receive the comments of the action agency less than 10 calendar days before the end of the established deadline of 135 days or as otherwise established by an agreed upon extension, then the Services are automatically entitled to a 10 calendar day extension of that deadline to deliver the opinion (50 CFR §402.14 (g)(5)).

Exhibit 4-1. Example of a letter sent to inform action agencies the Services have received a complete initiation package and will begin formal consultation on a proposed action.

(date)

Dear _____ :

This letter acknowledges the U.S. Fish and Wildlife Service's [or National Marine Fisheries Service's] (Service) [date of receipt of letter initiating consultation] receipt of your [date of agency's initiating letter] letter requesting initiation of formal section 7 consultation under the Endangered Species Act. The consultation concerns the possible effects of your proposed [name and location of the action] on [name of listed species and/or critical habitats affected].

All information required of you to initiate consultation was either included with your letter or is otherwise accessible for our consideration and reference. We have assigned log number [log number] to this consultation. Please refer to that number in future correspondence on this consultation.

Section 7 allows the Service up to 90 calendar days to conclude formal consultation with your agency and an additional 45 calendar days to prepare our biological opinion (unless we mutually agree to an extension). Therefore, we expect to provide you with our biological opinion no later than [date = 135 calendar days after receipt of initiation request].

As a reminder, the Endangered Species Act requires that after initiation of formal consultation, the Federal action agency may not make any irreversible or irretrievable commitment of resources that limits future options. This practice insures agency actions do not preclude the formulation or implementation of reasonable and prudent alternatives that avoid jeopardizing the continued existence of endangered or threatened species or destroying or modifying their critical habitats.

If you have any questions or concerns about this consultation or the consultation process in general, please feel free to contact me or _____(name)_____ of this office at _____(phone)___.

Sincerely yours,

Field Supervisor

Exhibit 4-2. Example of a letter sent when an incomplete formal consultation request has been received.

(date)

Dear _____ :

This letter acknowledges the U.S. Fish and Wildlife Service's [or National Marine Fisheries Service's] (Service) [date of receipt of letter initiating consultation] receipt of your [date of agency's initiating letter] letter requesting initiation of formal section 7 consultation under the Endangered Species Act. The consultation concerns the possible effects of your proposed [name and location of the action] on [name of listed species and/or critical habitats affected].

The Service has not received all of the information necessary to initiate formal consultation on [name of the project] as outlined in the regulations governing interagency consultations (50 CFR §402.14). To complete the initiation package, we will require the following information:

1. [Outline the additional information needs. Follow the general sequence and use language in 50 CFR §402.14(c) to identify each piece of missing information.]

2. etc.

The formal consultation process for the project will not begin until we receive all of the information, or a statement explaining why that information cannot be made available. We will notify you when we receive this additional information; our notification letter will also outline the dates within which formal consultation should be complete and the biological opinion delivered on the proposed action.

If you have any questions or concerns about this consultation or the consultation process in general, please feel free to call me at _____(phone)_____.

Sincerely yours,

Field Supervisor

Exhibit 4-3. Example of a request for extension of time.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
3100 University Blvd. South
Suite 120
Jacksonville, Florida 32216

October 30, 1992

FWS Log No: 4-1-92441C
Application No: 199201162(LP-CRFO)
Dated: August 6, 1992
Applicant:
County: Citrus

Dear _____ :

On August 4, 1992, the Fish and Wildlife Service entered into formal Section 7 consultation on the above referenced public notice. The 90-day consultation period expires November 4, 1992. Because of the difficulties we have encountered in acquiring additional information from the applicant, we request a 60-day extension of the consultation period in accordance with 50 CFR §402.14(e). The Biological Opinion will be issued before January 3, 1993.

We have been awaiting necessary information (i.e. plat maps) showing the amount of shoreline owned or controlled by the applicant and information on the number and sizes of existing docks. We requested shoreline information from them in writing on August 13, 1992, and on September 1, 1992, we requested maps showing both shoreline and dock information. We asked for this information again in a telephone conversation with their agent on October 14, 1992. Maps have still not been provided, however, the applicant's wife provided us with a verbal description of the map and the existing docks in a telephone conversation on October 29, 1992. Additional time is needed to review this information and prepare the biological opinion.

By copy of this letter, we are notifying the applicant of our request of an extension. We look forward to your response. If you have any questions or concerns about this consultation or the consultation process in general, please feel free to call me at ____(phone)____.

Sincerely,

Field Supervisor

(B) Coordination with other environmental reviews

Formal consultation and the Services' preparation of a biological opinion often involve coordination with the preparation of documents mandated by other environmental statutes and regulations, including the Fish and Wildlife Coordination Act (FWCA) and the National Environmental Policy Act (NEPA). Although other environmental reviews may be processed concurrently with a section 7 consultation package, they should be separate entities. The contents of the biological opinion and incidental take statement, including the discussion of effects to listed or proposed species and/or critical habitats, and appropriate measures to avoid or minimize those effects, may be addressed in the Service's comments and recommendations under the FWCA, section 404(m) of the Clean Water Act, NEPA, and other authorities. The section 7 consultation package may be prepared as a stand-alone document under separate signature, or one cover transmittal may be used as long as the consultation package is identified as a separate entity.

The Services should assist the action agency or applicant in integrating the formal consultation process into their overall environmental compliance. A major concern of action agencies is often the timing of the consultation process in relation to their other environmental reviews. For example, since the time required to conduct formal section 7 consultation may be longer than the time required to complete preparation of NEPA compliance documents, the action agency should be encouraged to initiate informal consultation prior to NEPA public scoping. Biological assessments may be completed prior to the release of the Draft Environmental Impact Statement (DEIS) and formal consultation, if required, should be initiated prior to or at the time of release of the DEIS. Early inclusion of section 7 in the NEPA process would allow action agencies to share project information earlier and would improve interagency coordination and efficiency. At the time the Final EIS is issued, section 7 consultation should be completed. The Record of Decision should address the results of section 7 consultation.

4.5 COMPONENTS OF A FORMAL CONSULTATION

The Services' formal consultation package includes at a minimum a biological opinion and an incidental take statement. The package also may include a conference opinion or notice of a need to confer if proposed species or proposed critical habitats are involved. Conservation recommendations for agency implementation of section 7(a)(1) responsibilities under the Act may be included if relevant to the action under consultation (Figure 4-2).

Sample language for various types of formal consultation packages can be found in Appendix B.

Following the address and salutation, the biological opinion begins with a standardized introduction and a history of the consultation.

Introductory Paragraph:

> **This document transmits the (Fish and Wildlife Service's/National Marine Fisheries Service's) (Service) biological opinion based on our review of the proposed (name or designation for the action) located in (County, State, and Marine Area as appropriate), and its effects on (species) in accordance with section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Your (date) request for formal consultation was received on (date).**
>
> **This biological opinion is based on information provided in the (date) biological assessment (or other title), the (date) draft environmental assessment (or environmental impact statement), the (date) project proposal, telephone conversations of (dates) with (names), field investigations, and other sources of information. A complete administrative record of this consultation is on file at (this office/elsewhere).**

Consultation history

The history of the consultation request includes any informal consultation, prior formal consultations on 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. If so, such conclusions should be documented in the biological opinion.

Figure 4-2. Outline of a formal consultation package.

[Handbook discussion in brackets]

Address
Salutation
Introductory paragraph [page 4-12]
Consultation history [page 4-12]

BIOLOGICAL OPINION

I. Description of proposed action [page 4-15]

II. Status of the species/critical habitat [page 4-19]
- A. Species/critical habitat description
- B. Life history
- C. Population dynamics
- D. Status and distribution
- E. Analysis of the species/critical habitat likely to be affected

III. Environmental baseline [page 4-22]
- A. Status of the species within the action area
- B. Factors affecting species environment within the action area

IV. Effects of the action [page 4-23]
- A. Factors to be considered
- B. Analyses for effects of the action
- C. Species' response to a proposed action

V. Cumulative effects [page 4-30]

VI. Conclusion [page 4-31]

VIII.Reasonable and prudent alternatives (as appropriate) [page 4-41]

INCIDENTAL TAKE STATEMENT [page 4-43]

Introductory paragraph [page 4-46]
Amount or extent of take anticipated [page 4-47]
Effect of the take [page 4-49]
Reasonable and prudent measures (as appropriate) [page 4-50]
Terms and conditions [page 4-51]
Coordination of incidental take statements with other laws, regulations, and policies [page 4-53]

CONFERENCE REPORT/CONFERENCE NOTICE (as appropriate) [page 4-58]

CONSERVATION RECOMMENDATIONS (as appropriate) [page 4-59]

REINITIATION - CLOSING STATEMENT [page 4-60]

LITERATURE CITED [page 4-60]

(A) Biological opinion

> ***"... the Secretary shall provide to the Federal agency and the applicant, if any, a written statement setting forth the Secretary's opinion, and a summary of the information on which the opinion is based, detailing how the agency action affects the species or its critical habitat. If jeopardy or adverse modification is found, the Secretary shall suggest those reasonable and prudent alternatives which he believes would not violate subsection (a)(2) and can be taken by the Federal agency or applicant in implementing the agency action.***
>
> **Section 7(b)(3)(A) of the Endangered Species Act**

A formal biological opinion consists of a description of the proposed action, status of the species/critical habitat, the environmental baseline, effects of the action, cumulative effects, the Services' conclusion of **jeopardy**/**no jeopardy** and/or **adverse modification/no adverse modification,** and reasonable and prudent alternatives, as appropriate.

Description of the proposed action

Provide descriptions of the proposed action and the action area (area including all direct and indirect effects). The description of the proposed action does not have to be comprehensive if details can be referenced from NEPA documents or other descriptions provided. However, some small actions may not have complete or formal descriptions of the proposed action, or the project's components may be scattered throughout a biological evaluation (or similar document), draft NEPA documents, draft plans for different portions of the action, miscellaneous policy and guidance documents, letters, telephone records, meeting notes, and other documents. In such cases, a comprehensive project description in the biological opinion is vital to determining the scope of the proposed action. The draft project description may be sent to the action agency for review to eliminate any inaccuracies regarding the scope of the action. This section should summarize enough information for the reader to understand and evaluate the action under consideration in the biological opinion.

If the Services determine that the action area differs from that described by the agency or applicant, the Services should discuss their rationale for the change with the agency or applicant. Occasionally, an action agency or an applicant disagrees with the Services' delineation of the action area. This generally occurs when impacts to the species/habitat result from indirect or interrelated/interdependent effects. Reaching agreement on the description of the action area is desirable, but ultimately the Services are responsible for this biological determination (Figures 4-3, 4-4 and 4-5). Subsequent analyses of the environmental baseline, effects of the action, and levels of incidental take are based upon the action area as determined by the Services. If appropriate, including a transition sentence clarifies why the action area was described in a manner differing from that provided by the action agency: "The Services have described the

action area to include.... for reasons that will be explained and discussed in the 'Effects of the proposed action' section of this consultation." Maps and other graphics also may be appropriate.

Figure 4-3. Example of an action area within the species' range.

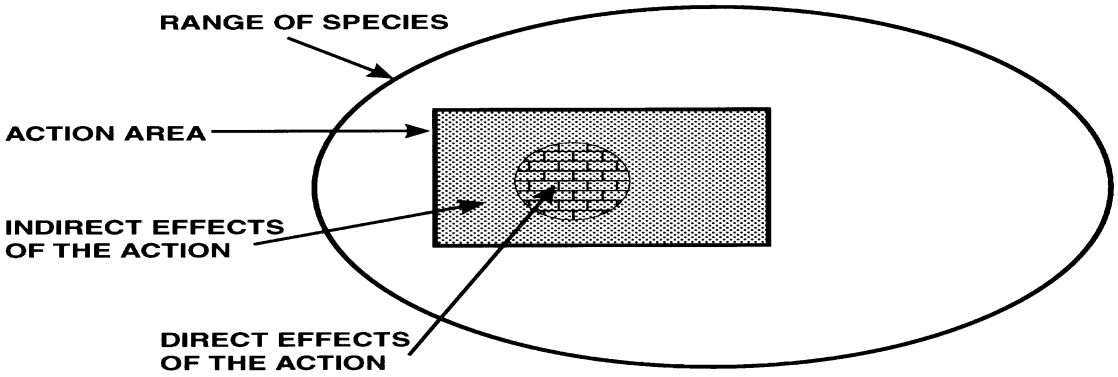


Figure 4-4. Example of an action area that encompasses the species' range.

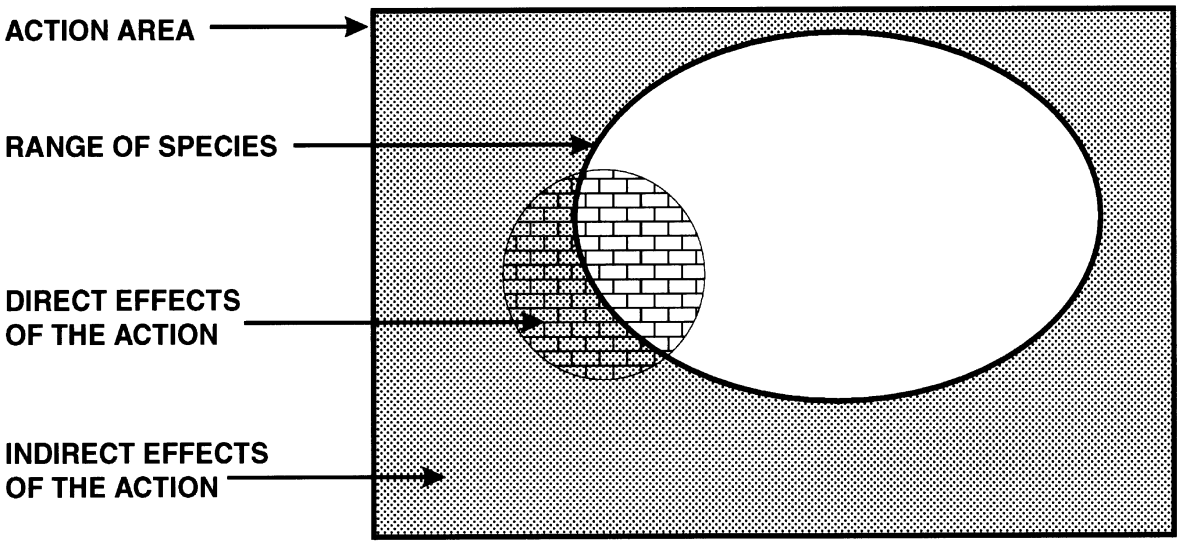
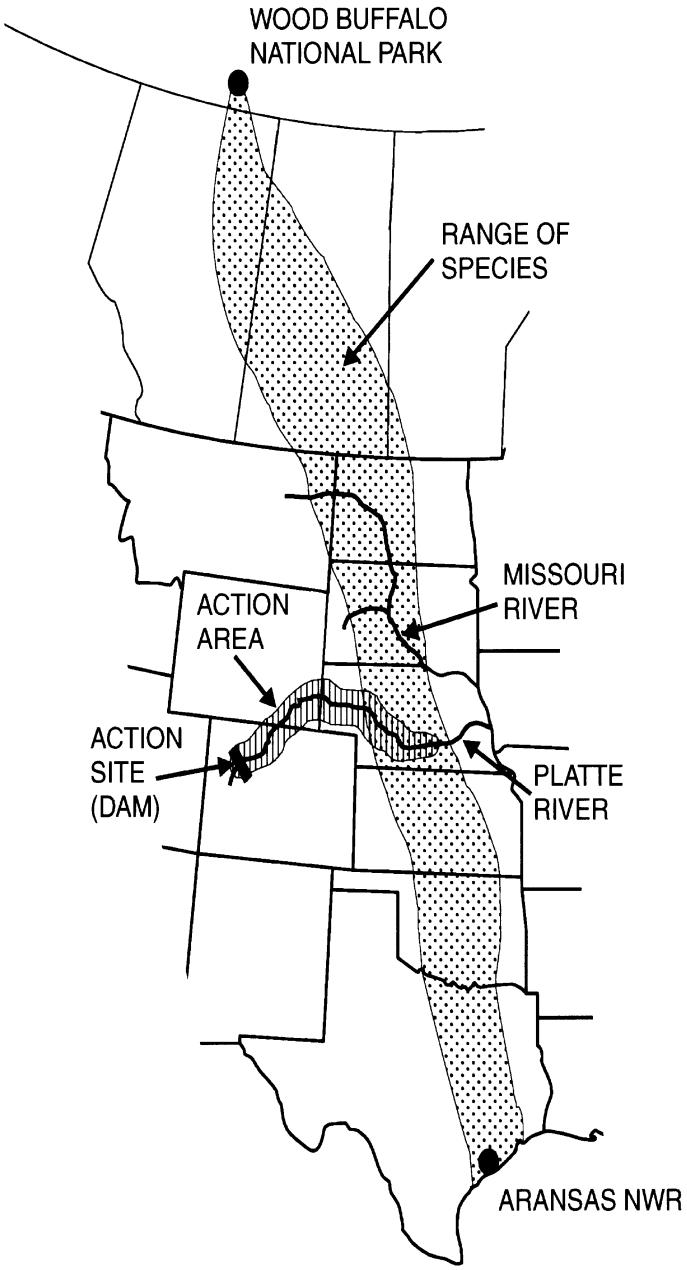


Figure 4-5. Example of an action area involving an effect not at the project site.

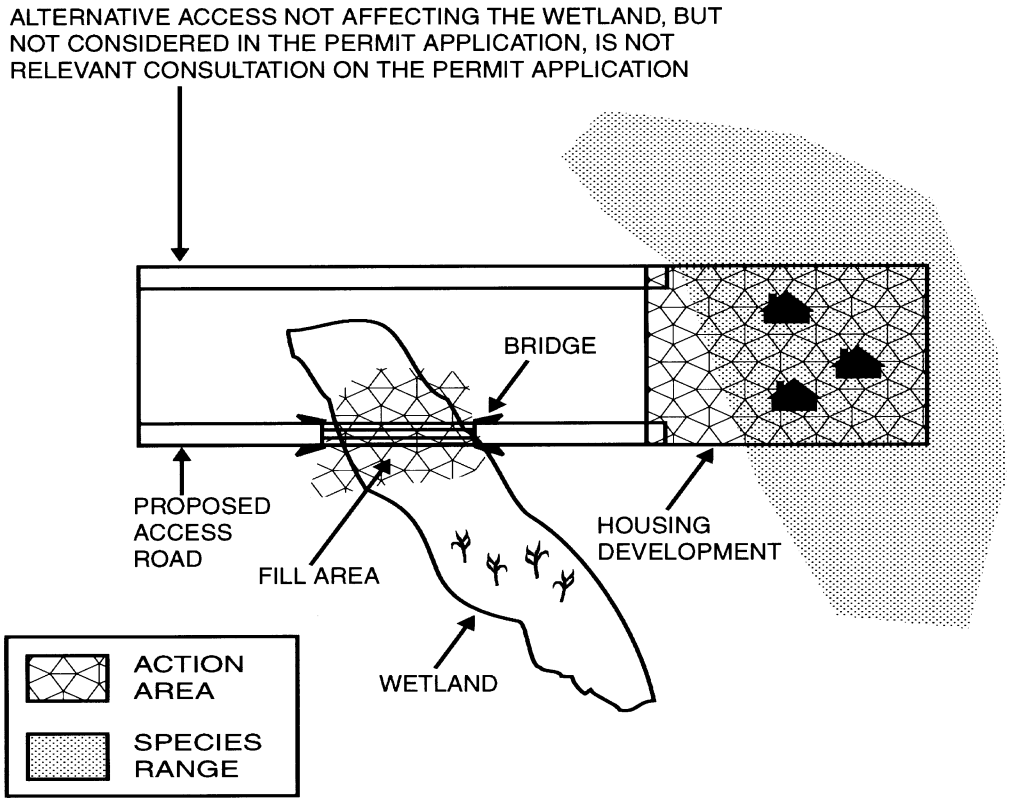
A dam on the Platte River in Colorado (project site) also may affect the water regime for whooping crane critical habitat (action area) 150 miles downstream in Nebraska.



Description of the proposed action (cont'd)

Determining the action area relates only to the action proposed by the action agency. Even if the applicant has an alternative not requiring Federal permits or funding, this does not enter into the Services' analyses. Such alternatives can be discussed in the reasonable and prudent alternatives or conservation recommendations if the alternative is within the agency's jurisdiction. 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)]. For example (Figure 4-6), if the proposed action is a wetland fill (requiring a federal permit) to accommodate access to a proposed development (the actual area of impact to the species), then the development is included in the action area. Whether or not the applicant can build a road that does not impact the wetland, the analysis of effects of the action still encompasses the proposed development. If the applicant is seriously considering the alternative with no Federal nexus, the applicant should be advised of the need for acquiring a section 10(a)(1)(B) permit before proceeding with development for actions that will result in a taking.

Figure 4-6. Determining the action area.



Describing the proposed action also includes any conservation measures proposed as part of the action. When used in the context of the Act, "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. For example, degraded habitat acquired by the applicant adjacent to the area to be developed may be improved as a conservation measure prior to project completion so that individuals depending on the habitat to be destroyed by development can be relocated or allowed to relocate on the improved site.

In this example, the activity carries out a recognized conservation need for the species. The beneficial effects of the conservation measure are taken into consideration for both **jeopardy** and incidental take analyses. However, remember that the objective of the incidental take analysis under section 7 is minimization, not mitigation. If the conservation measure only protects off-site habitat and does not minimize impacts to affected individuals in the action area, the beneficial effects of the conservation measure are irrelevant to the incidental take analysis. Discussion of the limits for minimization under section 7, and distinction from mitigation allowances under section 10, can be found in Section 2.1(C) of this handbook.

Since conservation measures are part of the proposed action, their implementation is required under the terms of the consultation. However, conservation recommendations (which may be provided at the end of the consultation package) are discretionary suggestions made by the Services for consideration by the agency or applicant.

Status of the species/critical habitat

This section presents the biological or ecological information relevant to formulating the biological opinion. Appropriate information on the species' life history, its habitat and distribution, and other data on factors necessary to its survival, is included to provide background for analyses in later sections. Note that when designated critical habitat is affected a companion analysis is 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. This information is presented in listing documents, and refined in recovery plans.

When the Services' review focuses on the effects of the action on a discrete recovery unit or designated critical habitat unit, this section of the biological opinion describes the status of that unit and its significance to the species as listed or to the designated critical habitat. For example, if the opinion focuses on the Chesapeake Bay recovery unit of the bald eagle, the status of that recovery unit is discussed including the recovery unit's role in both the survival and recovery of the species as listed.

The following types of information should be considered for inclusion in the biological opinion. All information may not be available for all species. However, Services biologists should use the best available scientific or commercial data. Pertinent information can be gathered from listing rules, including critical habitat designations, recovery plans, and published and unpublished studies done on the species. Once this section is developed for a given species, it can be used in successive biological opinions. Modification is necessary only when new information is developed.

a. Species/critical habitat description

This section should briefly describe the species and/or critical habitat, discussing the current legal status of the species, including listing history, and current known range of the listed species found in the action area. 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 which have been identified as having the potential for altering the primary constituent elements.

b. Life history

A large number of life history variables are relevant to **jeopardy** analyses. These variables help determine a species' population size, age distribution, sensitivity to a proposed action's effects, ability to recover from adverse effects, and ability to recolonize areas from which it has been extirpated. 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.

c. Population dynamics

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. However, detailed demographic analyses have recently been undertaken for some species. The level of discussion in this section will depend upon the detail and quality of the information available.

Population size: This species characteristic is often emphasized in consultations. Reduction in population size may jeopardize the continued existence of threatened or endangered species because the longer a species remains at low population levels, the greater the probability of extinction from chance events, inbreeding depression, or additional environmental disturbance. However, although population size has a clear relationship to a species' extinction probability, it can be less important than population variability and should be used carefully. How long a

species will persist before extinction depends on more than population size. Large populations may not protect a species from extinction in the face of extreme environmental disturbance.

Population variability: Fluctuations in a species' population over time can affect significantly the probability of its extinction. Population variability is affected by several characteristics of a species' life history: unstable age distributions and reproductive rates; widely variable mortalities resulting from unstable food resources or predation; population density; sex ratios; recolonization rates; and genetic viability. As a population fluctuates, one or more factors can lead to a chance extinction, e.g., irreversibly lowering population size to a point where it can no longer recover. Consequently, an action increasing a species' population variability may affect the continued existence of the species more significantly than a reduction in population size.

Population stability: Population stability is the ability of a species' population to resist change or dramatic fluctuations over time. It directly affects a species' sensitivity to the adverse effects of a proposed action. Even-age distribution, high reproductive rates, or long life spans with multiple reproductive periods can stabilize a population.

d. Status and distribution

Information on the status and distribution of listed species and designated critical habitat helps establish the environmental basis for a consultation. The Federal Register Notice with the final rule listing a species or designating critical habitat is a good starting point for gathering this type of information. The following factors should provide a reasonable environmental setting within which to consider the action and cumulative effects for the consultation.

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.

Rangewide 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 a proposed action on that species.

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 (*Dreissena polymorpha*), an exotic species threatening native mussel fauna throughout its range, wasn't considered when most native mussels were listed.

e. Analysis of the species/critical habitat likely to be affected

This section summarizes the previous discussion in Status of the species/ critical habitat and identifies those species or designated critical habitat likely to be adversely affected by the proposed action, which will be considered further in the remaining sections of the biological opinion. If the action agency requests consultation on a beneficial action, that will be noted here. Other listed species/designated critical habitat present in the project area are also listed here along with the reasons they are not likely to be adversely affected. Since the Services concur with the action agency's determination of "is not likely to adversely affect," a statement that those species will not be considered further in the consultation should be included.

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.

a. Status of the species within the action area

Unless the species' range is wholly contained within the action area, this analysis is a subset of the preceding rangewide status discussion. The purpose is to analyze the effects on the species and/or critical habitat at the action level. For example, the following issues are considered:

- the percent or amount of the species range or designated critical habitat in the action area;
- whether the effect is quantitative, qualitative, or both;
- the distribution of the affected and unaffected habitat; and
- if critical habitat will be impacted, the effect on the constituent elements.

b. Factors affecting species environment within the action area

This analysis describes factors affecting the environment of the species or critical habitat in the action area (Figure 4-3). 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.

An agency action can be removed from the environmental baseline analysis under any of the following conditions:

- o an action agency notifies the Services in writing that a previously proposed action will not be implemented;
- o a biological opinion for the proposed action (not an ongoing action) is no longer valid because reinitiation of consultation is required and the action agency has been so informed in writing by the Services, or has requested that the Services reinitiate consultation; or
- o alternatives have been implemented that remove all adverse effects.

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.

a. Factors to be considered

Proximity of the action: to the species, management units, or designated critical habitat units.

Distribution: geographic areas where the disturbance occurs (e.g., may be several small or one large area).

Timing: relationship to sensitive periods of a species' lifecycle.

Nature of the effect: effects of the action on elements of a species' lifecycle, population size or variability, or distribution; or on the primary constituent elements of the critical habitat, including direct and indirect effects.

Duration: The effects of a proposed action on listed species or critical habitat depend largely on the duration of its effects. Three potential categories of effects are: (1) a short-term event whose effects are relaxed almost immediately (pulse effect), (2) a sustained, long-term, or chronic event whose effects are not relaxed (press effect), or (3) a permanent event that sets a new threshold for some feature of a species' environment (threshold effect). For many species, a proposed action producing a single, short-term effect is less likely to jeopardize the continued existence of a species than a long-term chronic event or the permanent alteration of a species' habitat.

Disturbance frequency: the mean number of events per unit of time affects a species differently depending on its recovery rate. If the disturbance frequency is less than the species' recovery rate, the species might persist in the face of the disturbance (Figures 4-7a-b). If the disturbance

frequency equals the species' recovery rate, the species becomes more sensitive to the effects of other disturbances (Figure 4-7c). If the disturbance frequency is greater than a species' recovery rate, the species will be unable to recover between disturbances (Figure 4-7d). Disturbance frequency is an important consideration when evaluating the accumulating effects of proposed actions on listed species and/or designated critical habitat, particularly when it is combined with information on a species' recovery rate.

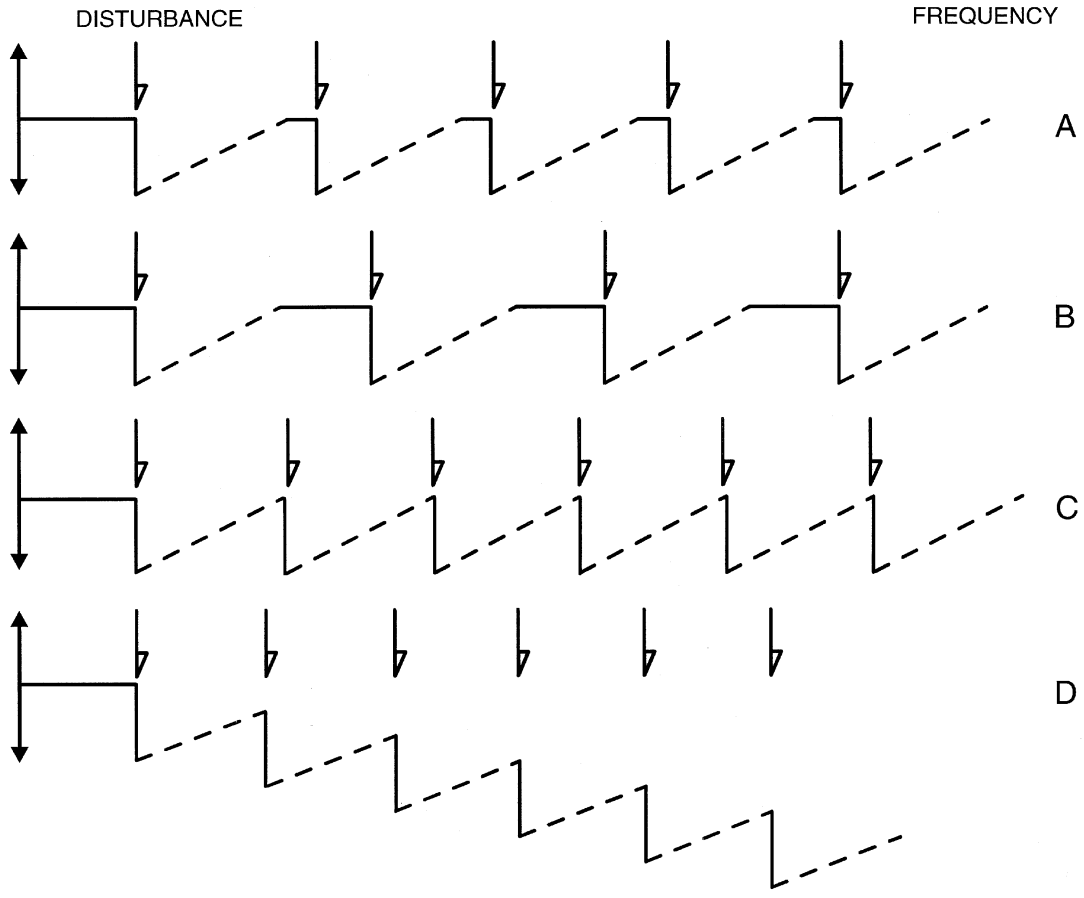


Figure 4-7. Effects of the disturbance. (figures modified from Trudghill 1988)

Disturbance intensity: the effect of the disturbance on a population or species as a function of the population or species' state after the disturbance. For example, a disturbance reducing the size of a population or critical habitat unit by 40 percent is more intense than a disturbance reducing population or unit size by 10 percent.

Disturbance severity: the effect of a disturbance on a population or species as a function of recovery rate. The longer the recovery rate, the more severe the disturbance. For example, a disturbance from which a species or habitat takes 10 years to recover is more severe than a disturbance requiring 2 years for recovery. A severe disturbance makes a population or species more susceptible to the effects of multiple actions.

b. Analyses for effects of the action

Sufficient description of the proposed action should be included so that the subsequent analysis of effects and the scope of the opinion are clear. If the analyses for this section determine that some individuals of a listed animal might be "taken" as a direct or indirect result of the proposed action, that information is included in the incidental take statement.

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Beneficial effects: are those effects of an action that are wholly positive, without any adverse effects, on a listed species or designated critical habitat. Determination that an action will have beneficial effects is a "may affect" situation (see section 3.5). However, since there are no adverse effects, formal consultation is not required. Biological opinions may discuss beneficial effects if the applicant requests it, or if a biological assessment considers numerous species, some with adverse effects, and one or more with beneficial effects.

> Example: The National Park Service proposes to modify an existing rock climbing management plan that allows climbing in historic peregrine falcon nesting areas. The new plan restricts climbing activities to areas outside of a zone 1/4 mile wide on either side of active peregrine falcon aeries during the breeding season. This protects the birds from human disturbance and eliminates take that could occur if an adult was flushed from an aerie with eggs or young needing incubation or brooding to survive. Therefore, the effects are wholly beneficial.

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Direct effects: 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 the piping plover may destroy its ground nest; building a housing unit may destroy the habitat of an endangered mouse. Direct effects result from the agency action including the effects of interrelated actions and interdependent actions (see definitions below for clarification). 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) are not considered in this biological opinion.

See Glossary e handbook for cl around underlin the paragraph.

Interrelated and interdependent actions: 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. An interdependent activity is an activity that has no independent utility apart from the action under consultation. (Note: the regulations refer to the action under consultation as the "larger action" [50 CFR § 402.02]). In fact, the use of the term "larger" has proven to be confusing when applied in the case of a modification to an existing project. Instead of keeping the inquiry on whether other activities are interrelated to or interdependent with the modification, it has unintentionally and inappropriately shifted the focus to an inquiry on whether the modification itself is interrelated to or interdependent with the "larger" action or project. To better understand how the interdependent or interrelated analysis should work, see the detailed examples below.

As a practical matter, 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," that the activity in question would occur regardless of the proposed action under consultation, then the activity is not interdependent or interrelated and would not be analyzed with the effects of the action under consultation. There will be times when the answer to this question will not be apparent on its face. The biologist should ask follow-up questions to the relevant parties to determine the relationship of the activity to the proposed action under consultation. It is important to remember that interrelated or interdependent activities are measured against the **proposed action**. That is, the relevant inquiry is whether the activity in question should be analyzed with the effects of the action under consultation because it is interrelated to, or interdependent with, the proposed action. Be careful not to reverse the analysis by analyzing the relationship of the proposed action against the other activity. For example, as cited below, if the proposed action is the addition of a second turbine to an existing dam, the question is whether the dam (the other activity) is interrelated to or interdependent with the proposed action (the addition of the turbine), not the reverse.

> Example: The Corps of Engineers requests consultation for construction of a dam which requires a section 404 permit. The dam will provide water to private irrigation canals that will come on line once the dam is completed. The private irrigation canals are interrelated to the proposed dam and must be considered in a biological opinion for the larger water development project since they would not be in existence "but for" the presence of the proposed dam under consultation. Similarly, a power turbine to be constructed concurrently with the dam cannot function and has no independent utility "but for" the dam and is, therefore, interrelated with the project. Thus the effects of this turbine on fish passage and water quality are to be considered in the biological opinion on the proposed dam.

Ten years after construction of the dam, a federal permit is needed to add a second turbine to the dam to increase power generation. The addition of the turbine, as the proposed action under consultation, is now the "larger action" against which the "but for" test for interrelated or interdependent effects would be applied. The pre-existing dam has independent utility without the new turbine and therefore is not interrelated to, or interdependent with, the proposed action. Ongoing effects of the existing dam are already included in the Environmental Baseline and would not be considered an effect of the proposed action under consultation. Activities which would be interdependent and interrelated to the proposed turbine could include construction of new power lines or conversion of natural habitat if the additional power capacity allowed for the development of a manufacturing facility that was dependent upon the new power grid.

Later, a new federal safety law requires the dam operator to construct a fuse plug on an existing spillway which improves response to emergency flood conditions. Construction of the fuse plug is now the proposed "larger action." Again, the existing dam is not interdependent or interrelated to the proposed fuse plug because it does not depend upon the proposed action for its existence. That is, the test is not whether the fuse plug in some way assists or facilitates in the continued operation of the pre-existing project, but instead whether the water project could not exist "but for" the fuse plug. Because the answer is that the project would exist independent of the fuse plug, the operation of that project is not interrelated or interdependent. Accordingly, the biologist would not consider the effects of the dam to be effects of the "larger" action under consultation (the proposed construction of the fuse plug). However, if the fuse plug would allow a greater flow of water through the spillway, thereby requiring the operator to increase the depth of the spillway channel and armor it with concrete, such activities would be interrelated to the proposed action.

Example: Another example would be a proposed agency action to enlarge the water supply storage capacity of an existing flood control reservoir. An existing water supply system into which the stored water will be released does not depend on the proposed action, and hence is not interrelated.

When one or more Federal actions are determined by the Services to be interdependent or interrelated to the proposed action, or are indirect effects of the proposed action, they are combined in the consultation and a lead agency is determined for the overall consultation.

See Glossary handbook for this term.

Indirect effects: are 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. In order to treat these actions as indirect effects in the biological opinion, they must be reasonably certain to occur, as evidenced by appropriations, work plans, permits issued, or budgeting; they follow a pattern of activity undertaken by the agency in the action area; or they are a logical extension of the proposed action.

Non-Federal activities with indirect effects can also be predicted, particularly for ongoing projects that have a past pattern of use that is anticipated to continue.

> Example: A very complex example of indirect effects arose in determining effects of renewing water service contracts from a large reclamation project (Friant Unit of the Central Valley Project) in the San Joaquin Basin of California. Upon checking with other Federal and State agencies, the FWS determined that the distribution of water for agricultural use on the higher east side of the Valley provided a hydrologic head maintaining the groundwater table on the west side of the Valley at a level making it economical to pump. As a result, occupied habitats for several species on the west side of the Valley were being destroyed because the pumped water could be used to convert this land to agriculture. The California Department of Water Resources provided trend data indicating a continuing conversion of habitat of 10,000 to 30,000 acres per year. These data were used to assess future non-Federal effects of the project.

Several court cases provide examples of indirect effects of a proposed action. In National Wildlife Federation v. Coleman, 529 F.2d 359 (5th Cir.), cert. denied, 429 U.S. 979 (1976), the court ruled that indirect effects of private development resulting from proposed construction of highway interchanges had to be considered as impacts of a proposed Federal highway project, even though the private development had not been planned at the time the highway project was proposed. In another case, Riverside Irrigation District v. Andrews, 758 F.2d 508 (10th Cir. 1985), the court ruled that the Corps of Engineers must consider the effects of consumptive water uses made possible by the proposed dam on critical habitat for whooping cranes 150 miles away, in addition to the local impacts of placing fill for the dam.

Determining the effect of ongoing water projects: Under the Federal Power Act, as amended by the Electric Consumers Protection Act of 1986, the Federal Energy Regulatory Commission (FERC) issues new licenses for existing hydropower projects as the original licenses expire. FERC has determined that these new licenses represent a new commitment of resources. Therefore, a section 7 analysis of the project's effects on listed species is done in the same way as new projects. When analyzing these water projects, as well as water contract renewals for Bureau of Reclamation (Bureau) programs and ongoing discretionary operations of Bureau and Corps of Engineers water facilities, use the same approach as for other types of section 7 analyses.

- The total effects of all past activities, including effects of the past operation of the project, current non-Federal activities, and Federal projects with completed section 7 consultations, form the environmental baseline;

- To this baseline, future direct and indirect impacts of the operation over the new license or contract period, including effects of any interrelated and interdependent activities, and any reasonably certain future non-Federal activities (cumulative effects), are added to determine the total effect on listed species and their habitat.

Annual operating permits issued prior to issuance of a new hydropower license are subject to section 7 consultation if the Federal agency has discretion to determine the terms of the annual permits.

c. Species' response to a proposed action

[Note: For critical habitat analyses, many of the following considerations can be addressed in terms of the effect on the functional suitability of the habitat to support the species.]

Numbers of individuals/populations in the action area affected: Many **jeopardy** analyses emphasize the effects of a proposed action on the size of a species' populations because small populations are more threatened by extinction due to demographic accidents than large populations. However, the length of time a species exists before extinction depends on more than population size. Large population size may not protect a species in the face of extreme disturbance. A species' response to disturbance will depend on the number of individuals or amount of habitat affected, although the age, sex, breeding status, and distribution of affected individuals, as well as the genetic variability within the remaining population(s), are equally important because they determine a population's ability to recover from the loss of individuals.

Sensitivity to change: This factor relates to the degree to which a population or species is prone to change when disturbed.

Resilience: This factor relates to the characteristics of populations, species, or critical habitat units allowing them to recover from different magnitudes of disturbance. For example, the greater the reproductive rate, the more resilient the species may be to population losses. Moreover, habitat specificity and other factors also contribute to a species' resiliency. Critical habitat also has resilience: grasslands, for example, can be more resilient to the adverse effects of fire than a forest. In a biological opinion, the biologist should determine the type and severity of the disturbance and determine how resilient the species or its habitat is to that particular type of disturbance.

Recovery rate: This factor relates to the time required for an individual, population, species, community, or ecosystem to return to equilibrium after exposure to a disturbance. A population,

species, community, or ecosystem that has a fast recovery rate is called stable. It is often difficult to know the recovery rate or resilience of species. In the absence of information, the best biological estimate should be used.

Cumulative effects

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. Additionally, the Services are required to consider cumulative effects in formulating their biological opinions (50 CFR §402.14(g)(3) and (4)). The standardized paragraph to introduce the cumulative effects section is:

> **Cumulative effects include the effects of future State, tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.**

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The concept of cumulative effects is frequently misunderstood as it relates to determining likely **jeopardy** or **adverse modification**. Cumulative effects include effects of future State, tribal, local, and private actions, not involving a Federal action, that are reasonably certain to occur within the action area under consideration. Future Federal actions requiring separate consultation (unrelated to the proposed action) are not considered in the cumulative effects section.

The "reasonably certain to occur" clause is a key factor in assessing and applying cumulative effects in biological opinions. First, cumulative effects involve only future non-Federal actions: past and present impacts of non-Federal actions are part of the environmental baseline. Indicators of actions "reasonably certain to occur" may include, but are not limited to: approval of the action by State, tribal or local agencies or governments (e.g., permits, grants); indications by State, tribal or local agencies or governments that granting authority for the action is imminent; project sponsors' assurance the action will proceed; obligation of venture capital; or initiation of contracts. The more State, tribal or local administrative discretion remaining to be exercised before a proposed non-Federal action can proceed, the less there is a reasonable certainty the project will be authorized. Speculative non-Federal actions that may never be implemented are not factored into the "cumulative effects" analysis. At the same time, "reasonably certain to occur" does not require a guarantee the action will occur. The action agency and the Services should consider the economic, administrative, and legal hurdles remaining before the action proceeds.

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The cumulative effects analysis is the last step or factor considered in formulating the biological opinion. Sometimes, cumulative effects can be the deciding factor in determining the likelihood of **jeopardy** or **adverse modification**. However, this is frequently the least documented part of

biological opinions, due to the lack of definitive information on future State, tribal, local, or private actions that are unrelated to the action undergoing consultation.

Gathering information on cumulative effects often requires more effort than merely gathering information on a proposed action. One of the first places to seek cumulative effects information is in documents provided by the action agency such as NEPA analyses for the action. The Services can review the broader NEPA discussion of cumulative effects, and apply the Act's narrower cumulative effects definition. Information on future non-Federal actions can be obtained through observations and inquiries during field reconnaissance in the action area; discussions with State game and fish agencies and other Federal, State, tribal and local agencies, and conservation organizations; and newspapers and other sources of local information (e.g., radio, television, libraries).

When addressing a section 7 action within a larger section 10(a)(1)(B) planning area, non-Federal proposals for development in the Habitat Conservation Plan (HCP) are considered cumulative effects for that planning area until the section 7 consultation for the section 10(a)(1)(B) permit is completed, at which time the effects of those projects become part of the environmental baseline for future consultations.

> Example: Formal consultation was conducted with the Federal Highway Administration (FHWA) on construction of a new highway in Latimer County, Oklahoma. The endangered American burying beetle is known to use forest and forest/edge habitats within the immediate area of the highway, and activities disturbing the soil surface of the beetle's habitat can impact reproduction. Intensive surface mining for coal and natural gas development were occurring in Latimer County and within the action area. Both of these activities would "benefit" from the new highway, but were independent of the highway construction. Coal mining, regulated by the Office of Surface Mining, was not considered a cumulative effect because it requires section 7 consultation. Future natural gas development is a cumulative effect as it is regulated by the State. The frequent occurrence of new drilling sites in the area indicated this activity was "reasonably certain to occur" in the future. Further, several landowners in the action area had recently signed contracts to sell their mineral rights to gas companies.

Conclusion

The conclusion section presents the Services' opinion regarding whether the aggregate effects of the factors analyzed under "environmental baseline," "effects of the action," and "cumulative effects" in the action area - when viewed against the status of the species or critical habitat as listed or designated- are **likely to jeopardize the continued existence of the species** or **result in destruction or adverse modification of critical habitat**.

Note: Conditional **no jeopardy** biological opinions (a conclusion of **no jeopardy** if the action agency undertakes certain mitigative measures) do not comply with section 7 regulations or the intent of the Act. The Services can evaluate only the Federal action proposed, not the action as the Services would like to see that action modified.

The standardized statement for introducing the conclusion section is as follows:

> **After reviewing the current status of (species), the environmental baseline for the action area** [use if different from the range of the species], **the effects of the proposed (action) and the cumulative effects, it is the Service's biological opinion that the (action), as proposed, (is/is not) likely to jeopardize the continued existence of the (species), and (is/is not) likely to destroy or adversely modify designated critical habitat.** [If no critical habitat has been designated for the species or the action will not affect designated critical habitat, use one of the following statements.] **No critical habitat has been designated for this species, therefore, none will be affected.** -OR- **Critical habitat for this species has been designated at (location), however, this action does not affect that area and no destruction or adverse modification of that critical habitat is anticipated.**

The remainder of the Conclusion section should summarize in a clear, concise manner the reasons for the finding(s) in terms of effects for each listed species or designated critical habitat.

This section addresses only two issues: whether the proposed action is likely to (1) **jeopardize the continued existence of** a listed species or (2) **result in the destruction or adverse modification of critical habitat**. The acceptable conclusions for this section of a biological opinion are as follows:

Jeopardy:

> Likely to jeopardize the continued existence of [one or more species]
>
> Not likely to jeopardize the continued existence of [one or more species]

Note: if the consultation is a reinitiation for consideration of effects on a subsequently designated critical habitat, re-evaluate the previous finding of **jeopardy** or **no jeopardy** here before continuing the analysis for **adverse modification** of critical habitat.

Destruction or adverse modification:

> No critical habitat has been designated for this species; therefore, none will be destroyed or adversely modified.

Critical habitat has been designated for this species, but the action is not likely to affect that critical habitat. Therefore, there is no destruction or adverse modification of the critical habitat.

The action is likely to result in destruction or adverse modification of critical habitat.

The action is not likely to result in destruction or adverse modification of critical habitat.

Analyses for jeopardy and adverse modification

Section 7(a)(2) of the Act requires Federal agencies to satisfy two standards in carrying out their programs. Federal agencies must ensure that their activities are not likely to: (1) **jeopardize the continued existence of** any listed species, or (2) **result in the destruction or adverse modification of designated critical habitat**. Section 7(a)(4) requires Federal agencies to confer with the Services on actions likely to jeopardize the continued existence of any species proposed for listing or result in the destruction or **adverse modification** of any proposed critical habitat.

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Regulations implementing these sections of the Act define "**jeopardize the continued existence of**" as: "to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species," and "destruction or **adverse modification**" as: "a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical."

"**Critical Habitat**" for listed species consists of (1) specific areas within the geographical area currently occupied by a species, at the time it is listed in accordance with the provisions of section 4 of the Act, on which are found those physical or biological features (i) essential to the conservation of the species, and (ii) that may require special management considerations or protection, and (2) specific areas outside the geographical area occupied by a species at the time it is listed in accordance with the provisions of section 4 of the Act, upon a determination by the Secretary that such areas are essential for the conservation of the species (50 CFR §424.02(d)).

The Services' abilities to designate unoccupied habitat as critical habitat when such areas are essential to the conservation (recovery) of listed species adds another dimension to the analysis. It is possible to conclude **adverse modification** for proposed actions if unoccupied critical habitat is sufficiently affected to appreciably diminish its value for both survival and recovery. Therefore, it is practical to distinguish between occupied and unoccupied critical habitat when a biological opinion is prepared.

In evaluating project effects on critical habitat, the Services must be satisfied that the constituent elements of the critical habitat likely will not be altered or destroyed by proposed activities to the extent that the survival and recovery of affected species would be appreciably reduced. Modification or destruction of designated critical habitat that does not reach this threshold is not prohibited by section 7.

Independent analyses are made for **jeopardy** when the species is present or potentially present, and for **adverse modification** when designated critical habitat is affected. When both analyses are made and both standards are exceeded, the reasonable and prudent alternatives should address eliminating or reducing both conditions.

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The determination of **jeopardy** or **adverse modification** is based on the effects of the action on the continued existence of the **entire** population of the listed species or on a listed population, and/or the effect on critical habitat as designated in a final rulemaking. When multiple units of critical habitat are designated for particular purposes, these units may serve as the basis of the analysis if protection of different facets of the species' life cycle or its distribution is essential to both its survival and recovery. Adverse effects on individuals of a species or constituent elements or segments of critical habitat generally do not result in **jeopardy** or **adverse modification** determinations unless that loss, when added to the environmental baseline, is likely to result in significant adverse effects throughout the species' range, or appreciably diminish the capability of the critical habitat to satisfy essential requirements of the species.

Definitions to aid in determination of jeopardy or adverse effect

Appreciably diminish the value: to considerably reduce the capability of designated or proposed critical habitat to satisfy requirements essential to both the survival and recovery of a listed species.

See glossary e handbook for d around the term elements.

Constituent elements: physical and biological features of designated or proposed critical habitat essential to the conservation of the species, including, but not limited to: (1) space for individual and population growth, and for normal behavior; (2) food, water, air, light, minerals, or other nutritional or physiological requirements; (3) cover or shelter; (4) sites for breeding, reproduction, rearing of offspring, germination, or seed dispersal; and (5) habitats that are protected from disturbance or are representative of the historic geographic and ecological distributions of a species.

Occupied critical habitat: critical habitat that contains individuals of the species at the time of the project analysis. A species does not have to occupy critical habitat throughout the year for the habitat to be considered occupied (e.g. migratory birds). Subsequent events affecting the species may result in this habitat becoming unoccupied.

Recovery: improvement in the status of a listed species to the point at which listing is no longer appropriate under the criteria set out in section 4(a)(1) of the Act. Said another way, recovery is the process by which species' ecosystems are restored and/or threats to the species are removed so self-sustaining and self-regulating populations of listed species can be supported as persistent members of native biotic communities.

Survival: the species' persistence, as listed or as a recovery unit, beyond the conditions leading to its endangerment, with sufficient resilience to allow recovery from endangerment. Said another way, survival is the condition in which a species continues to exist into the future while retaining the potential for recovery. This condition is characterized by a species with a sufficiently large population, represented by all necessary age classes, genetic heterogeneity, and number of sexually mature individuals producing viable offspring, which exists in an environment providing all requirements for completion of the species' entire life cycle, including reproduction, sustenance, and shelter.

Unoccupied critical habitat: critical habitat not occupied (i.e., not permanently or seasonally occupied) by the listed species at the time of the project analysis. The habitat may be suitable, but the species has been extirpated from this portion of its range. Conversely, critical habitat may have been designated in areas unsuitable for the species, but restorable to suitability with proper management, if the area is necessary to either stabilize the population or assure eventual recovery of a listed species. As recovery proceeds, this formerly unoccupied habitat may become occupied.

Some designated, unoccupied habitat may never be occupied by the species, but was designated because it is essential for conserving the species because it maintains factors constituting the species' habitat. For example, critical habitat may be designated for an upstream area maintaining the hydrology of the species' habitat downstream from the designated area (e.g. Concho water snake).

a. Jeopardy analysis

In determining whether an action is likely to jeopardize the continued existence of a species, the action is viewed against the aggregate effects of everything that has led to the species' current status and, for non-Federal activities, those things likely to affect the species in the future. At this point, the biologist sums up the previous analyses done to determine (1) the status of the species, (2) the environmental baseline, (3) all effects of the proposed action, and (4) the cumulative effects of other anticipated actions.

The final analysis then looks at whether, given the aggregate effects, the species can be expected to both survive and recover, as those terms are defined above. For the **jeopardy** analysis, this survival is framed in terms of the species' reproduction, numbers, and distribution in the wild.

Exceptions to the application of the jeopardy standard to an entire species: In the majority of cases, a **jeopardy** opinion is rendered when the total of the species' status, environmental baseline, effects of the proposed action, and cumulative effects lead to the conclusion that the proposed action is likely to jeopardize the continued existence of the **entire** species, subspecies, or vertebrate population as listed. However, for some wide-ranging species or those with disjunct or fragmented distributions, strict adherence to this general policy can result in significant accumulated losses of habitat and population that may, in total, result in a **jeopardy** situation.

In the past, exceptions from applying the jeopardy standard to an entire species were granted by memorandum for specific populations or "recovery units" of a species. That process of limiting the exceptions to those populations/recovery units listed in a memo is hereby discontinued and all future exceptions will adhere to the following guidance.

Jeopardy analyses may be based on an assessment of impacts to distinct population segments (DPS) of a species documented per the Services' joint policy on DPS (1995) in a final listing rule, or to a DPS as identified in a NMFS recovery plan, or to recovery units when those units are documented as necessary to both the survival and recovery of the species in a final recovery plan(s), for which a notice of availability has been published in the Federal Register. For species which had recovery plan notices published prior to this guidance, an addendum to the recovery plan, documenting the need to evaluate **jeopardy** on separate recovery units, can be written, and notice of its availability should be published in the Federal Register. FWS Regional recovery coordinators should be able to provide a list of species which meet this requirement.

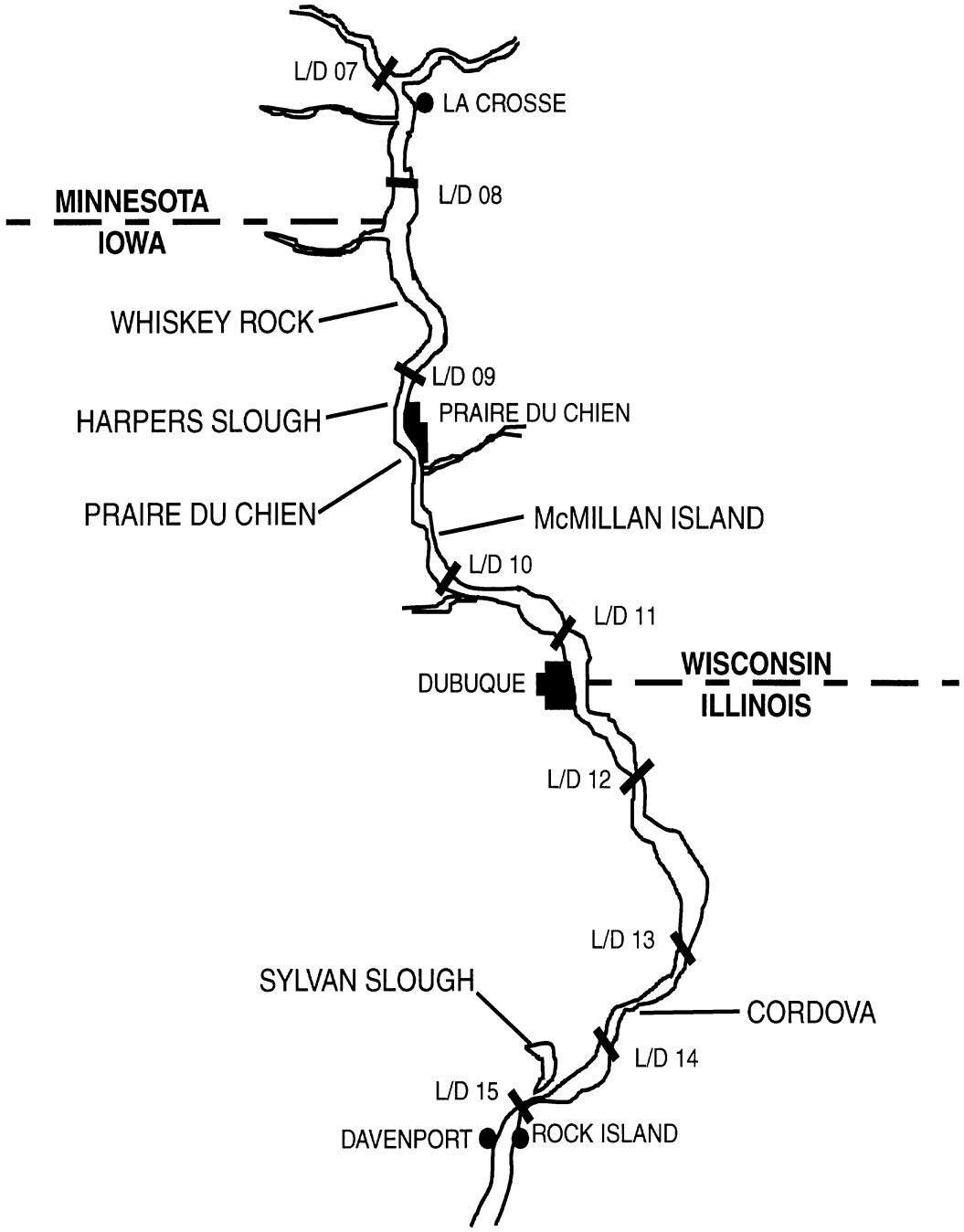
At publication, a species' recovery plan lays out the best available scientific information relative to the areas and environmental elements needed for that species to recover. Recovery plans may geographically describe actual recovery units (e.g., show lines on a map) essential to recovering the species that may or may not have been designated as critical habitat. Figures 4-8 and 4-9 illustrate such site-specific delineation of recovery units for the Higgin's eye pearly mussel.

When an action appreciably impairs or precludes the capability of a recovery unit from providing both the survival and recovery function assigned it, that action may represent **jeopardy** to the species. When using this type of analysis, include in the biological opinion a description of how the action affects not only the recovery unit's capability, but the relationship of the recovery unit to both the survival and recovery of the listed species as a whole.

For example, the recovery plan for the Higgin's eye pearly mussel identifies several site-specific units of habitat essential to the recovery of the species. An action that adversely affects the critical features of one of these recovery units can jeopardize the survival and recovery of the entire species because each unit is an essential link in the same chain. However, when dealing with a recovery unit keep in mind the status of the species as a whole to ensure that an action affecting only one unit without broader geographical implications does not jeopardize the whole

species. For example, the Prairie du Chien recovery unit of the Higgin's eye pearly mussel, considered alone, might be relatively healthy and appear to be able to sustain some impact before the species in that recovery unit is jeopardized. But, as identified by the approved recovery plan, that recovery unit contains the only known reproducing individuals of the species and may represent a major source of individuals for ensuring the survival of other recovery units. Any loss of reproductive capability in the Prairie du Chien unit can represent **jeopardy** because the survival of the entire species would be significantly impaired.

Figure 4-8. Example of "recovery unit."



b. Analysis of destruction or adverse modification of critical habitat

Critical habitat includes those physical and biological features essential to the conservation of listed species that may require special management considerations or protection. These physical and biological features include:

- o space for individual and population growth and for normal behavior;
- o food, water, air, light, minerals, or other nutritional or physiological requirements;
- o cover or shelter;
- o sites for breeding, reproduction, rearing of offspring, germination, or seed dispersal;
- o habitats protected from disturbance or representative of the historic geographical and ecological distributions of a species.

Critical habitat designations must be thorough and accurate, encompassing habitat and its constituent elements which describe an area that is essential to the ultimate survival and recovery of the listed species. However, many critical habitat designations predate the requirement for identification of constituent elements or habitat qualities necessary to allow a species to survive and recover from the threat of extinction. In such cases, the biologist should use the best scientific and commercial data available to determine and document those characteristics of the designated critical habitat that support the species' survival and recovery.

If an action affects critical habitat, but does not appreciably diminish the value of constituent elements essential to the species' conservation, the **adverse modification** threshold is not exceeded. On the other hand, the **adverse modification** threshold is exceeded when the proposed action will adversely affect the critical habitat's constituent elements or their management in a manner likely to appreciably diminish or preclude the role of that habitat in both the survival and recovery of the species. For conference purposes, constituent elements described in the proposed critical habitat rule are used to determine likely **jeopardy** or **adverse modification**.

The consultation or conference focuses on the entire critical habitat area designated unless the critical habitat rule identifies another basis for analysis, such as discrete units and/or groups of units necessary for different life cycle phases, units representing distinctive habitat characteristics or gene pools, or units fulfilling essential geographic distribution requirements.

To determine if a proposed action is likely to destroy or adversely modify critical habitat, refer to the critical habitat designation in 50 CFR §17 Subpart I. The rule provides a narrative

description of the area(s) included in the designation. A map of the critical habitat may be provided, and since 1985, the rule may identify constituent elements associated with the habitat.

The level of detail used to describe constituent elements contained in critical habitat designations varies widely. Some, usually older, critical habitat designations do not describe constituent elements, while others provide only a general description of the types of habitat contained within the designation.

For example, the critical habitat designation for the Perdido Key beach mouse (*Peromyscus polionotus trissyllepsis*) identifies the following constituent elements: "... dunes and interdunal areas, and associated grasses and shrubs that provide food and cover." Similarly, the critical habitat designation for the Sonora chub (*Gila ditaenia*) identifies primary constituent elements as "...clean permanent water with pools and intermediate riffle areas and/or intermittent pools maintained by bedrock or by subsurface flows in areas shaded by canyon walls." As data become available on the species' habitat needs and the qualitative and quantitative attributes of the physical and biological features representing "clean permanent water," it becomes possible to determine if an action is likely to destroy or adversely modify critical habitat.

The following steps help determine if a proposed action is likely to destroy or adversely modify critical habitat:

1. Review the status of the critical habitat as designated and the environmental baseline within the action area. The status and environmental baseline for any constituent elements may have been modified by actions considered in earlier biological opinions.

2. Those opinions should be consulted to determine the current baseline.

3. Evaluate the effects of the proposed action on the constituent elements of critical habitat.

4. Evaluate the cumulative effects in the action area on the critical habitat and its constituent elements.

5. Assess whether the aggregate effects of these analyses will appreciably diminish the value of the critical habitat in sustaining its role in both the survival and recovery of the species.

Critical habitat is not the same as a wilderness designation. Many activities can be expected to take place within critical habitat without conflicting with the prohibitions found in section 7(a)(2) of the Act.

Reasonable and prudent alternatives

This section lays out reasonable and prudent alternative actions, if any, that the Services believe the agency or the applicant may take to avoid the likelihood of **jeopardy** to the species or destruction or **adverse modification** of designated critical habitat (50 CFR §402.14(h)(3)). When a reasonable and prudent alternative consists of multiple activities, it is imperative that the opinion contain a thorough explanation of how each component of the alternative is essential to avoid **jeopardy** and/or **adverse modification**. The action agency and the applicant (if any) should be given every opportunity to assist in developing the reasonable and prudent alternatives. Often they are the only ones who can determine if an alternative is within their legal authority and jurisdiction, and if it is economically and technologically feasible.

If adopted by the action agency, the reasonable and prudent alternatives do not undergo subsequent consultation to meet the requirements of section 7(a)(2). The action agency's acceptance in writing of the Services' reasonable and prudent alternative concludes the consultation process.

Section 7 regulations (50 CFR §402.02) limit reasonable and prudent alternatives to:

- alternatives the Services believe will avoid the likelihood of **jeopardy** or **adverse modification**,
- alternatives that can be implemented in a manner consistent with the intended purpose of the action,
- alternatives that can be implemented consistent with the scope of the action agency's legal authority and jurisdiction, and
- alternatives that are economically and technologically feasible.

If the Services conclude that certain alternatives are available that would avoid **jeopardy** and **adverse modification**, but such alternatives fail to meet one of the other three elements in the definition of "reasonable and prudent alternative," the Services should document the alternative in the biological opinion to show it was considered during the formal consultation process. This information could prove important during any subsequent proceeding before the Endangered Species Committee (established under section 7(e) of the Act), which reviews requests for exemptions from the requirements of section 7(a)(2).

Although a strong effort should always be made to identify reasonable and prudent alternatives, in some cases, no alternatives are available to avoid **jeopardy** or **adverse modification**. Examples include cases in which the corrective action relies on:

- an alternative not under consideration (e.g., locating a project in uplands instead of requiring a Corps permit to fill a wetland);

- actions of a third party not involved in the proposed action (e.g., only the County, which is not a party to the consultation, has the authority to regulate speed limits);

- actions on lands over which the action agency has no jurisdiction or no residual authority to enforce compliance; and

- data not available on which to base an alternative.

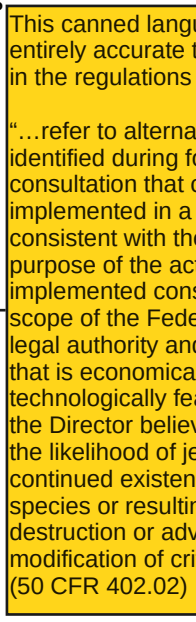
In these cases, a statement is included that no reasonable and prudent alternatives are available, along with an explanation. When data are not available to support an alternative, the explanation is that according to the best available scientific and commercial data, there are no reasonable and prudent alternatives to the action undergoing consultation.

The Services are committed to working closely with action agencies and applicants in developing reasonable and prudent alternatives. The Services will, in most cases, defer to the action agency's expertise and judgment as to the feasibility of an alternative. When the agency maintains that the alternative is not reasonable or not prudent, the reasoning for its position is to be provided in writing for the administrative record. The Services retain the final decision on which reasonable and prudent alternatives are included in the biological opinion. When necessary, the Services may question the agency's view of the scope of its authorities to implement reasonable and prudent alternatives.

The following standardized paragraphs are used in the Reasonable and Prudent Alternatives section:

Introductory paragraph:

> **Regulations (50 CFR §402.02) implementing section 7 of the Act define reasonable and prudent alternatives as alternative actions, identified during formal consultation, that: (1) can be implemented in a manner consistent with the intended purpose of the action; (2) can be implemented consistent with the scope of the action agency's legal authority and jurisdiction; (3) are economically and technologically feasible; and (4) would, the Service believes, avoid the likelihood of jeopardizing the continued existence of listed species or resulting in the destruction or adverse modification of critical habitat.**



Closing paragraph:

> **Because this biological opinion has found (jeopardy/destruction or adverse modification of critical habitat), the (agency) is required to notify the Service of its final decision on the implementation of the reasonable and prudent alternatives.**

(B) Incidental Take Statement

> ***"(4) If after consultation under subsection (a)(2) of this section, the Secretary concludes that -***
> ***(A) the agency action will not violate such subsection, or offers reasonable and prudent alternatives which the Secretary believes would not violate such subsection;***
> ***(B) the taking of an endangered species or a threatened species incidental to the agency action will not violate such subsection; and***
> ***(C) if an endangered species or a threatened species of a marine mammal is involved, the taking is authorized pursuant to section 1371(a)(5) of this title;***
> ***the Secretary shall provide the Federal agency and the applicant concerned, if any, with a written statement that -***
> ***(i) specifies the impact of such incidental taking on the species,***
> ***(ii) specifies those reasonable and prudent measures that the Secretary considers necessary or appropriate to minimize such impact,***
> ***(iii) in the case of marine mammals, specifies those measures that are necessary to comply with section 1371(a)(5) of this title with regard to such taking, and***
> ***(iv) sets forth the terms and conditions (including, but not limited to, reporting requirements) that must be complied with by the Federal agency or applicant (if any), or both, to implement the measures specified under clauses (ii) and (iii)."***
> **Section 7(b)(4) of the Endangered Species Act**

As a matter of policy, the Services require that an incidental take statement be included in all formal consultations, except those only involving plants, thus assuring the action agency that this element of formal consultation has been considered.

What is incidental take?

Properly interpreting an incidental take statement requires familiarity with section 9 of the Act, which identifies acts that are prohibited when dealing with any endangered and some threatened[1]

1 Section 9 prohibitions generally have been applied by regulation to threatened species unless there are special rules that provide exemptions, or some other alternative approach (see 50 CFR 17.31). To determine if section 9 prohibitions apply to threatened

species of fish and wildlife. When the consultation involves listed plants, the agency is advised that the Act does not prohibit incidental take of these species. However, cautions may be provided on prohibitions against certain deliberate removal or disturbance of plants (see standardized statement on page 4- 47). The term "take" is defined by the Act (section 3(19)) to mean *"to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."*

Most of these terms are commonly understood. However, the terms "harass" and "harm" have been further defined by FWS regulations at 50 CFR §17.3, as follows:

- Harass means an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering.

- Harm means an act which actually kills or injures wildlife. Such acts may include significant habitat modification or degradation when it actually kills or injures wildlife by significantly impairing essential behavioral patterns including breeding, feeding or sheltering.

NMFS has not defined the terms "harass" or "harm." A 1981 FWS Solicitor's opinion (Appendix D, #SO-1) expands on these concepts, holding that an act that harasses wildlife must demonstrate the likelihood of injury to the species and some degree of fault, whether intentional or negligent. Thus, a private landowner who wishes to develop land that serves as habitat for listed wildlife is not harassing that wildlife if reasonable measures are taken to avoid their injury. However, if the modification of such habitat would likely result in death or injury, the species nevertheless would be "harmed."

On June 29, 1995, the Supreme Court upheld the FWS' definition of harm to include **adverse modification** of habitat in the Sweet Home case (Babbitt v. Sweet Home Chapter of Communities for a Great Oregon, et al., No. 94-859 [U.S. Supreme Court 1995]). A copy of the Supreme Court decision can be found in Appendix A.

Identifying habitat modifications that harm individuals of a species involves understanding the species' life history. For example, the Florida scrub jay is highly territorial and relies for its existence on food cached within its territory. A project that destroys occupied habitat and thus the food supply for that family group increases the likelihood of their starvation. Similarly, a number of birds are highly site-tenacious, returning year after year to the same nesting site. Removal of nesting habitat on that site is likely to result in loss of the pair's reproductive

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capability, and may result in loss of the pair for lack of available feeding or nesting habitat. Opening up or fragmenting the habitat may similarly affect the species by introducing increased predation or parasitism.

Incidental take statements exempt action agencies and their permittees from the Act's section 9 prohibitions if they comply with the reasonable and prudent measures and the implementing terms and conditions of incidental take statements.

> ***"(o) EXEMPTION AS PROVIDING EXCEPTION ON TAKING OF ENDANGERED SPECIES - ". . . (2) any taking that is in compliance with the terms and conditions specified in a written statement provided under subsection (b)(4)(iv) of this section shall not be considered to be a prohibited taking of the species concerned."***
>
> **Section 7(o)(2) of the Endangered Species Act**

In order to be considered in an incidental take statement, any taking associated with an agency's action must meet the following three criteria. The taking must:

- not be likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat,
- result from an otherwise lawful activity, and
- be incidental to the purpose of the action.

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An agency action can meet the first criterion if (1) reasonable and prudent alternatives identified in a **jeopardy** or **adverse modification** biological opinion eliminate the likelihood of **jeopardy** to the species or **adverse modification** of designated critical habitat or (2) the Services make a finding of **no jeopardy** or **no adverse modification**. When the taking associated with the action violates any one of these criteria, the Services provide a documentation of that fact and a statement that such taking is prohibited by section 9.

In issuing an incidental take statement, the Services provide a statement of anticipated incidental take with reasonable and prudent measures, as appropriate, to minimize such take. This statement provides an exemption from the taking prohibitions of section 9 only when the agency and/or applicant demonstrate clear compliance with the implementing terms and conditions. These terms and conditions implement reasonable and prudent measures designed to minimize the impact of incidental take on the species as described in the incidental take statement and are binding on the action agency.

In preparing an incidental take statement, the Services are responsible for documenting the amount or extent of take anticipated; writing reasonable and prudent measures with implementing terms and conditions that are clear, precise, and enforceable; and including reporting requirements that assure timely compliance with the terms and conditions described.

The following standardized statements are provided for each section of the incidental take statement. For standardized statements for consultations involving migratory birds or marine mammals, see pages 4-56 and 4-57.

Introductory paragraph

> **Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by FWS to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by FWS as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.**
>
> **The measures described below are non-discretionary, and must be undertaken by the (agency) so that they become binding conditions of any grant or permit issued to the (applicant), as appropriate, for the exemption in section 7(o)(2) to apply. The (agency) has a continuing duty to regulate the activity covered by this incidental take statement. If the (agency) (1) fails to assume and implement the terms and conditions or (2) fails to require the (applicant) to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the (agency or applicant) must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement. [50 CFR §402.14(i)(3)]**

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When the biological opinion finds **jeopardy** or **adverse modification** without a reasonable and prudent alternative, the introductory statement is as follows:

This biological opinion finds the proposed action will result in (likely jeopardy to the species/destruction or adverse modification of critical habitat), and no reasonable and prudent alternative can be identified. Any incidental taking is prohibited by section 9 of the Act.

If listed plant species are present in the action area, the following special provisions apply:

Sections 7(b)(4) and 7(o)(2) of the Act generally do not apply to listed plant species. However, limited protection of listed plants from take is provided to the extent that the Act prohibits the removal and reduction to possession of Federally listed endangered plants or the malicious damage of such plants on areas under Federal jurisdiction, or the destruction of endangered plants on non-Federal areas in violation of State law or regulation or in the course of any violation of a State criminal trespass law. [Include citations to any applicable State laws.]

Amount or extent of take anticipated

This section outlines the amount of take anticipated from the action. Generally, incidental take is expressed as the number of individuals reasonably likely to be taken or the extent of habitat likely to be destroyed or disturbed. In determining whether the proposed action is reasonably likely to be the direct or indirect cause of incidental take, the Services use the simple causation principle; i.e., "but for" the implementation of the proposed action and its direct or indirect degradation of habitat, would actual injury or mortality to individuals of a listed wildlife species be reasonably likely to occur? If the take would not occur but for the proposed action, then the Services must describe the amount or extent of such anticipated incidental take.

When preparing an incidental take statement, a specific number (for some species, expressed as an amount or extent, e.g., all turtle nests not found and moved by the approved relocation technique) or level of disturbance to habitat must be described. Take can be expressed also as a change in habitat characteristics affecting the species (e.g., for an aquatic species, changes in water temperature or chemistry, flows, or sediment loads) where data or information exists which links such changes to the take of the listed species.

In some situations, the species itself or the effect on the species may be difficult to detect. However, some detectable measure of effect should be provided. For instance, the relative occurrence of the species in the local community may be sufficiently predictable that impacts on the community (usually surrogate species in the community) serve as a measure of take, e.g., impacts to listed mussels may be measured by an index or other censusing technique that is based on surveys of non-listed mussels. In this case, the discussion determining the level at which incidental take will be exceeded (reinitiation level) describes factors for the non-listed mussels indicating impact on the listed species, such as an amount or extent of decrease in numbers or recruitment, or in community dynamics. Similarly, if a sufficient causal link is demonstrated (i.e.

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the number of burrows affected or a quantitative loss of cover, food, water quality, or symbionts), then this can establish a measure of the impact on the species or its habitat and provide the yardstick for reinitiation.

In programmatic or national consultations, which evaluate planning documents or broad programs (see Chapter 5, Special Consultations and Reviews), the best available scientific data may not support the determination of any anticipated level of incidental take. In such instances, the incidental take statement should indicate that, based on the best available data, no incidental take is anticipated and that the issue will be reexamined during the consultation process for site-specific actions under the umbrella of the larger planning document.

Also, the time period over which the incidental take is expected to occur is addressed in this section. For example, the statement should distinguish between an instance in which a permanent loss of two bald eagle nesting territories will result from construction of a new bridge, and a case in which the two territories are likely to be abandoned only during the actual construction period.

Standardized statements:

- Incidental take statement when no take is anticipated (**jeopardy** or **non-jeopardy** opinion):

> **The Service does not anticipate the proposed action will incidentally take any (species).**

- Incidental take statement for a biological opinion of likely **jeopardy** when incidental take is anticipated:

o For opinions with only one reasonable and prudent alternative:

> **The Service has developed the following incidental take statement based on the premise that the reasonable and prudent alternative will be implemented.**

o For opinions with more than one reasonable and prudent alternative, provide separate estimates of anticipated take for each reasonable and prudent alternative, as appropriate:

> **The Service has developed the following incidental take statement based on the premise that reasonable and prudent alternative number XX will be implemented.**

- Introductory statement for amount and extent of take (**jeopardy** or **non- jeopardy** opinion):

> **The Service anticipates (number of individuals or extent of habitat resulting from take of (species)) could be taken as a result of this proposed action. The incidental take is**

expected to be in the form of (harm, harass, kill, etc.). [Separately specify each type of take anticipated.]

[Provide a concise summary of the analysis leading to this determination.]

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The Service anticipates incidental take of (species) will be difficult to detect for the following reason(s): [Incidental take of actual species numbers may be difficult to detect when the species is wide-ranging; has small body size; finding a dead or impaired specimen is unlikely; losses may be masked by seasonal fluctuations in numbers or other causes (e.g., oxygen depletions for aquatic species); or the species occurs in habitat (e.g., caves) that makes detection difficult]. **However, the following level of take of this species can be anticipated by loss of** [quantify amount of surrogate species, food, cover, other essential habitat element such as water quantity or quality, or symbiont] **because:** [provide an explanation].

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The requirement that incidental take not reach the level of **jeopardy** or **adverse modification** is addressed in the biological opinion that finds **no jeopardy/no adverse modification** for the action or that provides reasonable and prudent alternative(s) to avoid **jeopardy/adverse modification**.

Statement of impact:

o The following statement should be made when the biological opinion finds likely **jeopardy/adverse modification**, and no reasonable and prudent alternative is available.

Because the proposed action is (1) likely to jeopardize the continued existence of (species) or result in the destruction or adverse modification of critical habitat, and (2) no reasonable and prudent alternatives have been identified, any incidental take resulting from the proposed action would be prohibited.

o The proposed action is not likely to result in **jeopardy/adverse modification**:

In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat.

o The opinion contains reasonable and prudent alternatives:

In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat when (one of) the reasonable and prudent alternative(s) is implemented.

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Reasonable and prudent measures

The incidental take statement provides nondiscretionary measures that are necessary and appropriate to minimize the impact of incidental take. In a biological opinion where there are a number of reasonable and prudent alternatives provided to eliminate **jeopardy** to a species, there may be varying levels of incidental take associated with the alternatives. In that case, the biological opinion may contain different incidental take statements, each with reasonable and prudent measures and terms and conditions, for each reasonable and prudent alternative.

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Section 7 requires minimization of the level of take. It is not appropriate to require mitigation for the impacts of incidental take. Reasonable and prudent measures can include only actions that occur within the action area, involve only minor changes to the project, and reduce the level of take associated with project activities. These measures should minimize the impacts of incidental take to the extent reasonable and prudent. For example, a measure may call for actions like education of employees about the species, reduction of predation, removal or avoidance of the species, or monitoring. Measures are considered reasonable and prudent when they are consistent with the proposed action's basic design (e.g., narrowing of disturbed right-of-way at known species locations), location (e.g., temporary storage of equipment or other materials), scope, duration, and timing. The test for reasonableness is whether the proposed measure would cause more than a minor change to the project.

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Reasonable and prudent measures and terms and conditions should be developed in coordination with the action agency and applicant, if any, to ensure that the measures are reasonable, that they cause only minor changes to the project, and that they are within the legal authority and jurisdiction of the agency or applicant to carry out. For example, the effect of measures costing $10,000 or $100,000 may be critically significant for a single family boat dock, but minor for a multi-million dollar development complex. An example of an unreasonable measure would be a timing delay to minimize the impacts of incidental take if project timing is critical.

Reasonable and prudent measures serve to minimize impacts on the specific individuals or habitats affected by the action. Activities resulting from these measures must occur within the action area, which may be larger than the footprint of the project itself (see description of action area in section 4.5(A)).

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Reasonable and prudent measures are not a substitute for a finding of **jeopardy** or **adverse modification**. Similarly, discretionary conservation recommendations under section 7(a)(1) are

not a substitute for reasonable and prudent measures as a means of minimizing the impacts of incidental take.

Standardized introductory paragraph for reasonable and prudent measures for species other than marine mammals and migratory birds:

> **The Service believes the following reasonable and prudent measure(s) are necessary and appropriate to minimize impacts of incidental take of (species):** [Go on to list these measures and provide a brief discussion documenting the Service's analysis of the biological need for, and reasonableness of, these measures.]

Terms and conditions

The terms and conditions set out the specific methods by which the reasonable and prudent measures are to be accomplished, e.g., who is to be educated, when/what/how; the actions necessary to reduce predation; who may remove or how to avoid the species; or the protocol for monitoring. Terms and conditions of an incidental take statement must include reporting and monitoring requirements that assure adequate action agency oversight of any incidental take [50 CFR §402.14(i)(1)(iv) and (i)(3)]. The monitoring must be sufficient to determine if the amount or extent of take is approached or exceeded, and the reporting must assure that the Services will know when that happens.

The incidental take statement should include a discussion on the "disposition of individuals taken" that distinguishes between injured and killed animals, and tells the action agency (1) what needs to be done with sick or injured animals to assure adequate care; (2) how to preserve dead animals to determine the cause of death, if not known; (3) the procedures for disposing of the animal, including shipping preserved animals to research facilities; and (4) to notify the nearest Service Law Enforcement Office when a listed species is taken.

Care should be exercised in developing the incidental take statement and its terms and conditions. Consider: (1) any incidental take anticipated must not be likely to result in **jeopardy** or **adverse modification**; (2) the action agency must provide for monitoring the actual number of individuals taken; (3) review requirements need to determine when the reasonable and prudent measures are not reducing the effect to the extent anticipated; and (4) if the anticipated level of incidental take is exceeded, the action agency must immediately stop the action causing the taking and reinitiate formal consultation.

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Standardized introductory paragraph for terms and conditions:

> **In order to be exempt from the prohibitions of section 9 of the Act, the (agency) must comply with the following terms and conditions, which implement the reasonable and**

prudent measures described above and outline required reporting/monitoring requirements. These terms and conditions are non-discretionary.

[Go on to list these terms and conditions, including the requirements for monitoring, reporting, review, [see 50 CFR 402.14(i)(1)(iv) and (i)(3)] and disposition of any specimens [see 50 CFR 402.14(i)(1)(v).]

Salvage of species and habitat data included as a term and condition: Where practical, an attempt should be made to salvage specimens or habitat data from areas to be destroyed as a direct or indirect result of the action. For example, when the Services determine that research would be beneficial to the species (generally identified by a recovery plan or recovery outline), and a willing researcher has a permit for that research, the terms and conditions could call for reasonable allowance to collect biological data on specimens that would be killed, or information on species' habitat (e.g., the construction, depth, moisture characteristics of underground burrows). "Reasonable" is to be defined in each case as appropriate to the action, and should not significantly delay legitimate project activities. For example, if the action is time sensitive, such as bulldozing a firebreak during a fire, there is likely to be insufficient time to collect specimens. However, should a long-term project be proposed, such as development of a housing project, more extensive opportunities for collection may exist.

Salvaging live specimens may minimize the net adverse effects of an action by providing individuals for captive breeding or approved translocation. If dead specimens can be collected, valuable data may still be obtained, possibly providing research material in lieu of the need to collect additional specimens.

Terms and conditions for salvage efforts are explicitly described in the incidental take statement to fully inform the action agency and/or the applicant of how they are to comply with that statement. Information is to be provided as to who will do the salvage, where, when, techniques to be employed, the fate of specimens and data collected, the possible need for Federal and/or State permits or other documentation to conduct the salvage operation or transfer the specimens, or guidelines on who to contact for changes in the protocol.

The impact of incidental take is to be minimized by the reasonable and prudent measures and implementing terms and conditions. In many cases, the implementation of the terms and conditions may lead to a reduction in the anticipated level of incidental take. However, the incidental take statement quantifies the amount of take anticipated based on implementation of the proposed action before implementation of the terms and conditions. To ensure that the measures are working as anticipated, a review requirement is included in the closing paragraph as follows:

Closing Paragraph

The Service believes that no more than (number or extent) of (species) will be incidentally taken as a result of the proposed action. The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize the impact of incidental take that might otherwise result from the proposed action. If, during the course of the action, this level of incidental take is exceeded, such incidental take represents new information requiring reinitiation of consultation and review of the reasonable and prudent measures provided. The Federal agency must immediately provide an explanation of the causes of the taking and review with the Service the need for possible modification of the reasonable and prudent measures.

If, after receipt of a Final Biological Opinion, an action agency declines to take the reasonable and prudent measures and their implementing terms and conditions or to make them conditions of the license or permit, the Services document this fact(s) and state in writing that any anticipated taking would be prohibited by section 9, unless a permit is granted under section 10 of the Act. The Services should follow up with the action agency to determine if the terms and conditions have been implemented.

Coordination of incidental take statements with other laws, regulations, and policies

Section 10 permits

Section 10(a)(1)(A) permits (Research and Education)

Determining whether a section 10(a)(1)(A) permit is needed in addition to the incidental take statement depends on the proposed action. When intentional take is described as part of the proposal in order to minimize anticipated incidental take, the biological opinion and incidental take statement serve as the authority for that take. Example: "Take" of desert tortoises where a highway is to be constructed. Animals captured as part of the proposed action could be put in research or captive propagation projects. Since this intentional “take” would be a requirement of the proposed action to minimize the anticipated impact to the species, this action would not require a separate section 10 permit. However, if the terms and conditions require future take for research purposes, a separate section 10 permit is required. Example: If the biological opinion for the highway construction requires the agency to capture additional tortoises for study at a later date, a section 10 permit would be required.

Section 10 permits are not required for:

- activities carried out under an approved cooperative section 6 agreement as long as any taking of an endangered species is not reasonably anticipated to result in (1) the death or permanent disabling of the specimen; (2) the removal of the specimen from the State where

the taking occurred; (3) the introduction of the specimen so taken, or any progeny derived from such specimen, into an area beyond the historical range of the species; or (4) the holding of the specimen in captivity for a period of more than 45 consecutive days. (50 CFR §17.21(c)(5))

- o take activities directed by the terms and conditions of an incidental take statement in accordance with section 7(o)(2).

When incidental take involves an applicant or licensee, the permitting Federal agency should be directed to provide a copy of the incidental take statement to the applicant/licensee, or to include the language of the terms and conditions in the permit itself if they are to be implemented by the applicant. The applicant/licensee then has a document in their possession at anytime they are involved in an action that may result in take.

Terms and conditions covering research or other "enhancement" activities detail the conditions of the research or require a subsequent Service and/or State review and approval of the research plan. See the FWS Handbook for Endangered and Threatened Species Permits for conditions included in section 10 permits.

Safe Harbor Agreements

The Act's "take" prohibitions may have, inadvertently, created some disincentives for non-Federal landowners to manage their lands for the benefit of listed species. To address this issue, the Services are seeking ways to encourage an "endangered species friendly" approach to non-Federal lands management through the creation of incentives or by removing conservation disincentives. One such approach is the "Safe Harbor" concept. This program protects landowners from the Act's restrictions when they cooperate with the Services to benefit listed species on their lands. A proposed policy and rule for the implementation of the Safe Harbor concept was published jointly by FWS and NMFS in the Federal Register on June 12, 1997 [62 FR 113, 32178-32183 and 32189-32194]. Some information contained in this section may be outdated upon publication of the final policy and regulations. Users of this handbook should check the final policy and regulations for further guidance.

"Safe Harbor" agreements are currently developed through existing Act provisions under section 10(a)(1)(B). Under these agreements non-Federal landowners are encouraged to maintain or enhance existing endangered species habitat, to restore listed species habitats, or to manage their lands in a manner that benefits listed species. In return, the Services provide assurances that future activities would not be subject to restrictions above those applicable to the property at the time of enrollment into the program. As a result, any endangered species occupying a landowner's property at the time of enrollment in the program would remain protected (baseline). Thus, to implement the "Safe Harbor" program, the Services must authorize incidental take of all

listed species on an enrolled property in excess of those lands or animals that were already protected at the time of signing the agreement. Once the proposed policy and regulations are final, these arrangements will be formalized through an enhancement of survival permit (section 10(a)(1)(A)) and an agreement or similar instrument between the landowner and the Services, and would be subject to intra-Service section 7 consultation.

In essence, future incidental taking of non-baseline animals and habitat would be authorized. While not totally risk free, the Services believe this approach will provide positive conservation benefits. The animals and habitat that would be taken under the program would not have existed but for the program and without the programs' incentives, landowners may continue to actively exclude listed species in land management activities. This approach will help reduce habitat fragmentation, increase population numbers and serve as a way to field test innovative management techniques. Some of these gains will be reversed when landowners choose to return to baseline conditions, but the Services believe that the gains will outweigh the reversals. This approach is expected to help diminish the fear and distrust that many non-Federal landowners have toward listed species and the Act.

Section 10(a)(1)(B) permits (Conservation Plans)

Permits for incidental take under section 10(a)(1)(B) require a FWS or NMFS intra-Service consultation. These consultations are conducted in the same manner as outlined in this chapter except that the incidental take statement is governed by section 10(a)(1)(B) to the extent that mitigation, including off-site compensation not directed at the affected individuals, may be considered. Specific procedures for FWS intra-Service consultation are outlined in Appendix E of this handbook. The intra-Service consultation should be done concurrently during development of the Habitat Conservation Plan, and finalized once the HCP has been officially submitted. The Services have developed a handbook for Habitat Conservation Planning and Incidental Take Permit Processing (November 1996), which should be referenced for further information.

In some cases, Federal agencies besides the Services may be integrally involved in HCP efforts. In these cases, the action to be conducted by the Federal agency during the implementation of the HCP should be included as an additional element to be consulted on through the section 7 consultation conducted for the issuance of a permit. This allows the Services to conduct one formal consultation that incorporates the actions for the HCP and any related and supportive Federal actions into one biological opinion. The biological opinion developed for the HCP should also incorporate the necessary biological analysis on the Federal action as well as the actions in the HCP to help eliminate duplication. Thus, the single biological opinion issued by the Services would address both the Federal action and the non-Federal action, and it would include an incidental take statement that authorizes any incidental take by the Federal agency and an incidental take permit that authorizes any incidental take by the section 10 permittee. Also,

the incidental take statement in a section 7 biological opinion does not provide a "No Surprises assurances" guarantee. The action agency is responsible for reinitiating consultation should their actions result in exceeding the level of incidental take.

The incidental take statement for any section 10(a)(1)(B) permit application includes the following standardized language which would replace the second paragraph in the standardized introductory paragraph language given on page 4-46. Appropriate changes may be made in the wording of the following paragraphs when consulting on any subsequent amendments to the permit.

> **The proposed (name)] HCP and its associated documents clearly identify anticipated impacts to affected species likely to result from the proposed taking and the measures that are necessary and appropriate to minimize those impacts. All conservation measures described in the proposed HCP, together with the terms and conditions described in any associated Implementing Agreement and any section 10(a)(1)(B) permit or permits issued with respect to the proposed HCP, are hereby incorporated by reference as reasonable and prudent measures and terms and conditions within this Incidental Take Statement pursuant to 50 CFR §402.14(i). Such terms and conditions are non-discretionary and must be undertaken for the exemptions under section 10(a)(1)(B) and section 7(o)(2) of the Act to apply. If the permittee fails to adhere to these terms and conditions, the protective coverage of the section 10(a)(1)(B) permit and section 7(o)(2) may lapse. The amount or extent of incidental take anticipated under the proposed (*name*) HCP, associated reporting requirements, and provisions for disposition of dead or injured animals are as described in the HCP and its accompanying section 10(a)(1)(B) permit(*s*).**

Migratory birds including bald eagles

Though bald longer listed specific regu regarding ta (under the B Eagle Act).

Some migratory birds (e.g., golden-cheeked warbler and the bald eagle) are also listed as either threatened or endangered species. Incidental take for these species can be granted under the Act, but neither the Migratory Bird Treaty Act (MBTA) nor the Bald and Golden Eagle Protection Act (BEPA) have explicit provisions that address incidental take.

This situation has now been clarified via a February 9, 1996, Director's memo (see Appendix D, SO-6). FWS may use its powers of prosecutorial discretion to determine that if incidental take of listed migratory birds, including the bald eagle, occurs, and if the requirements of the consultation have been met, the FWS would choose not to prosecute the incidental take under the MBTA or the BEPA. Any appropriate actions to minimize incidental take of threatened or endangered migratory birds or bald eagles may be addressed in the incidental take statement provided with the biological opinion.

Again, only incidental take of migratory birds listed as threatened or endangered under the Act, including bald eagles, may be addressed in the following language. Include, when appropriate, the following language into any section 7 incidental take statement concluding that take of listed migratory birds (including the bald eagle) will result from the actions under consultation:

> **The Fish and Wildlife Service will not refer the incidental take of any migratory bird or bald eagle for prosecution under the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. §§ 703-712), or the Bald and Golden Eagle Protection Act of 1940, as amended (16 U.S.C. §§ 668-668d), if such take is in compliance with the terms and conditions (including amount and/or number) specified herein.**

Marine mammals

The incidental take of listed marine mammals must meet the requirements of the Marine Mammal Protection Act (MMPA) as well as the Act. NMFS has responsibility for listed species of whales, dolphins, seals and sea lions; FWS has responsibility for the southern sea otter and manatee. Framework regulations at 50 CFR §18.27 and Parts 216 and 229 establish standards and a process for determining whether an exception exists for incidental taking of small numbers of marine mammals related to a specific activity in a specific geographic region. After a set of area-specific regulations are promulgated for a particular area or activity, letters of authorization are issued annually by the NMFS or the FWS, depending on the species involved, to each person wishing to conduct an activity that may result in incidental take.

In addition, the MMPA amendments of 1994 authorize incidental take of marine mammals in the form of "harassment" authorizations for non-commercial fishing activities, and permits for incidental take for commercial fishing activities under certain circumstances. NMFS has published regulations implementing the 1994 MMPA amendments. [61 FR 45086 (August 30, 1995) and 61 FR 15884 (April 10, 1996)] The August 1995 regulations concern the taking of marine mammals incidental to commercial fishing operations. The April 1996 regulations clarify the existing regulations for obtaining a small, incidental take authorization for other activities. Consistent with the Act and regulations at 50 CFR §402.14(i) (Appendix A), incidental take statements for marine mammals are not included in formal consultations until regulations, authorizations, or permits under MMPA 101(a)(5) are in effect.

Standard paragraph for incidental take of marine mammals: [If the incidental take is not authorized under MMPA 101(a)(5):]

> **The Service is not including an incidental take authorization for marine mammals at this time because the incidental take of marine mammals has not been authorized under section 101(a)(5) of the Marine Mammal Protection Act and/or its 1994 Amendments. Following issuance of such regulations or authorizations, the Service**

may amend this biological opinion to include an incidental take statement for marine mammals, as appropriate.

After area-specific or activity-specific regulations have taken effect:

Pursuant to section 101(a)(5) of the Marine Mammal Protection Act, as amended in 1994, and implementing regulations at 50 CFR §18.27, and 50 CFR §216 and §229, the following measures are required to be consistent with the total taking allowable under the MMPA authorization and to effect the least practical adverse impact on the species and its habitat and on the availability of the species for subsistence uses: [Cite measures identified in specific regulations and/or letters of authorization or permits for commercial fishing]. **Pursuant to section 7(b)(4) of the Endangered Species Act, the following reasonable and prudent measures are necessary and appropriate to minimize take:** [Go on to list the measures, followed by the standard paragraph for terms and conditions.]

(C) Conference Report/Conference Notice

In addition to determining whether an action is likely to jeopardize listed species or destroy or adversely modify designated critical habitat, the Services also may assist action agencies in making such a preliminary determination for proposed species or proposed critical habitats. The final determination of likely **jeopardy** or **adverse modification** to such proposed species or critical habitats remains with the Services. When the Services make a preliminary determination that a proposed agency action presents the likelihood of **jeopardy** to proposed species or **adverse modification** to proposed critical habitat, the action agency should be advised in writing. A determination should be made as to whether the agency wants the proposed species/critical habitat included in the formal consultation.

If the agency does not want proposed species/critical habitat considered, notice of the need to confer (or, if the action agency requests an informal conference, the conference report) is included in the consultation package following the incidental take statement. A finding of "likely to jeopardize" is not required to trigger the conference procedure if the action agency wishes to initiate a review of possible effects on a proposed species or critical habitat. The Services will confer when an agency requests such a conference based on their determination that the proposed action may affect a proposed species or critical habitat.

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When an action agency requests formal conference for an action that also affects listed species, the analyses of effects may be included in the body of the biological opinion. However, an incidental take statement for proposed species is separated from that for listed species, and contains the standardized language provided in Chapter 6.

(D) Conservation Recommendations

> ***"(1) The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act. All other Federal agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species. . . ."***
>
> **Section 7(a)(1) of the Endangered Species Act**

When the Services identify discretionary actions the action agency can implement, relevant to the proposed action and consistent with their section 7(a)(1) authority, voluntary conservation recommendations may be included as a separate item in the consultation package. Conservation recommendations serve several purposes. They can suggest how an action agency can assist species conservation in furtherance of their responsibilities under section 7(a)(1) of the Act. They may further minimize or avoid the adverse effects of a proposed action on listed species or critical habitat - in which case they are applied after the terms and conditions of the incidental take statement are implemented. They may also suggest ways to minimize or avoid the adverse effects of a proposed action on proposed or candidate species. They can recommend studies improving an understanding of a species' biology or ecology. Wherever possible, these actions should be tied to tasks identified in recovery plans.

Conservation recommendations may be provided separately or at the end of the consultation package, but they are not incorporated anywhere in the biological opinion or incidental take statement where they may be confused with the opinion or statement itself. These recommendations are never a precondition for a subsequent finding of **no jeopardy** or to reduce the impacts of anticipated incidental take.

Standardized paragraphs for conservation recommendations:

Introductory paragraph:

> **Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.**

Closing paragraph:

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In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

(E) Reinitiation Notice

Section 7 regulations outline four general conditions for reinitiating formal consultation: (1) the amount or extent of incidental take is exceeded; (2) 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; (3) the action is modified in a manner causing effects to listed species or critical habitat not previously considered; (4) a new species is listed or critical habitat designated that may be affected by the action.

In this section, the Services should identify situations, if any, that meet one or all of these four conditions. For example, the Services may identify studies in progress whose results may cause a reassessment of the biological opinion, or proposed listings or critical habitat designations.

Federal action agencies should be informed of the advisability of maintaining a Federal nexus for the project so that consultation can be reinitiated, if necessary. This is usually done by making the terms of the biological opinion a condition of the license, permit, or other authorization that is issued for project approval.

The standard closing statement of the formal consultation package is as follows:

This concludes formal consultation on the action(s) outlined in the (request/reinitiation request). As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

(F) Literature Cited

Section 7(a)(2) of the Act requires biological opinions to be based on "the best scientific and commercial data available." This section of the opinion identifies the scientific and commercial data used in development of the biological opinion.

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4.6 PROCEDURES FOR MODIFYING BIOLOGICAL OPINIONS AND INCIDENTAL TAKE STATEMENTS

When the action agency determines that one or more of the four conditions requiring reinitiation of formal consultation has occurred, consultation must be reinitiated. Similarly, if the Services recognize that any of these conditions have occurred, written advice is provided to the action agency of the need to reinitiate consultation.

Documentation of a reinitiated consultation must be in writing, and must contain sufficient information to record the nature of the change in the action's effects and the rationale for amending analyses of anticipated incidental take or the reasonable and prudent alternatives or measures (Exhibit 4-4).

Reinitiations involving major changes in effects analyses or changes in the Services' biological opinion are addressed fully in a new consultation. A reinitiation based on a new species listing or critical habitat designation is treated as a new consultation, although data in the original opinion may be referenced when the action has not changed.

Exhibit 4-4. Example of modification of an incidental take statement.

United States Department of the Interior

FISH AND WILDLIFE SERVICE

FISH AND WILDLIFE ENHANCEMENT
RENO FIELD STATION
4600 Kietzke Lane, Building C-125
Reno, Nevada 89502-5093

February 7, 1991

File No.: 1-5-90-F-25

Memorandum

To: District Manager, Las Vegas District, U. S. Bureau of Land Management, Las Vegas, Nevada

From: Field Supervisor, Reno Field Station, U. S. Fish and Wildlife Service, Reno, Nevada

Subject: Clark County Regional Flood Control District's Proposed 10-Year Plan for Flood Control Facilities: Amendment to Opinion

This letter constitutes an amendment to the August 29, 1990, Biological Opinion on the Clark County Regional Flood Control District's (District's) 10-Year Plan (File No: 1-5-90-F-25). The Fish and Wildlife Service (Service) has received verbal communication from _____(name)____ of the Bureau of Land Management's Las Vegas District office on January 10, 1991, and copies of correspondence to your agency from the District dated November 26, 1990, and January 3, 1991, regarding changes in the design of the Upper Las Vegas Wash Detention Basin (Facility N3-8). In addition, that portion of the floodway (N3-1) extending north of the detention basin is proposed to be eliminated. ____(name)____ requested our determination of whether additional surveys would be required, and whether formal consultation with the Service should be reinitiated.

Our review of the alternative proposal indicates that the overall size of the new detention basin will be 5 acres less than that of the original facility. Furthermore, the area to be disturbed by the new proposed dike, located in the same general area as the floodway, is less than that of the portion of the floodway that will be eliminated by the alternative design. Therefore it is likely

that the level of incidental take that would occur from construction of N3-8 Alt. would not exceed that which would occur from the original proposal.

Accordingly, the following condition is substituted for Condition l.e. of the Biological Opinion issued to your agency on August 29, 1990. The change from the original condition is underlined.

l.e. Temporary tortoise proof fencing shall be erected around each of the following facilities prior to beginning construction activities: N3-8 Alt ; N4-8; N5-1, 2, 3, 4, 5, 6; N10-9, 10, 11; N12-9, 10, 11; Cl-45; C2-46, 47, 48, 49, 52, 53; Sl-59; S2-81; S4-23, 24; S20-17; S21-28, 29; S22-25; 4109-28. A qualified biologist shall supervise the erection of the fence. All tortoise burrows and other burrows and dens that could be occupied by tortoises within the fence construction zone shall be excavated by hand. All tortoises, including any eggs found, shall be removed from the fence construction zone according to the protocol provided in Appendix C prior to brush removal, grading, and fence installation.

If you have any questions, please contact ___(name)_____ of this office at ____(phone)____.

Sincerely yours,

Field Supervisor

4.7 HANDLING CLASSIFIED DOCUMENTS

National security classified documents used during consultation require specialized handling.

- Only personnel trained and qualified to handle such documents may do so. Security clearances are regularly checked to determine if they are still current.

- If classified information is included in the biological opinion, that portion of the document is covered by a derivative classification (and must be marked and protected accordingly), and can be reviewed only by appropriate personnel with the required security clearance who have a need to know.

- All classified documents are to be maintained in files secured for their level of security. See Departmental regulations for handling of such files.

- Classified information is exempt from disclosure under the Freedom of Information Act (FOIA).

When classified documents or information will be required for a consultation, FWS personnel should check with the FWS Regional Office and the Department of the Interior's Security Office in Washington, DC, for current procedures and names of personnel with appropriate security clearances who are authorized to review the classified information. Similarly, NMFS personnel should contact the Endangered Species Division at Headquarters to determine the appropriate security procedures and contacts.

4.8 PROTECTION OF CONFIDENTIAL BUSINESS INFORMATION

During the course of consultations, some of the information received or gathered may contain trade secrets and commercial or financial information that is prohibited from release by Federal statute. Further, under FOIA, information may be exempt from disclosure if its release would cause competitive harm to the submitter, would impair the Government's ability to gather necessary information in the future, or would interfere with compliance or program effectiveness. If confidential information was provided to the Services by the action agency, outside requests for access to, or copies of, the information generally should be referred to the agency that collected the information for a determination concerning release (made under 43 CFR §2.15(c)). If the Services obtained the information directly from the businesses or organizations (including sole proprietorships), the Services will generally need to make a determination concerning release in accordance with the FOIA (Part 203 of the Fish and Wildlife Manual). Contact your Regional FOIA Coordinator or the Services' FOIA Officer for assistance in processing such requests.

4.9 DISTRIBUTION OF FINAL FORMAL CONSULTATION DOCUMENTS

Upon completion, the formal consultation package is provided promptly to the action agency and the applicant, if any. The action agency then provides copies to other interested parties. For example, EPA is responsible for distributing pesticide consultation documents. However, if the action agency refuses to provide copies, the Services will provide copies upon request after sufficient time (10 working days) has passed to ensure that the action agency has received the consultation document. The Services will inform the action agency that they are responding to the request.

Exceptions to this waiting period include providing copies simultaneously to appropriate State and tribal agencies when they are involved in the consultation or implementation of terms of the biological opinion.

Consultations containing classified material or confidential business information follow procedures laid out in 4.7 and 4. 8 above.

CHAPTER 5 - SPECIAL CONSULTATIONS AND REVIEWS

The following procedures facilitate section 7 compliance for complex programs or specialized situations.

5.1 PROACTIVE CONSERVATION REVIEWS - Section 7(a)(1)

> ***The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act. All other Federal agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 4 of this Act.***
>
> **Section 7(a)(1) of the Endangered Species Act**

Implementation of section 7(a)(1) needs to be closely coordinated with the section 7(a)(2) consultation program. FWS offices and other agencies have recognized the need for, but have yet to request, such a review of major national programs.

This type of programmatic review is also appropriate for Federal agency planning and program management documents (e.g. BLM Resource Area Management Plans, Forest Timber Program Planning Documents). Often in these cases there is not enough specific information about on-the-ground impacts to determine if there would be an adverse effect from a specific project and what the amount of incidental take might be. By identifying potential program effects and developing guidelines to minimize these effects to listed species and designated critical habitats, subsequent "stepped-down" consultations, where more specific effects on species can be determined within the context of a local geographical area, can be done more expediently (see also section 5.4 regarding Streamlined Consultations).

Ultimately, these conservation reviews should provide the agency with concurrence on, or recommendations for, a blueprint for conservation activities including section 7(a)(2) consultation, section 10 permits, assistance in developing and implementing recovery plans, and assistance in candidate monitoring and management programs. Initial efforts will address the consultation component, and examples will be provided as they become available. For the time being, such conservation reviews are confined to national programs (plans, regulations) and will be conducted or coordinated by the Washington Office of both Services.

5.2 NATIONAL CONSULTATIONS - Section 7(a)(2)

Increasingly, the Services are requested to consult on an action or series of actions affecting many species over all or a major portion of the country. Examples have included: the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) Animal Damage Control program addressing most of that office's activities nationwide; and the Environmental Protection Agency's (EPA) pesticide registration program. Within the FWS, these consultations have been addressed by one or more teams from the Regions, with the lead assigned to one Region or the Washington Office. National consultation documents will be signed in the FWS Washington Office. Within the NMFS, these consultation documents are addressed and signed in the Washington Office of Protected Resources.

These consultations differ from "conservation reviews" (see (A) above) in that (1) specific species affected by the action can be identified; (2) specific actions affecting these species can be described; (3) the effects of the action on the species can be determined during consultation; and (4) the consultation fulfills an agency's obligation under section 7(a)(2). If a federal action affects both NMFS and FWS species, it is appropriate to conduct a joint consultation and issue a joint opinion (see Appendix C for an example of a joint consultation). Joint consultation documents should be addressed and signed at the Washington Office level of both Services.

Successful conduct of these consultations requires the Regions to provide strong support to the development of these opinions, including funding and staff time to complete assigned portions of the work, and the Washington Office to designate a liaison to facilitate the consultation.

Program-specific protocols have been developed for recurring national consultations, like EPA's pesticide registration program.

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(A) Pesticide consultations (FWS)

As the action agency responsible for most pesticide registrations, U.S. Environmental Protection Agency is usually the agency that requests consultation on these activities. Occasionally, other agencies (e.g., U.S. Food and Drug Administration) may also request consultation on chemicals with pesticidal effects under their jurisdiction for review of their effects on listed species. These consultations review the potential effects of all registered uses of pesticides on listed species. EPA has combined several pesticides into a single request. Occasionally, EPA may request case-by-case consultation on a specific pesticide when conditions warrant.

This section describes general procedures the FWS follows while reviewing Environmental Protection Agency's registration of pesticides under the Federal Insecticide, Fungicide, and Rodenticide Act. This guidance is intended to facilitate the efficient and effective completion of these consultations and improve coordination among the FWS's Field, Regional, and Washington

offices. This guidance will facilitate the evaluation of potential impacts to Federally listed species from the use of pesticides.

Registration of pesticides is an action with potentially broad geographical effects perhaps making these consultations the most complex type of consultation the FWS deals with under section 7. Because of their technical complexity the FWS has utilized National teams to conduct these consultations.

The current FWS national pesticide consultation team consists of (1) a team leader from the Division of Endangered Species in the Washington Office (DTE), (2) at least one biologist from each of Regions 1-6, and (3) a subteam of both Regional and Field Office Environmental Contaminants staff, as necessary, led by a biologist from the Division of Environmental Contaminants in the Washington Office (DEC).

The team leader is responsible for initial contacts and coordination with EPA in preparing their initiation package. Upon receipt of the initiation package, the team leader will promptly distribute copies to all team members and request technical review from the DEC technical subteam. Concurrently the team leader will notify EPA of receipt of their initiation package and will provide EPA with a timeline for completion of the FWS's evaluation of the package. If the FWS's review cannot be completed within the expected timeframe it is the responsibility of the team leader to request an extension from EPA. This review of the initiation package could have one of two outcomes. First the FWS may accept the package as adequate to formulate the necessary biological opinions, in which case the team leader will notify EPA, in writing, acknowledging initiation of formal consultation and providing an expected timeframe for completion of the biological opinion. Another possible outcome of this review could be the determination by the FWS that the initiation package does not provide adequate information for the FWS to develop a biological opinion. In such a case the team leader will provide EPA, in writing, with a rationale for the FWS's determination and also clear guidance on how EPA should supplement its initiation package to be satisfactory for the development of the necessary biological opinions.

Section 7 regulations allow 90 days to conduct formal consultation and an additional 45 days to complete the biological opinion, for a total of 135 days from receipt of the initiation request to delivery of the biological opinion. Given the workload involved in conducting pesticide consultations, these consultations generally cannot be completed within the regulatory timeframe. DTE negotiates an acceptable timeframe for completing national pesticide consultations and requests extensions, as necessary, based on recommendations from team members.

When initiation is acknowledged, DTE's responsibility as team leader is to ensure that all team members have access to all necessary and pertinent information, coordinate all team meetings and workshops, and facilitate information exchange among team members, DEC, and EPA.

Each team member is responsible for evaluating all listed and proposed species and designated or proposed critical habitats for which their Region has the lead. Each team member will develop the necessary biological opinions and submit them to the team leader for incorporation into a draft biological opinion. Once a draft opinion is developed it will be provided to DEC for their review. DEC's role at this stage of the consultation is to review the draft opinion for technical accuracy and comment on the technical feasibility of the reasonable and prudent alternatives or measures or both. Once the draft opinion has been reviewed, it will be provided to EPA for EPA's review and comment.

As soon as the team leader receives EPA's comments on the draft opinion, the team leader will transmit such comments to all team members and to DEC's technical subteam for their review and consideration. DEC's role at this stage would be to aid the team in evaluating EPA's comments on the draft opinion and suggesting courses of action to address EPA's comments. DTE's role at this stage is to facilitate the dialogue among DEC, National team members, and EPA on how to best address EPA's comments and develop the final opinion with implementable reasonable and prudent alternatives and measures. Each team member is responsible for editing or amending, as necessary, the portions of the opinion they developed. After all the team members have completed the necessary amendments to the opinion, they submit their work to the team leader for final review by both DEC and DTE prior to signature and transmittal to EPA.

Future EPA or other agency pesticide consultations will probably follow this general format. However, modifications will be made, as necessary, to continually improve the process and accommodate any special circumstances, if warranted.

(B) Other national consultations

Several other programs will probably generate national consultation requests. For example, State and tribal programs to assume administration of section 404 of the Clean Water Act may require development of specific national consultation procedures.

5.3 REGIONAL OR ECOSYSTEM CONSULTATIONS

Action agencies occasionally request multi-action and "ecosystem-based" consultations. These consultations may be step-downs of conservation reviews or national consultations. For FWS, a lead Region or field office may be designated. Regional and ecosystem biological opinions may be signed at the FWS Regional or Field Office level, as appropriate. For NMFS, these consultations are addressed by a lead Region for the Office of Protected Resources, and signed by the Washington Office Director, Protected Resources, except where signature has been delegated to a specific Region. Examples of these consultations include:

Regional:

- U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) program to eradicate the boll weevil in southern cotton growing states, to control grasshoppers and crickets in western states, or to control Mediterranean fruit flies in the Southwest.

Ecosystem:

- An FWS Region 6-led consultation on the continuing operations of all Corps dams on the Missouri River and their effects on listed species within that aquatic ecosystem (bald eagle, piping plovers, interior least terns and the pallid sturgeon).

- An FWS Region 3 consultation on operation of Corps facilities along the breadth of the Upper Mississippi River.

- An FWS Region 2-led consultation with the Bureau of Reclamation on regulations to implement water entitlements on the Lower Colorado River.

- An FWS Region 1-led consultation with the BLM on grazing activities throughout the range of the desert tortoise, and other program activities within the proposed critical habitat.

Consideration should be given to conducting ecosystem-based consultations, particularly in areas undergoing large HCPs, with the Federal agencies whose future activities may affect one or more species within a regional planning area. This type of consultation would involve programmatic review of the agencies' activities and would be most effective if conducted simultaneously with development of the HCP. Such an approach could involve a single lead agency, if there is a predominant Federal agency influence (e.g., the Bureau of Reclamation in the Central Valley of California), or could involve a limited number of agencies representing Federal programs in the planning area. Such simultaneous consideration of both Federal and non-Federal programs could (1) assist in assessing overall effects on a species/group of species/ ecosystem from multiple actions; (2) result in a better determination of the respective roles of all the parties in conserving the species/ecosystem, (3) assist in determining the priority of all proposed actions for use of any "resource cushion" that may exist, and (4) demonstrate that all parties are being provided equal consideration at equal speed (programmatic consultations do not have applicants and are subject to mutually agreed timeframes).

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5.4 STREAMLINED CONSULTATIONS

(A) Activities in the Pacific Northwest

In March of 1995, FWS, NMFS, the Forest Service, and the Bureau of Land Management released a jointly-developed consultation timeline and streamlining process for accomplishing forest health projects and salvage timber harvest in Washington, Oregon, Idaho, and California. In February of 1997 a revised Streamlining Procedures Consultation Guidance was released (See Appendix A for copies of the agreement and the Guidance document). The process utilizes interagency teams to work together in the early stages of project planning, and to complete consultation on projects within the timeframes needed to meet the requirements of the National Environmental Policy Act. The process provides for consultation to occur simultaneously with project planning and development under NEPA by the action agency. Informal consultations are to be completed within 30 days, and formal consultations within 60 days of submission of an agreed-upon biological assessment. On May 31, 1995, the process was expanded to apply to all consultation efforts in the Pacific Northwest, with the exception that on BLM lands the streamlined consultation process will only apply to consultations involving forest ecosystem activities. During the period from August 30, 1995, to August 30 1996, informal consultations done under this program were completed in an average of 17 days (162 consultations), while formal consultations averaged 46.5 days (50 consultations).

(B) Interagency Streamlined Consultation MOA

An MOA, which is currently being developed jointly by the FWS, NMFS, Bureau of Land Management, and the Forest Service will establish a framework for cooperation in the conductance of section 7 consultation on land management plans, amendments, and programs that BLM and FS implement. The MOA is being developed in response to the need for BLM and FS to update these plans in a timely manner when new species become listed or critical habitat is designated. Early and effective interagency cooperation is critical in meeting this need.

The MOA will confirm that the BLM and FS agree to consult on the effects that implementation of land management plans or other programmatic documents have on listed species or designated critical habitat, to conference on proposed species or proposed critical habitat, and to include an analysis of the effects of the plan on candidate species in a Biological Assessment/ Evaluation. The signatory agencies will agree to maintain and exchange information on species biology and planning schedules and priorities on a regular basis. A document providing guidance on the process for implementing streamlined consultations on land use plans and programs will be finalized and implemented when the MOA is put in place. The MOA will be signed soon. Once signed, the MOA will be considered an addendum to this handbook as Appendix H.

5.5 INCREMENTAL STEP CONSULTATIONS

When a statute authorizes an agency to complete an action in incremental steps, the Services shall, at the request of the action agency, issue a biological opinion on the incremental step being considered. That opinion also includes the Services' views on the entire action (50 CFR §402.14(k)). An action agency may proceed with each proposed incremental step after consultation, when:

- the biological opinion concludes that the incremental step does not violate section 7(a)(2) of the Act;
- the action agency continues consultation with respect to the entire action, and obtains biological opinions, as required, for each incremental step;
- the action agency fulfills its continuing obligation to obtain sufficient data upon which to base the final biological opinion on the entire action;
- the incremental step does not violate section 7(d) of the Act concerning irreversible or irretrievable commitment of resources; and
- there is a reasonable likelihood that the entire action will not violate section 7(a)(2) of the Act.

Consultation for the first phase of an incremental step action must be conducted formally to address these five factors. If no adverse effect is likely for subsequent intermediate steps, consultation may be conducted informally for such steps. An example of an incremental step consultation can be found in Appendix C.

Incremental step consultation is most appropriate for long-term, multi-staged activities for which agency actions occur in discrete steps, such as the development of oil and gas resources on the Outer Continental Shelf. However, in Conner v. Burford, 848 F.2d 1441 (9th Cir. 1988), cert. denied, 109 S.Ct. 1121 (1989), the Ninth Circuit Court of Appeals disallowed the incremental step consultation approach for onshore oil and gas leasing and made clear the burden it expects action agencies to carry:

> *In light of the ESA requirement that the agencies use the best scientific and commercial data available to insure that protected species are not jeopardized, 16 U.S.C. §1536(a)(2), the FWS cannot ignore available biological information or fail to develop projections of oil and gas activities which may indicate potential conflicts between development and the preservation of protected species. We hold that the FWS violated the ESA by failing to use the best information available to prepare comprehensive biological opinions considering all*

> *stages of the agency action, and thus failing to adequately assess whether the agency action was likely to jeopardize the continued existence of any threatened or endangered species, as required by section 7(a)(2). To hold otherwise would eviscerate Congress' intent to "give the benefit of the doubt to the species."*
>
> Connor v. Burford
> 848 F.2d at 1454 (footnote omitted).

The Services should follow the ruling in Conner on all consultations for proposed on-shore oil and gas leases and other activities on Federal lands located within the following Ninth Circuit States: Alaska, Arizona, California, Hawaii, Idaho, Montana, Nevada, Oregon, and Washington.

The question has been raised about whether this approach is inconsistent with the consultation regulations. The Conner court stated that Service regulations on section 7 consultation limit the incremental step consultation process to activities that are statutorily segmented. See 848 F.2d at 1457 n.38. Under 50 CFR §402.14(k), an opportunity for incremental review exists when an activity is "authorized by a statute that allows the agency to take incremental steps toward the completion of the action." The Department of the Interior believes the incremental steps need not be statutorily-mandated to meet the requirements of section 402.14(k), and has long held that the Mineral Leasing Act allows the use of a segmented decisionmaking process. Therefore, Service regulations do not prevent evaluating on-shore mineral leasing activities through incremental-step consultation. This disparity between Department of the Interior practice and the wording of the Ninth Circuit opinion in Conner does not require a revision to the section 7 regulations. Continued use of the incremental step activities in areas outside the jurisdiction of the Ninth Circuit can still be achieved without regulatory amendment. See Appendix D (SO-7) for a copy of Conner.

This chapter on conferences conflates a lot of concepts from required conferences under 7(a)(4) of the Act versus completely voluntary conferences which are not contemplated in in the Act or regulations. Caution is recommended when reading this chapter.

CHAPTER 6 - CONFERENCE

"Each Federal agency shall confer with the Secretary on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed ... or result in the destruction or adverse modification of critical habitat proposed to be designated for such species. This paragraph does not require a limitation on the commitment of resources as described in subsection (d)."

Section 7(a)(4) of the Endangered Species Act of 1973

6.1 THE NEED FOR CONFERENCE

Section 7(a)(4) was added to the Act to provide a mechanism for identifying and resolving potential conflicts between a proposed action and proposed species or proposed critical habitat at an early planning stage. While consultations are required when the proposed action may affect listed species, a conference is required only when the proposed action is likely to jeopardize the continued existence of a proposed species or destroy or adversely modify proposed critical habitat. However, Federal action agencies may request a conference on any proposed action that may affect proposed species or proposed critical habitat. The Services also can request a conference after reviewing available information suggesting a proposed action is likely to jeopardize proposed species or destroy or adversely modify proposed critical habitat.

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6.2 INFORMAL CONFERENCE

Conferences may involve informal discussions among the Services, the action agency, and the applicant (if any). During the conference, the Services may assist the action agency in determining effects and may advise the action agency on ways to avoid or minimize adverse effects to proposed species (or candidate species if present, and voluntarily considered by the action agency and/or the applicant), or proposed critical habitat (Figure 6-1). Although not required by the Act, the Services encourage the formation of partnerships to conserve candidate species since these species by definition may warrant future protection under the Act.

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(A) Conference Report

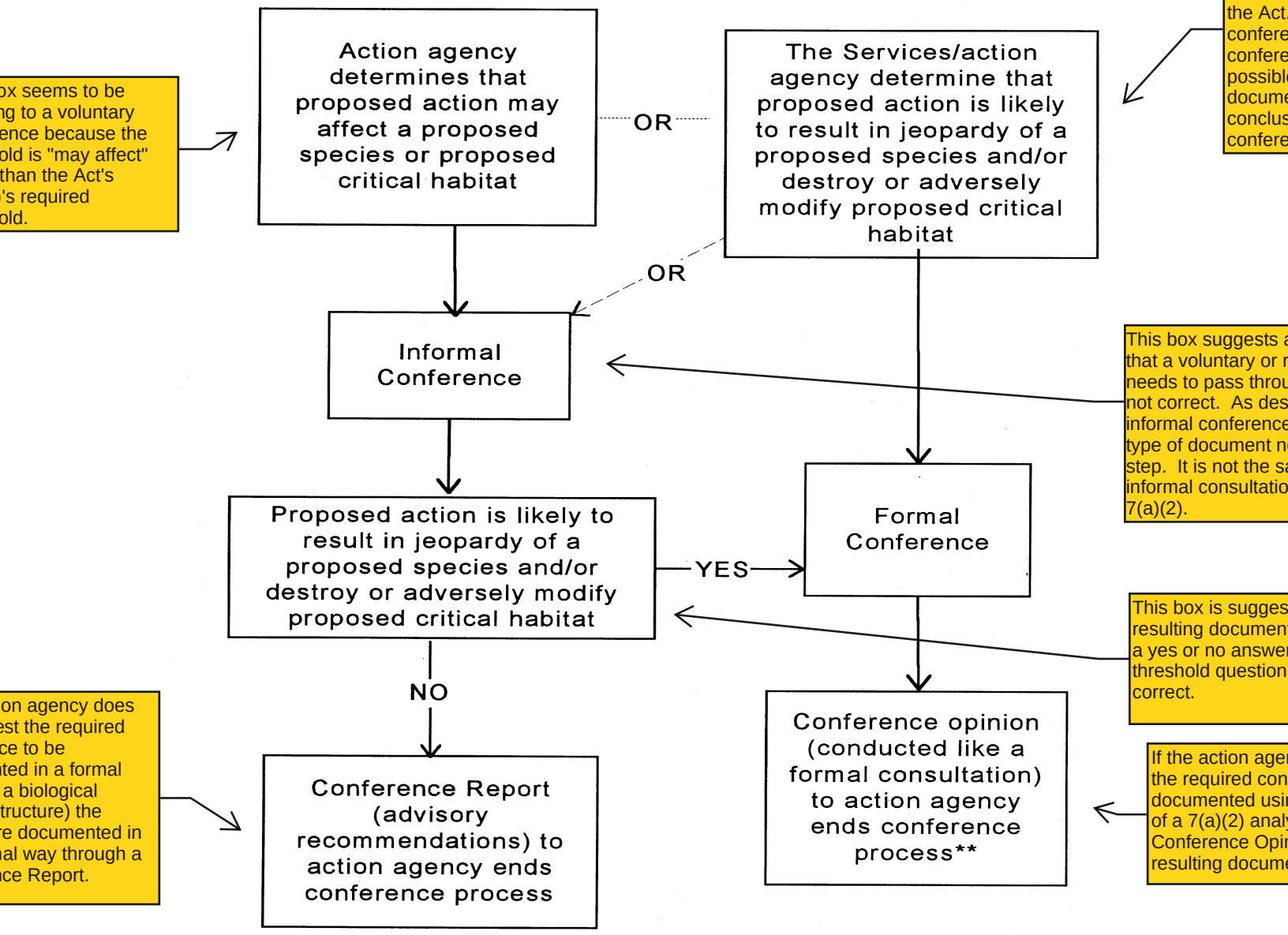
Following informal conference with the action agency, the Services issue a conference report containing recommendations for reducing adverse effects. These recommendations are advisory because the action agency is not prohibited from jeopardizing the continued existence of a proposed species or destroying or adversely modifying proposed critical habitat until the species is listed or critical habitat is designated. However, as soon as a listing becomes effective, the prohibition against **jeopardy** or **adverse modification** applies regardless of the action's stage of

completion. Therefore, action agencies should utilize the conference report's recommendations to avoid likely future conflicts. (Figure 6-2).

(B) Conference Notice

If the Services, instead of the Federal Agency, determine that an action is likely to jeopardize a proposed species or destroy or adversely modify proposed critical habitat, it notifies the action agency of a need for conference. This takes the form of a letter or memorandum if the action is likely to jeopardize only a proposed species or adversely modify a proposed critical habitat. When the Services are already in consultation on listed species or designated critical habitats, a conference notice is appended after the incidental take statement.

Figure 6-1. Conference processes.



* Informal discussions can occur at any time.

** The incidental take statement does not become effective unless the Services adopt the opinion as final once the speciesislisted and/or critical habitat is designated.

6.3 FORMAL CONFERENCE

Action agencies may request formal conference on a proposed action. Although the regulations (50 CFR §402.10(d)) permit the Services to decide whether formal conference is appropriate, generally formal conferences should be provided if requested.

Formal conferences follow the same procedures as formal consultation. The opinion issued at the end of a formal conference is called a conference opinion. It follows the contents and format of a biological opinion. However, the incidental take statement provided with a conference opinion does not take effect until the Services adopt the conference opinion as a biological opinion on the proposed action - after the species is listed.

(A) Timeframes of Formal Conferences

Section 7 regulations provide no specific schedule for conferences. However, by policy, formal conferences will follow the same timeframes as formal consultations. The timing of a formal conference can be affected by a final listing action. If a proposed species is listed during the conference, and the proposed action still may affect the species, the formal conference ends and formal consultation begins. The subsequent formal consultation timeframes begin with the request from the action agency for initiation of formal consultation.

(B) Format of Conference Opinion

Stand-alone conference

A stand-alone conference opinion addresses only proposed species or proposed critical habitat, and has the same format and contents as a final biological opinion (see chapter 4). Standardized language for a stand-alone formal conference opinion includes the following (sample language for formal stand-alone conference can be found in Appendix B):

If **no jeopardy/adverse modification:**

> **After reviewing the current status of (species), the environmental baseline for the action area** [use if different from the range of the species], **the effects of the proposed (action) and the cumulative effects, it is the Service's conference opinion that the (action), as proposed, (is/is not) likely to jeopardize the continued existence of the proposed (species), and (is/is not) likely to destroy or adversely modify proposed critical habitat.**

In **jeopardy** or **adverse modification** opinions with a reasonable and prudent alternative, the introductory statement is as follows:

> **Based on the foregoing analysis, the Service concurs with the agency that the (proposed action) is likely to (jeopardize the continued existence of the proposed species and/or destroy or adversely modify the proposed critical habitat). While the Act does not preclude an agency from taking an action with such adverse effects on a proposed (species/critical habitat), the (agency) is reminded that if the (species is listed/critical habitat is designated) prior to the completion of the action or while (agency) still maintains any discretionary authority relative to the action, the (agency) may be required to modify or suspend the action at that time pending resolution of formal consultation under section 7. Consequently, the Service advises (the agency) to consider implementing the following reasonable and prudent alternative(s).**

When the conference opinion finds **jeopardy** or **adverse modification** without a reasonable and prudent alternative, the introductory statement is as follows:

> **The conference opinion finds the proposed action will result in (likely jeopardy to the species/destruction or adverse modification of critical habitat), and no reasonable and prudent alternative can be identified. Any incidental taking is prohibited by section 9 of the Act.**

In the incidental take statement:

> Insert the standard Introductory paragraph of the Incidental Take Statement followed by the paragraph below:
>
> **The prohibitions against taking the species found in section 9 of the Act do not apply until the species is listed. However, the Service advises the (agency) to consider implementing the following reasonable and prudent measures. If this conference opinion is adopted as a biological opinion following a listing or designation, these measures, with their implementing terms and conditions, will be non-discretionary.**

Once the proposed listing or critical habitat proposal is made final, the action agency writes the appropriate Service requesting that the conference opinion be confirmed as a biological opinion.

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Conference included in a formal consultation

When both listed and proposed species or designated and proposed critical habitats are affected by a proposed action, the Services advise the action agency of the presence of the proposed species or proposed critical habitat and determine whether the agency wants them considered

during the formal consultation. If the agency does not, the appropriate Service may include a notice of the need to confer in the consultation if there is a likely **jeopardy** to proposed species or **adverse modification** to proposed critical habitat. However, if proposed species or proposed critical habitat are considered in a formal consultation, the analyses for these species/critical habitats are included in the same sections as the listed species, using the standardized statements in 5.2(B)(1). Sample language for a combined formal conference/ consultation can be found in Appendix B.

(C) Confirmation of Conference Opinion as a Formal Consultation

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Requests for Service confirmation of a conference opinion must be in writing. The Services must respond within 45 calendar days, and, within that period, may adopt the conference opinion as the biological opinion issued through formal consultation if no significant changes have occurred in the proposed action or the information used in the conference. When the conference opinion is adopted in this manner, it satisfies an action agency's section 7 consultation requirements. If the Services deny the confirmation request, they advise the action agency to initiate formal consultation unless the "may affect" situation has been eliminated.

The standard closing statement for formal conferences is as follows:

> **This concludes the conference for (action). You may ask the Service to confirm the conference opinion as a biological opinion issued through formal consultation if the (species is listed or critical habitat is designated). The request must be in writing. If the Service reviews the proposed action and finds that there have been no significant changes in the action as planned or in the information used during the conference, the Service will confirm the conference opinion as the biological opinion on the project and no further section 7 consultation will be necessary.**
>
> **After listing of ((species) as endangered/threatened and/or designation of critical habitat for (species)) and any subsequent adoption of this conference opinion, the Federal agency shall request reinitiation of consultation if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect the species or critical habitat in a manner or to an extent not considered in this conference opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the species or critical habitat that was not considered in this conference opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action.**
>
> **The incidental take statement provided in this conference opinion does not become effective until the species is listed and the conference opinion is adopted as the biological opinion issued through formal consultation. At that time, the project will be**

reviewed to determine whether any take of the (species/habitat) has occurred. Modifications of the opinion and incidental take statement may be appropriate to reflect that take. No take of the (species/habitat) may occur between the listing of (species) and the adoption of the conference opinion through formal consultation, or the completion of a subsequent formal consultation.

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Figure 6-2. Comparison of the conference and consultation provisions of the Endangered Species Act and regulations implementing section 7.

	CONFERENCE	CONSULTATION
Authority	section 7(a)(4)	section 7(a)(2)
When Required	Federal action to fund, authorize or carry out an action likely to jeopardize proposed species or destroy or adversely modify proposed critical habitat	Federal action to fund, authorize or carry out an action which may affect listed species or designated critical habitat.
Types of Procedures	**Informal conference -** Informal discussions resulting in advisory recommendations on ways to minimize or avoid adverse effects, avoid jeopardy, or adverse modification. If the species is listed or the critical habitat is designated before the action is completed, the need for formal consultation must be determined.	**Informal consultation -** Informal discussions resulting in advisory recommendations on ways to avoid adverse effects. If adopted, may lead to a concurrence that the action is not likely to adversely affect the listed species/designated critical habitat. ESA obligation is completed, based on concurrence by the Services.

	CONFERENCE	CONSULTATION
	Formal conference - At the agency's request, and Service's concurrence, the formal process for consultation will be followed, resulting in an opinion that can stand as the biological opinion for the action if no significant new information or change in the action develops. The incidental take statement is not effective unless the Services adopt the conference opinion once the proposed species is listed.	**Formal consultation -** A formal process with regulated timeframes, that results in the development of a biological opinion and incidental take statement.
Agency Responsi-bilites	**Formal conference -** None, but a prudent agency would adopt any reasonable and prudent alternatives and incidental take terms and conditions if the conference opinion is expected to be adopted as the biological opinion following listing.	**Formal Consultation -** Adopt the reasonable and prudent alterna-tives and incidental take terms and condit-ions, or do not undertake the action, or apply for an exemption.

The use of the wor "concurrence" here advised. The regu say...."and deeme appropriate by the the word concurre be used only in a c under 7(a)(2).

	CONFERENCE	CONSULTATION
Irreversible and Irretrievable Commitment of Resources Precluding Formulation or Implementation of Reasonable and Prudent Alternatives - Section 7(d)	Not applicable, but a prudent agency would not make such a resource commitment if the conference opinion is to be adopted as the biological opinion following listing.	Can not be made between the "may affect" finding and the conclusion of formal consultation.
Incidental Take	**Informal conference -** Not required. **Formal conference -** Required to be addressed in the conference opinion but not effective until adopted by the Services after the species is listed.	**Informal consultation -** Not required. **Formal consultation -** Required except for plant species - anticipated incidental take may be zero.

CHAPTER 7 - EARLY CONSULTATION

" ... a Federal agency shall consult with the Secretary on any prospective agency action at the request of, and in cooperation with, the prospective permit or license applicant if the applicant has reason to believe that an endangered species or a threatened species may be present in the area affected by his project and that implementation of such action will likely affect such species."

Section 7(a)(3) of the Endangered Species Act

7.1 ELIGIBILITY FOR EARLY CONSULTATION

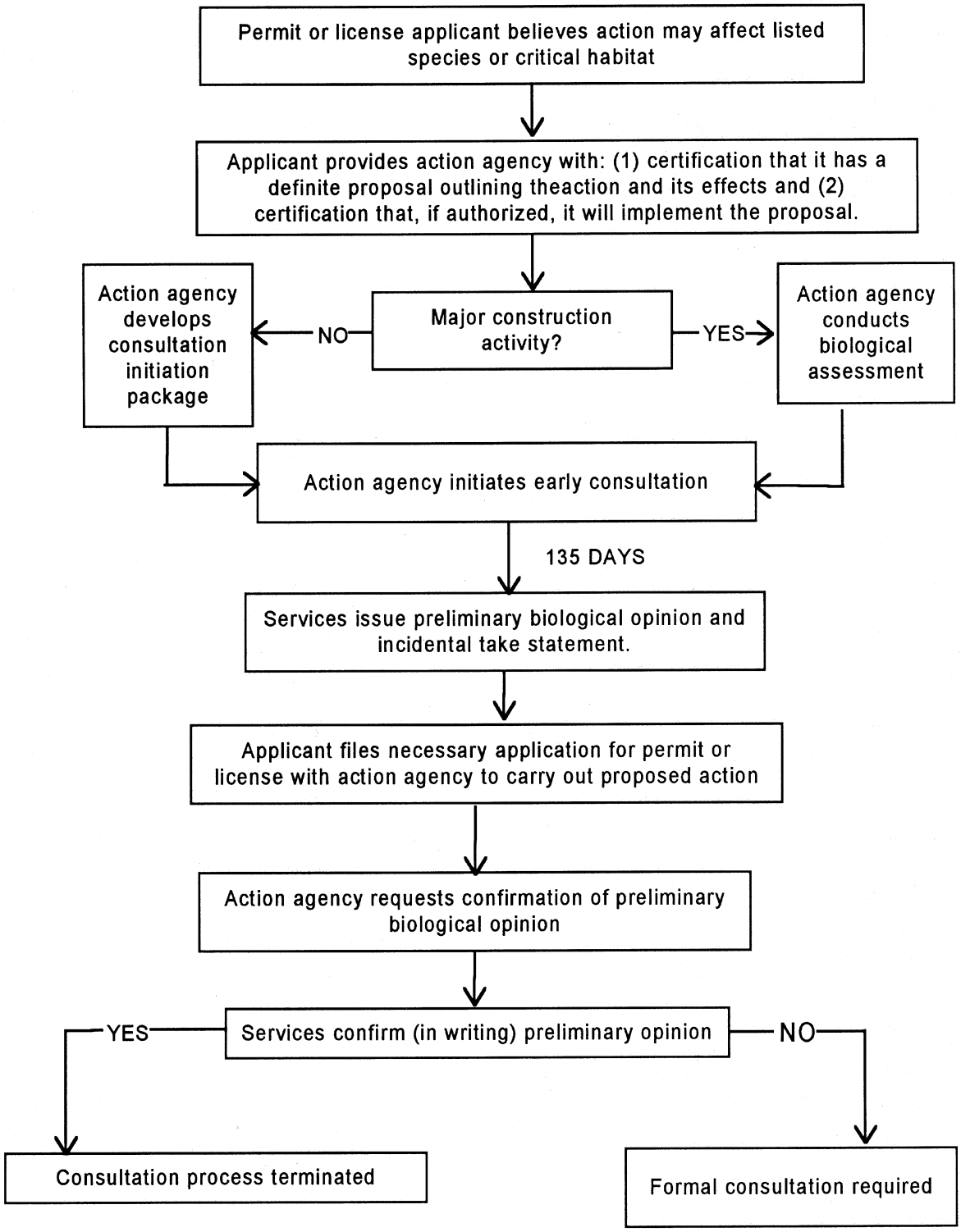
Section 7(a)(3) of the Act was added in the 1982 amendments, and is addressed in section 402.11 of the regulations. Early consultations are intended to reduce the potential for conflicts between listed species or critical habitat and proposed actions. Early consultation is an optional process that occurs before a prospective applicant files an application for a Federal permit or license, frequently referred to as pre-application (Figure 7-1). To qualify, a prospective applicant must certify in writing to the Federal agency that:

- he/she has a definite proposal outlining the action and its effects; and
- he/she intends to implement the proposal if it is authorized.

If the prospective applicant provides the action agency with this information in writing, the section 7 regulations require the action agency to initiate early consultation with the Services. This request contains the same information required for formal consultation (50 CFR §402.14(c)). If the action is a major construction activity, a biological assessment is required. Action agencies conducting an early consultation use the same procedures and have the same responsibilities as they do for formal consultations. Although early consultation is conducted between the Services and the action agency, the prospective applicant should be involved throughout the process.

A long "early consultation" example (Shorelands project in San Francisco Bay) is included in Appendix C.

Figure 7-1. Early Consultation Process.



7.2 PROCEDURES

> ***"(2) Consultation under subsection (a)(3) shall be concluded within such period as is agreeable to the Secretary, the Federal agency, and the applicant concerned."***
>
> **Section 7(b)(2) of the Endangered Species Act**

By regulation (50 CFR §402.11(e)) the procedures and timeframes for early consultation are the same as those for formal consultation (Chapter 4). The action agency's request for initiation of early consultation must be accompanied by the information described in 50 CFR §402.14(c). If the prospective activity involves a major construction activity, the action agency must prepare a biological assessment before initiating early consultation.

Preliminary biological opinions prepared for early consultations are nearly identical to biological opinions prepared for formal consultations so they can be confirmed as a final biological opinion once the prospective applicant submits a permit application to the action agency. The major difference between a preliminary biological opinion and a final biological opinion lies in the incidental take statement, which is not effective until the early consultation is confirmed as a formal consultation. A sample of an early consultation document can be found in Appendix B, with modified standardized statements including the following:

Closing of incidental take statement:

> **Because the proposed action is likely to result in the taking of listed species incidental to that action, the Service has included an incidental take statement pursuant to section 7(b)(4) of the Act. However, because this is an early consultation on the prospective action, this incidental take statement does not eliminate the (agency's) or the (applicant's) liability under the taking prohibitions of section 9 of the Act.**
>
> **Instead, this statement provides your agency and the applicant with foreknowledge of the terms and conditions that will be required if this prospective application is filed with your agency. These reasonable and prudent measures and implementing terms and conditions become effective only after the Service confirms the preliminary biological opinion as a final biological opinion on the prospective action.**

7.3 CONFIRMATION AS A FINAL BIOLOGICAL OPINION

> ***"(B) Consultation under subsection (a)(3) of this section, and an opinion issued by the Secretary incident to such consultation, regarding an agency action shall be treated respectively as a consultation under subsection (a)(2) of this section, and as an opinion issued after consultation under such subsection, regarding that action if the***

> ***Secretary reviews the action before it is commenced by the Federal agency and finds, and notifies such agency, that no significant changes have been made with respect to the action and that no significant change has occurred regarding the information used during the initial consultation."***
>
> **Section 7(b)(3)(B) of the Endangered Species Act**

At the conclusion of an early consultation, the Services issue a preliminary biological opinion that has the same format and contents as a final biological opinion. Once the prospective applicant formally applies for a permit or license from the action agency, and before final action is taken on the application, the action agency writes the Services to request confirmation of the preliminary biological opinion as a final biological opinion. Within 45 days, the Services confirm or deny the preliminary opinion as final if there are no significant changes in the proposed action or the information used in the early consultation. If the Services confirm the preliminary opinion as final, that action satisfies the action agency's section 7 consultation requirements. If the Services deny the request, it asks the action agency to initiate formal consultation. To make the action agency aware of the opportunity to confirm the early consultation, the following closing paragraph is used:

> **This concludes early consultation for the (action). You may ask the Service to confirm this preliminary biological opinion as a final biological opinion on the prospective action once you receive the permit application from the prospective applicant. The request must be in writing. If the Service reviews the proposed action and finds that there are no significant changes in the action as planned or in the information used during the early consultation, it will confirm the preliminary biological opinion as a final biological opinion on the project and no further section 7 consultation will be necessary except when one of the following criteria for reinitiation is met: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the action is subsequently modified in a manner that causes an effect on the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. When the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.**
>
> **If the Service does not confirm this preliminary biological opinion as a final biological opinion on the prospective action, the (agency) is required to initiate formal consultation with the Service.**

Exhibit 7-1. Sample letter to prospective applicants about the availability of early consultation.

(date)

Dear _____:

This responds to your letter of ___(date)___, concerning the upcoming proposed experimental use of _____. This agricultural chemical was previously used in [State] under the U.S. Environmental Protection Agency's (EPA) Experimental Use Permit (EUP) ___-EUP-__ _.

We have enclosed a general list of all endangered, threatened, and proposed species in [State], organized by county, for planning purposes. When specific test plots have been designated, EPA should consult with this office pursuant to section 7(a)(2) of the Endangered Species Act of 1973, as amended (ESA), prior to the issuance of the EUP for _____.

The enclosed list constitutes technical assistance only. It does not fulfill EPA's requirements pursuant to section 7 of the ESA; only EPA or their non-Federal designee can fulfill those requirements. By copy of this letter, EPA's Office of Pesticide Programs is being made aware of their responsibility to consult with the FWS to insure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of listed species or result in destruction or adverse modification of critical habitat. We hope the resulting dialogue between EPA and the FWS will provide registrants and permittees with better guidance on compliance with the Endangered Species Act. If EPA chooses not to consult, the FWS cannot be certain that EPA and you, as the project proponent, have complied with the provisions of the ESA.

Nevertheless, you should be aware that, pursuant to section 7(a)(3) of the ESA, you have certain opportunities as an applicant for a Federal permit or license. Section 7(a)(3) and implementing regulations at 50 C.F.R. §402.11 establish an optional process called "early consultation," that was specifically designed to reduce the likelihood of conflicts between listed species or critical habitat and prospective actions such as yours.

Copies of the specific regulations pertaining to early consultations are enclosed. If you have reason to believe that your proposal, which will eventually be included in an application for Federal agency approval, may affect listed species or critical habitat, you can ask the Federal agency issuing a permit or license (in this case it is EPA) to enter into early consultation with the FWS.

Although early consultation would be between EPA and the FWS, your office must be involved in the process if you elect to request EPA to initiate early consultation with the FWS. Your request for EPA to initiate early consultation with the FWS must be in writing

and must certify that: (1) you have a definitive proposal outlining your action and its effects, and (2) that you intend to carry out your proposal if it is authorized. When EPA receives your proposal, they are required by the ESA to initiate early consultation with the FWS.

If you have questions regarding our comments, please contact ____(name)____ of this office at ____(phone)____.

Sincerely yours,

Field Supervisor

CHAPTER 8 - EMERGENCY CONSULTATION

8.1 THE NEED FOR EMERGENCY CONSULTATION

Section 7 regulations recognize that an emergency (natural disaster or other calamity) may require expedited consultation (50 CFR §402.05).

Where emergency actions are required that may affect listed species and/or critical habitats, a Federal agency may not have the time for the administrative work required by the consultation regulations under non-emergency conditions. Emergency consultations should be handled with as much understanding of the action agency's critical mission as possible while ensuring that anticipated actions will not violate sections 7(a)(2) or 7(d). Emergency consultation procedures allow action agencies to incorporate endangered species concerns into their actions during the response to an emergency.

An emergency is a situation involving an act of God, disasters, casualties, national defense or security emergencies, etc., and includes response activities that must be taken to prevent imminent loss of human life or property. Predictable events, like those covered in Emergency Use Permits issued by the Environmental Protection Agency for pesticide applications, usually do not qualify as emergencies under the section 7 regulations unless there is a significant unexpected human health risk. Under no circumstances should a Services representative obstruct an emergency response decision made by the action agency where human life is at stake.

8.2 PROCEDURES FOR HANDLING EMERGENCY CONSULTATIONS

(A) Initial Contact by the Action Agency

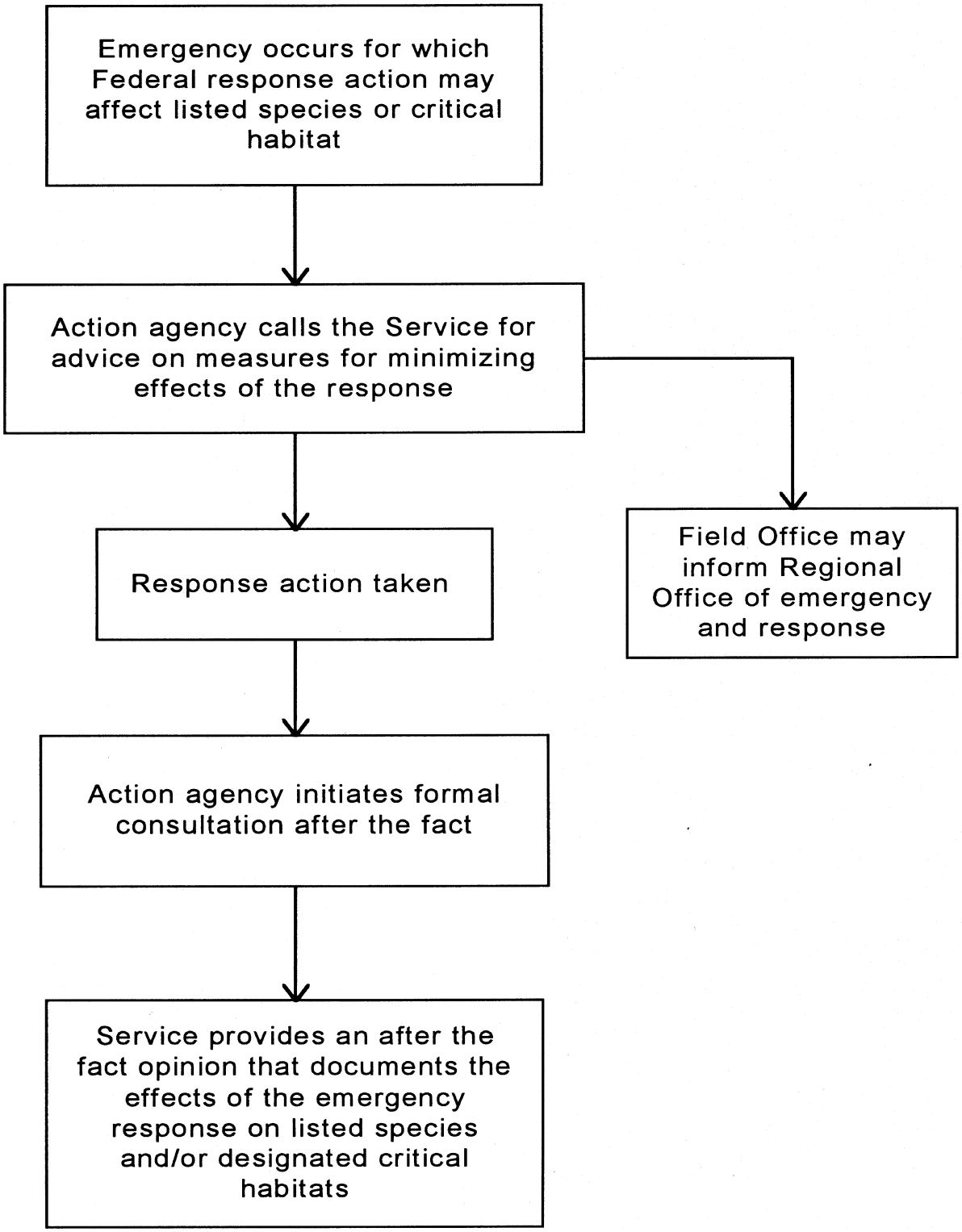
The initial stages of emergency consultations usually are done by telephone or facsimile, followed as soon as possible (within 48 hours if possible) by written correspondence from the Services. This provides the Services with an accurate record of the telephone contact. This record also provides the requesting agency with a formal document reminding them of the commitments made during the initial step in emergency consultation (Figure 8-1). During this initial contact, or soon thereafter, the Services' role is to offer recommendations to minimize the effects of the emergency response action on listed species or their critical habitat (the informal consultation phase). DO NOT stand in the way of the response efforts.

If this initial review indicates the action may result in **jeopardy** or **adverse modification**, and no means of reducing or avoiding this effect are apparent, the agency should be so advised, and the Services' conclusions documented.

Project leaders should establish procedures (e.g., a calling tree) within their offices outlining who can be called to handle the emergency consultation. Once these procedures have been established, they should be provided to all Federal agencies in that operating area responsible for handling emergency situations (e.g., Coast Guard, Environmental Protection Agency, and Federal Emergency Management Agency) and any other Federal agencies with responsibilities in the operating area.

The FWS Field Office conducting the consultation should notify the FWS Assistant Regional Director responsible for endangered species and/or the ecosystem at risk, following timeframes established by FWS Regional guidance. The notification should be in memo form, following the format outlined in Exhibit 8-1. Early telephone notification may be required. For NMFS, the Regional Director should notify the Director, Office of Protected Resources.

Figure 8-1. Emergency Consultation Process.



(B) Initiating Formal Consultation

As soon as practicable after the emergency is under control, the action agency initiates formal consultation with the Services if listed species or critical habitat have been adversely affected. Although formal consultation occurs after the response to the emergency, procedurally it is treated like any other formal consultation. However, the action agency has to provide additional information to initiate a formal consultation following an emergency:

- o a description of the emergency;
- o a justification for the expedited consultation; and
- o an evaluation of the response to and the impacts of the emergency on affected species and their habitats, including documentation of how the Services' recommendations were implemented, and the results of implementation in minimizing take.

This is phrased in such that practitioners some the impression that no consultation is necess emergency response t falls in the may affect, to adversely affect cat That is not correct. Fo expedited consultation as an emergency, the affect" determination r the trigger for requiring consultation.

(C) Emergency Biological Opinion

After concluding formal consultation on an emergency, the Services issue an emergency biological opinion. The "effects of the action" section, documents the recommendations provided by the Services to the action agency and the results of agency implementation of the recommendations on listed species. The timeframe, format and contents are the same as for formal consultation (Chapter 4). A sample of standardized language for an emergency consultation document can be found in Appendix B. The standardized statements for formal consultation have been modified to reflect that this is, in most cases, an after-the-fact consultation.

As indicated above, if response was a may but not likely to adver affect a concurrence would be appropriate.

Documenting **jeopardy** and **adverse modification** biological opinions is particularly important to tracking the effect on species and habitat conditions. For FWS, emergency biological opinions with the conclusion of "not likely to jeopardize" the species or "not likely to result in destruction or **adverse modification** of critical habitat" are completed at the Field Office level. However, if the conclusion is likely **jeopardy** or **adverse modification**, the consultation is elevated to the Regional Office. Such a finding may not have a reasonable and prudent alternative available, unless some further action can restore or enhance the species to a level below the **jeopardy** threshold. For NMFS, emergency opinions are signed in Washington by the Director, Office of Protected Resources, except where a specific Region has been delegated signature authority (i.e., Northwest and Southwest Regions have been delegated signature authority for anadromous fish).

(D) Incidental Take Statement

If incidental take is anticipated during the emergency response, the Services can advise the action agency during the informal consultation phase of ways to minimize take. In some circumstances, the actual or estimated take occurring from the agency's emergency response actions can be determined, and should be documented in the biological opinion for future inclusion in the species' environmental baseline. The incidental take statement in an emergency consultation does not include reasonable and prudent measures or terms and conditions to minimize take, unless the agency has an ongoing action related to the emergency. Rather, an emergency consultation incidental take statement documents the recommendations given to minimize take during informal consultation, the success of the agency in carrying out these recommendations, and the ultimate effects on the species of concern through take.

(E) Conservation Recommendations

Emergency consultations may contain conservation recommendations to help protect listed species and their habitats in future emergency situations or initiate beneficial actions to conserve the species.

Note: While the timing of "emergencies" is unpredictable, the types of emergencies that may affect listed species or critical habitat can be determined in advance. Emergency response actions are routinely practiced by responsible Federal agencies. Advance coordination with responsible Federal agencies is encouraged so that endangered species components can be incorporated into the emergency response where appropriate.

Exhibit 8-1. FWS Emergency consultation notification memorandum to the Regional Office (optional).

(date)

Memorandum

To: Assistant Regional Director, Region __(number)___

From: Field Supervisor, ____(name of Field Office)____

Subject: Emergency Consultation on ____(name of Federal action)___.

This office has completed an informal emergency consultation. The following information summarizes the location of the emergency, nature of the emergency, listed species and critical habitat(s) involved, and how those species and habitats are likely to be affected by the emergency.

Date of Contact: Time:

Contact(s) Name:

Agency:

Contact(s) Title:

Nature of the Emergency:

Species/Critical Habitats in the Area:

Anticipated Effects:

Recommendations Given the Contact:

CHAPTER 9 - MONITORING AND REPORTING

9.1 MONITORING IMPLEMENTATION/EFFECTS OF REASONABLE AND PRUDENT ALTERNATIVES AND MEASURES

When incidental take is anticipated, the terms and conditions must include provisions for monitoring project activities to determine the actual project effects on listed fish or wildlife species (50 CFR §402.14(i)(3)). Project monitoring, carried out by the Federal agency or applicant, provides the Services with information essential to assessing the effects of various actions on listed species and designated critical habitat. Monitoring allows the Services to track incidental take levels and to refine biological opinions, reasonable and prudent alternatives, reasonable and prudent measures, and terms and conditions. Consequently, monitoring programs should be integral elements of all interagency consultations concluding that an action may adversely affect listed species or critical habitat.

Monitoring programs resulting from interagency consultations should be designed to: (1) detect adverse effects resulting from a proposed action, (2) assess the actual level of incidental take in comparison with the anticipated incidental take level documented in the Biological Opinion, (3) detect when the level of anticipated incidental take is exceeded, and (4) determine the effectiveness of reasonable and prudent measures and their implementing terms and conditions. The following objectives/steps should be taken to develop monitoring programs:

- Develop objectives. Any monitoring program associated with section 7 consultations should answer specific questions or lead to specific conclusions, captured in the objectives. If the objectives are well-developed, they will help shape a complete monitoring program.

- Describe the subject of the monitoring program: Effects on populations of a listed species, effects on the habitat (critical or not) of a listed species, or effects on both.

- Describe the variables to be measured and how data will be collected. The success or failure of monitoring programs ultimately depends on the information collected about the variables that demonstrate or refute a position outlined in the objectives. Collection methods should be standardized to ensure comparability with data from studies in other areas.

- Detail the frequency, timing, and duration of sampling for the variables. Determining how frequently and how long to collect data is important to the success or failure of the program. If the interval between samples is too long or if the sampling program is too short, the monitoring program may not detect an effect. The frequency, timing, and duration of the sampling regimen should relate

to the type of action being evaluated, the organism affected by the action, and the response of the organism to the effects produced by the action.

- Describe how the data are to be analyzed and who will conduct the analyses. A monitoring program is more effective when the analytical methods are integrated into the design. For example, parametric and non-parametric statistical analyses require different sample sizes, which will affect the frequency, timing, and duration of sampling.

- Discuss the relationship between the monitoring program being included in a consultation and other monitoring programs. At almost any given time, hundreds of environmental monitoring programs are being conducted in every region of the country. Whenever possible, these should be coordinated to eliminate duplication, standardize sampling methods, and/or improve geographic coverage.

9.2 TRACKING COLLECTIVE EFFECTS ON SPECIES AND THEIR HABITATS

Managing collected information efficiently improves the overall effectiveness of interagency consultations and makes it easier to (1) evaluate the effects of various actions as they accumulate over time, (2) determine which consultations need to be reinitiated when a new species is listed, (3) determine when the level of incidental take approaches the likely **jeopardy**/**adverse modification** thresholds, (4) exchange similar information across Regional boundaries, and (5) determine if reasonable and prudent alternatives and measures are carried out.

(A) FWS

For FWS, the following set of fields and values will form the core of a FWS nationwide information system on interagency consultation. The fields and values will become part of a national, computerized information system, which will be developed by a team of WO and Regional biologists. Data are to be maintained for all formal consultations, conferences, early consultations, emergency consultations, and concurrence letters that conclude informal consultations (data on the latter should be kept in case consultations are required because a new species is proposed or listed, or critical habitat is proposed or designated).

To facilitate data exchange within the FWS, the national database will be maintained and updated by the Regional Offices and will be posted by the WO on the Threatened and Endangered Species System (TESS) or on an intra-net page available for read-only access. Until this national database becomes operational, each Region should maintain their own database.

Field Name	Field Values
Species Name	For vertebrates, butterflies, and mussels, use the common name in the format used in the official list (50 CFR §17). For all other species (primarily invertebrates and plants) use the scientific name. Enter only one name for each record.
Log Number	Enter the log number for the consultation. Use the following format: RN-FO-YY-T-XXXX (RX) RN = Region number FO = two-number or letter code for the field office YY = last two digits of the fiscal year T = type of consultation F = formal I = informal C = conference E = early M = emergency P = programmatic XXXX = a sequential number 0001-9999 Reinitiated consultations use the log number of the original consultation with the letter (R) added at the end. If there are several reinitiations for the same consultation, the suffix reads as (R1) to (RX) for each new reinitiation.
Record Number	Numerical sequence of the record.
Fiscal Year	Fiscal year of initiation.
Region	Lead Region for consultation.
Office	FWS office that issued the document. Use a four letter code for field offices; or ROn (where n is the Region number) for consultations conducted by a Region.
Action Agency	Standard abbreviation for action agencies where applicable (e.g., EPA, BLM, COE).
Department	Standard abbreviation for the department (e.g., DOI).

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Applicant	[Pursuant to the Privacy Act, do not maintain the applicant's name in this file if the applicant is an individual.]
Action Name	Short name of the proposed action (e.g., Didion bulk transfer facility; Page Avenue extension).
Permit Number	Permit number used by action agency where one exists.
Description	Short description of the proposed action. For example, bulk transfer facility, airport construction, landfill expansion, etc.
Ecoregion	Identify the ecoregion number and name. Provide a short description of species habitat.
State	Standard two letter code for State or Territory in which proposed action will occur.
County	County name or code if multiple counties.
Locality	Township, city, or land management area (for example, Shawnee National Forest, Indiana Dunes National Lakeshore) in which action will occur.
Start Date	For consultations and formal conferences, enter the date initiated.
Date Issued	Date the document or concurrence letter was issued.
Species Conclusion	Two letter code for the conclusion of the consultation for listed species: NE = No effect NL = Not likely to adversely affect LA = Likely to adversely affect NJ = Not likely to jeopardize J = Likely to jeopardize
Habitat Conclusion	Conclusion of consultation for critical habitat AM = Destruction or adverse modification NM = No destruction or adverse modification
RPAs	Summary of reasonable and prudent alternatives for **jeopardy** or **adverse modification** biological opinions.

Take Type	Type and quantity/extent of incidental take anticipated, numbers of individuals by species name and/or acreages of habitat type.
Take Level	Level of take being anticipated (with reasonable and prudent alternatives implemented) and time period covered.
RPMs	Summary of reasonable and prudent measures for incidental take.
Terms	Enter summary of terms and conditions of incidental take.
Report	Report required (Yes or No).
Report Frequency	How frequently must the action agency report?
Report Due	Date report is due to the FWS.
Conservation Recommendations	Summary of conservation recommendations.
Follow-up	Summary of any follow-up evaluation.
Contact	Name and telephone number of the individual who authored the consultation.
Notes	Notes on the consultation.

(B) NMFS

NMFS' Protected Species Status and Tracking System (PSST) is designed to provide rapid and accurate access to information for protected species and includes information about section 7 consultations, recovery plans and listing actions.

The part on section 7 consultation contains information on formal and informal consultations. Data is maintained for the action, impact, reasonable and prudent alternatives and measures, and conservation recommendations. Regions provide copies of all opinions to the Office of Protected Resources where the data system is maintained.

SUGGESTED READING

Endangered & Threatened Species Conservation

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APPENDIX E - FWS INTRA-SERVICE CONSULTATION HANDBOOK

ENDANGERED SPECIES ACT

U.S. FISH AND WILDLIFE SERVICE
FINAL INTRA-SERVICE CONSULTATION HANDBOOK

U.S. FISH AND WILDLIFE SERVICE

WASHINGTON D.C.

MARCH 1998

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GOALS

Internal Fish and Wildlife Service (Service) actions involving listed, proposed, and candidate species will promote the conservation of those species to the greatest extent practical under Federal law. Use the Service's Ecosystem Approach to Fish and Wildlife Conservation as the overlying theme during the internal consultation process. Although including candidate species is not required by law, it is Service policy to consider candidate species when making natural resource decisions. Therefore, candidate species will be considered for all intra-Service consultations. This species conservation will be accomplished by ensuring that Service-sponsored, authorized, or funded programs:

- use the best scientific and commercial information available for all section 7 evaluations, including approved recovery plans, to assist Service decision makers;

- provide the benefit of the doubt to the species if important scientific data are lacking;

- ensure adequate protection through a buffer (degree of safety to the species) so that subsequent chance or recurring events (e.g., drought, fire, flooding, hurricanes, chemical spills, etc.) are not allowed to jeopardize the continued existence of these species;

- promote and expand the species' opportunities for survival and recovery;

- involve State and tribal fish and wildlife agencies in the intra-Service consultation process by keeping them informed of proposed Federal actions undergoing consultation, by obtaining information from the State and tribal agencies in the preparation of Biological Opinions, and by recommending that Federal agencies provide State and tribal agencies copies of Biological Opinions; and

- apply Secretary Babbitt's "Ten Principles for Federal Endangered Species Act Policy"

    1. Base decisions on sound and objective science
    2. Minimize social and economic impacts
    3. Provide quick, responsive answers and certainty to landowners
    4. Treat landowners fairly and with consideration
    5. Create incentives for landowners to conserve species
    6. Make effective use of limited public and private resources by focusing on groups of species dependent on the same habitat
    7. Prevent species from becoming endangered or threatened
    8. Promptly recover and de-list threatened and endangered species
    9. Promote efficiency and consistency

10. Provide State, tribal and local governments with opportunities to play a greater role in carrying out the Endangered Species Act (Act).

LISTED, PROPOSED, AND CANDIDATE SPECIES INFORMATION

Knowledge of what species occur in an action area, including information on their life histories, is integral to an intra-Service section 7 consultation. Ecological Services Offices (ESOs [1]) are responsible for providing lists of endangered, threatened, proposed, and candidate species and critical habitats to Service programs within their jurisdictions. Other Service units with responsibility for managing proposed and candidate species (e.g., Refuges, Fish Hatcheries) are responsible for keeping ESO information bases updated for their lead species and critical habitats.

The Washington Office Division of Endangered Species will ensure that Regional Office endangered species programs are furnished regularly with updated lists of endangered, threatened, proposed, and candidate species and critical habitat designations. Regional Office endangered species programs will provide these lists to all Regional and Field Office programs on a regular basis. Additional species information, such as known species distributions and biological requirements, may be obtained from the ESOs with lead responsibilities for that species. The above responsibilities of the ESOs and other Service units do not remove Project Leaders from the responsibility to assess which listed, proposed, and candidate species occur within action areas, as well as any proposed or designated critical habitat.

FISH AND WILDLIFE SERVICE ACTIONS

Following are examples of Service actions that may be subject to intra-Service section 7 consultation:

[1] In this handbook, "ESO" includes the Regional or Washington Office Division of Endangered Species for intra-Service consultations conducted at those levels.

Ecological Services

Endangered species recovery plan implementation
Endangered Species Act section 10 permits [2]
Endangered species Safe Harbor Agreements
Endangered species Habitat Conservation Plans
Farm Bill activities
Partners for Wildlife
Contaminant cleanup, spills, response activities, remedial actions
Superfund activities

Section 10(a)(1)(B) permits applications may include species that are not Service listed, proposed or candidate species. In this situation, the biologist conducting the consultation will assess these species in the same way as candidate species, that is, as if they were proposed for listing. They should be included in the incidental take permit, however, only if there is adequate information about the species to determine what the specific project-related effects will be.

Fisheries

Endangered species recovery plan implementation
Fisheries and Wildlife Assistance projects
Hatchery operations, endangered species projects, fish stocking, land acquisition, construction
Fish management plans

Federal Aid

Wildlife Restoration Act projects
Sportfish Restoration Act projects
Endangered Species Act Section 6 projects (programmatic)
Clean Vessel Act projects

[2] Service activities such as research, marking, moving, and harassing that directly take endangered and threatened species may require a section 10(a)(1)(A) permit. This permit is subject to section 7 review and may require the issuance of a biological opinion, <u>especially</u> if takings are involved.

National Coastal Wetlands Planning, Protection and Restoration Act projects
Partnerships for Wildlife Act projects

Refuges and Wildlife

Endangered species recovery plan implementation
Refuge operation and maintenance
Refuge habitat management and improvement projects, public use programs, commercial activities, construction projects, land disposal
North American Waterfowl Management Plan activities
Pest control activities on refuge croplands

All

Information transfer (e.g., a Service publication on use of rotenone should caution against use where vulnerable listed or candidate species occur) if it results in effects to listed species
Challenge grants
Partners in Flight

This glossary is a repe
glossary at the beginn
handbook. As such, it
numerous errors and
inaccurate quotes fron
regulations. See the g
at the beginning of this
handbook for commen

GLOSSARY OF TERMS USED IN INTRA-SERVICE SECTION 7 CONSULTATIONS

The wording of these definitions has been modified slightly from the cited source to reflect an internal Service consultation rather than a consultation between the Service and another Federal agency.

Act - the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 *et seq.*

Action - all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by the Service or upon the high seas. Examples include, but are not limited to: (a) actions intended to conserve listed species or their habitat; (b) the promulgation of regulations; (c) the granting of licenses, contracts, leases, easements, rights-of-way, permits, or grants-in-aid; or (d) actions directly or indirectly causing modifications to the land, water, or air. [50 CFR §402.02]

Action area - all areas to be affected directly or indirectly by the Service action and not merely the immediate area involved in the action. [50 CFR §402.02]

Affect/effect - to affect (a verb) is to bring about a change ("The proposed action is likely to adversely affect piping plovers nesting on the shoreline"). The effect (usually a noun) is the result ("The proposed highway is likely to have the following effects on the Florida scrub jay"). **"Affect"** appears throughout section 7 regulations and documents in the phrases "may affect" and "likely to adversely affect." **"Effect"** appears throughout section 7 regulations and documents in the phrases "adverse effects," "beneficial effects," "effects of the action," and "no effect." [Proper grammatical usage]

Anticipated/allowable/authorized - in incidental take statements, the Service determines the amount or extent of incidental take "anticipated" (expected) due to the proposed action or an action modified by reasonable and prudent alternatives. When writing incidental take statements, use only the phrase "anticipated" rather than "allowable" or "authorized," as the Service does not allow or authorize (formally permit) incidental take under section 7. [Clarification of usage]

Applicant - any person (an individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the Federal Government, of any State, municipality, or political subdivision of a State, or of any foreign government; any State, municipality, or political subdivision of a State; or any other entity subject to the jurisdiction of the United States) [ESA §3(12)] who requires formal

approval or authorization from a Federal agency as a prerequisite to conducting the action. [50 CFR §402.02]

Appreciably diminish the value - to considerably reduce the capability of designated or proposed critical habitat to satisfy requirements essential to both the survival and recovery of a listed species. [Clarification of usage]

Best available scientific and commercial data - to assure the quality of the biological, ecological, and other information used in the implementation of the Act, it is the policy of the Service to: (1) evaluate all scientific and other information used to ensure that it is reliable, credible, and represents the best scientific and commercial data available; (2) gather and impartially evaluate biological, ecological, and other information disputing official positions, decisions, and actions proposed or taken by the Service; (3) document their evaluation of comprehensive, technical information regarding the status and habitat requirements for a species throughout its range, whether it supports or does not support a position being proposed as an official agency position; (4) use primary and original sources of information as the basis for recommendations; (5) retain these sources referenced in the official document as part of the administrative record supporting an action; (6) collect, evaluate, and complete all reviews of biological, ecological, and other relevant information within the schedules established by the Act, appropriate regulations, and applicable policies; and (7) require management-level review of documents developed and drafted by Service biologists to verify and assure the quality of the science used to establish official positions, decisions, and actions taken by the Service during their implementation of the Act. [59 FR 34271 (July 1, 1994)]

Biological assessment - information prepared by the Service to determine whether a proposed Service action is likely to: (1) adversely affect listed species or designated critical habitat; (2) jeopardize the continued existence of species that are proposed for listing or are candidates for listing; or (3) adversely modify proposed critical habitat. Biological assessments must be prepared for "major construction activities." The outcome of this biological assessment determines whether formal consultation or a conference is necessary. [50 CFR §402.02, 50 CFR §402.12]

Biological opinion - document which includes: (1) the opinion of the Service as to whether or not a Service action is likely to jeopardize the continued existence of listed species, or result in the destruction or adverse modification of designated critical habitat; (2) a summary of the information on which the opinion is based; and (3) a detailed discussion of the effects of the action on listed species or designated critical habitat. [50 CFR §402.02, 50 CFR §402.14(h)]

Candidate species - plant and animal taxa considered for possible addition to the List of Endangered and Threatened Species. These are taxa for which the Service has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposal to list, but issuance of a proposed rule is currently precluded by higher priority listing actions. [61 FR 7596-7613 (February 28, 1996)]

Conference - a process of early intra-Service cooperation involving informal or formal discussions between one program of the Service and another program of the Service pursuant to section 7(a)(4) of the Act regarding the likely impact of a Service action on proposed species, candidate species, or proposed critical habitat. Conferences are: (1) required for proposed Service actions likely to jeopardize proposed species, candidate species, or destroy or adversely modify proposed critical habitat; (2) designed to help Service programs identify and resolve potential conflicts between an action and species conservation early in a project's planning; and (3) to develop recommendations to minimize or avoid adverse effects to proposed species, candidate species, or proposed critical habitat. [50 CFR §402.02, §402.10]

Conservation - the terms "conserve," "conserving" and "conservation" mean to use, and the use of, all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to [the] Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking. [ESA §3(3)]

Conservation measures - are actions to benefit or promote the recovery of listed species that are included by the Service as an integral part of the proposed Service action. These conservation measures will be taken by the Service to minimize, or compensate for, project effects on the species under review. These may include actions taken prior to the initiation of consultation, or actions which the Service has committed to complete in a biological assessment or similar document.

Conservation recommendations - the Services' non-binding suggestions resulting from formal or informal consultation that: (1) identify discretionary measures Service programs can take to minimize or avoid the adverse effects of a proposed action on listed or proposed species, candidate species, or to designated or proposed critical habitat; (2) identify studies, monitoring, or research to develop new information on listed, proposed or candidate species, or to designated or proposed critical habitat; and (3) include suggestions on how the Service can assist species conservation, as part of their action and in furtherance of their authorities under section 7(a)(1) of the Act. [50 CFR §402.02]

Constituent elements - physical and biological features of designated or proposed critical habitat essential to the conservation of the species, including, but not limited to: (1) space for individual and population growth, and for normal behavior; (2) food, water, air, light, minerals, or other nutritional or physiological requirements; (3) cover or shelter; (4) sites for breeding, reproduction, rearing of offspring, germination, or seed dispersal; and (5) habitats that are protected from disturbance or are representative of the historic geographic and ecological distributions of a species. [ESA §3(5)(A)(i), 50 CFR 424.12(b)]

Critical habitat - for listed species consists of: (1) the specific areas within the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of the Act, on which are found those physical or biological features (constituent elements) (a) essential to the conservation of the species and (b) which may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of the Act, upon a determination by the Secretary that such areas are essential for the conservation of the species. [ESA §3 (5)(A)] Designated critical habitats are described in 50 CFR §17 and 226.

Cumulative effects - are those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Service action subject to consultation. [50 CFR §402.02] This definition applies only to section 7 analyses and should not be confused with the broader use of this term in the National Environmental Policy Act or other environmental laws.

Designated non-Federal representative - the person, agency, or organization designated by the Service as its representative to conduct informal consultation or prepare a biological assessment. The non-Federal representative must be designated by giving written notice to the Director. If a permit or license applicant is involved and is not the designated non-Federal representative, then the applicant and the Service must agree on the choice of the designated non-Federal representative. [50 CFR §402.02, 50 CFR §402.08]

Destruction or adverse modification of critical habitat - a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical. [50 CFR §402.02]

Director - the Service's regional director, or his/her respective authorized representative. [50 CFR §402.02]

Distinct Population Segment - "population," or "distinct population segment," are terms with specific meaning when used for listing, delisting, and reclassification purposes to describe a discrete vertebrate stock that may be added or deleted from the list of endangered and threatened species. The use of the term "distinct population segment" will be consistent with the Services' population policy. [61 FR 4722-4725 (February 7, 1996)]

Early consultation - a preliminary consultation requested by the Service on behalf of a prospective permit or license applicant prior to the filing of an application for a Service permit or license. [50 CFR §402.11]

Effects of the action - the direct and indirect effects of a Service action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action. These effects are considered along with the environmental baseline and the predicted cumulative effects to determine the overall effects to the species for purposes of preparing a biological opinion on the proposed action. [50 CFR §402.02] The environmental baseline covers past and present impacts of all Federal actions within the action area. This includes the effects of existing Federal projects that have not yet come in for their section 7 consultation.

Endangered species - any species which is in danger of extinction throughout all or a significant portion of its range. [ESA §3(6)]

Environmental baseline - the past and present impacts of all Federal, State, or private actions and other human activities in an action area, the anticipated impacts of all proposed Federal projects in an action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions that are contemporaneous with the consultation in process. [50 CFR §402.02]

ESA - the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 *et seq.*

FWS - the Fish and Wildlife Service.

Federal agency - any department, agency, or instrumentality of the United States. [ESA §3(7)]

Fish or wildlife - any member of the animal kingdom, including without limitation any mammal, fish, bird (including any migratory, nonmigratory, or endangered bird for which protection is also afforded by treaty or other international agreement), amphibian, reptile, mollusk, crustacean, arthropod or other invertebrate, and includes any part, product, egg, or offspring thereof, or the dead body or parts thereof. [ESA §3(8)]

Formal intra-Service consultation - a process between a Service program taking/authorizing an action and another Service program affected by that action that: (1) determines whether a proposed Service action is likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat; (2) begins with the Service program taking the action providing a written request and submittal of a complete initiation package to the affected Service program; and (3) concludes with the issuance of a biological opinion and incidental take statement by the affected Service program. If a proposed Service action may affect a listed species or designated critical habitat, formal intra-Service consultation is required (except when the involved Service programs concur, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat). [50 CFR §402.02, 50 CFR §402.14]

Habitat Conservation Plan - Under section 10(a)(2)(A) of the Act, a planning document that is a mandatory component of an incidental take permit application, also known as a Conservation Plan.

Incidental take - take of listed fish and wildlife species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by a Federal agency or applicant. [50 CFR §402.02]

Indirect effects - those effects that are caused by or will result from the proposed action and are later in time, but are still reasonably certain to occur. [50 CFR §402.02]

Informal intra-Service consultation - an optional process that includes all discussions and correspondence between Service programs, prior to formal intra-Service consultation, to determine whether a proposed Service action may affect listed species or critical habitat. This process allows the Service to utilize it's in-house expertise to evaluate a Service program's assessment of potential effects or to suggest possible modifications to the proposed action which could avoid potentially adverse effects. If a proposed Service action may affect listed species or designated critical habitat, formal intra-Service consultation is required (except when the involved Service programs concur, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat). [50 CFR §402.02, 50 CFR §402.13]

Interdependent actions - actions having no independent utility apart from the proposed action. [50 CFR §402.02]

Interrelated actions - actions that are part of a larger action and depend on the larger action for their justification. [50 CFR §402.02]

Is likely to adversely affect - the appropriate finding in a biological assessment (or conclusion during informal consultation) if any adverse effect to listed species may occur as a direct or indirect result of the proposed Service action or its interrelated or interdependent actions, and the effect is not: discountable, insignificant, or beneficial (see definition of "is not likely to adversely affect"). In the event the overall effect of the proposed Service action is beneficial to the listed species, but is also likely to cause some adverse effects, then the proposed Service action "is likely to adversely affect" the listed species. If incidental take is anticipated to occur as a result of the proposed action, an "is likely to adversely affect" determination should be made. An "is likely to adversely affect" determination requires the initiation of formal intra-Service section 7 consultation. [Clarification of usage]

Is likely to jeopardize proposed or candidate species/adversely modify proposed critical habitat - the appropriate conclusion when the Service identifies situations where the proposed Service action is likely to jeopardize the continued existence of a species proposed for listing or a candidate species, or adversely modify an area proposed for designation as critical habitat. If this conclusion is reached, intra-Service conference is required.

Is not likely to adversely affect - the appropriate conclusion when effects on listed species are expected to be discountable, insignificant, or completely beneficial. **Beneficial effects** are contemporaneous positive effects without any adverse effects to the species. **Insignificant effects** relate to the size of the impact and should never reach the scale where take occurs. **Discountable effects** are those extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur. [Clarification of usage]

Jeopardize the continued existence of - to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species. [50 CFR §402.02]

Letter - refers to all written correspondence, such as letters, memoranda, or electronic mail messages relating to a formal or informal consultation. [Clarification of usage]

Listed species - any species of fish, wildlife or plant which has been determined to be endangered or threatened under section 4 of the Act. [50 CFR §402.02]

Major construction activity - a construction project (or other undertaking having similar physical effects) which is a major Federal action significantly affecting the quality of the human environment as referred to in the National Environmental Policy Act (NEPA, 42 U.S.C. 4332(2)(C)) [50 CFR §402.02].

May affect - the appropriate conclusion when a proposed action may pose **any** effects on listed species or designated critical habitat. When the Federal agency (in this case the Service) proposing the action determines that a "may affect" situation exists, then the Service must then either initiate formal consultation or seek written concurrence from the involved Service programs that the action "is not likely to adversely affect" [see definition above] listed species. [Clarification of usage]

Minor change rule - when preparing incidental take statements, the Service must specify reasonable and prudent measures and their implementing terms and conditions to minimize the impacts of incidental take that do not alter the basic design, location, scope, duration, or timing of the action, and that involve only minor changes. [50 CFR §402.14]

No effect - the appropriate conclusion when the Service determines that a proposed Service action will not affect a listed species or designated critical habitat. [Clarification of usage]

Occupied critical habitat - critical habitat that contains individuals of the species at the time of the project analysis. A species does not have to occupy critical habitat throughout the year for the habitat to be considered occupied (e.g. migratory birds). Subsequent events affecting the species may result in this habitat becoming unoccupied. [Clarification of usage]

Plant - any member of the plant kingdom, including seeds, roots, and other parts thereof. [ESA §3(14)]

Population - "population" or "distinct population segment" are terms with specific meaning when used for listing, delisting, and reclassification purposes to describe a discrete vertebrate stock that may be added or deleted from the list of endangered and threatened species. The term "population" will be confined to those distinct population segments officially listed, or eligible for listing, consistent with section 4(a) of the Act and the Service's population policy. [61 FR 4722-4725 (February 7, 1996)]

Preliminary biological opinion - the opinion issued as a result of early consultation. [50 CFR §402.02]

Programmatic consultation - consultation addressing the Service's multiple actions on a program, regional or other basis. [Clarification of usage]

Project Leader - the first line supervisor and/or manager of the projects or programs under a specific area of Service responsibility.

Proposed critical habitat - habitat proposed in the Federal Register to be designated as critical habitat, or habitat proposed to be added to an existing critical habitat designation, under section 4 of the Act for any listed or proposed species. [50 CFR §402.02]

Proposed species - any species of fish, wildlife or plant that is proposed in the Federal Register to be listed under section 4 of the Act. [50 CFR §402.02]

Reasonable and prudent alternatives - recommended alternative actions identified during formal intra-Service consultation that can be implemented in a manner consistent with the intended purpose of the action, that can be implemented consistent with the scope of the Service's legal authority and jurisdiction, that are economically and technologically feasible, and that the Director believes would avoid the likelihood of jeopardizing the continued existence of listed species or the destruction or adverse modification of designated critical habitat. [50 CFR §402.02]

Reasonable and prudent measures - actions identified during formal intra-Service consultation the Director believes necessary or appropriate to minimize the impacts, i.e., amount or extent, of incidental take. [50 CFR §402.02]

Recovery - improvement in the status of listed species to the point at which listing is no longer appropriate under the criteria set out in section 4(a)(1) of the Act. [50 CFR §402.02]

Recovery unit - management subsets of the listed species that are created to establish recovery goals or carrying out management actions. To lessen confusion in the context of section 7 and other Endangered Species Act activities, a subset of an animal or plant species that needs to be identified for recovery management purposes will be called a "recovery unit" instead of a "population." [Clarification of usage]

Section 4 - the section of the Endangered Species Act of 1973, as amended, outlining procedures and criteria for: (1) identifying and listing threatened and endangered species; (2) identifying, designating, and revising critical habitat; (3) developing and revising recovery plans; and (4) monitoring species removed from the list of threatened or endangered species. [ESA §4]

Section 7 - the section of the Endangered Species Act of 1973, as amended, outlining procedures for interagency cooperation to conserve Federally listed species and designated critical habitats. Section 7(a)(1) requires Federal agencies to use their authorities to further the conservation of listed species. Section 7(a)(2) requires Federal agencies to consult with the Services to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely

modify designated critical habitat. Other paragraphs of this section establish the requirement to conduct conferences on proposed species and candidate species; allow applicants to initiate early consultation; require FWS and NMFS to prepare biological opinions and issue incidental take statements. Section 7 also establishes procedures for seeking exemptions from the requirements of section 7(a)(2) from the Endangered Species Committee. [ESA §7]

Section 7 consultation - the various section 7 processes, including both consultation and conference if proposed or candidate species are involved. [50 CFR §402]

Section 9 - the section of the Endangered Species Act of 1973, as amended, that prohibits the taking of endangered species of fish and wildlife. Additional prohibitions include: (1) import or export of endangered species or products made from endangered species; (2) interstate or foreign commerce in listed species or their products; and (3) possession of unlawfully taken endangered species. [ESA §9]

Section 10 - the section of the Endangered Species Act of 1973, as amended, that provides exceptions to section 9 prohibitions. The exceptions most relevant to section 7 consultations are takings allowed by two kinds of permits issued by the Service: (1) scientific take permits and (2) incidental take permits. The Service can issue permits to take listed species for scientific purposes, or to enhance the propagation or survival of listed species. The Service can also issue permits to take listed species incidental to otherwise legal activity. [ESA §10]

Service - the U.S. Fish and Wildlife Service.

Species - includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature. [ESA §3(16)]

Survival - For determination of **jeopardy/adverse modification**: the species' persistence as listed or as a recovery unit, beyond the conditions leading to its endangerment, with sufficient resilience to allow for the potential recovery from endangerment. Said another way, survival is the condition in which a species continues to exist into the future while retaining the potential for recovery. This condition is characterized by a species with a sufficient population, represented by all necessary age classes, genetic heterogeneity, and number of sexually mature individuals producing viable offspring, which exists in an environment providing all requirements for completion of the species' entire life cycle, including reproduction, sustenance, and shelter. [Clarification of usage]

Take - to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct. [ESA §3(19)] **Harm** is further defined by the Service to

include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. **Harass** is defined by the Service as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. [50 CFR §17.3]

Threatened species - any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. [ESA §3(20)]

Unoccupied critical habitat - critical habitat not occupied (i.e., not permanently or seasonally occupied) by the listed species at the time of the project analysis. The habitat may be suitable, but the species has been extirpated from this portion of its range. Conversely, critical habitat may have been designated in areas unsuitable for the species, but restorable to suitability with proper management, if the area is necessary to either stabilize the population or assure eventual recovery of a listed species. As recovery proceeds, this formerly unoccupied habitat may become occupied.

Some designated, unoccupied habitat may never be occupied by the species, but was designated because it is essential for conserving the species because it maintains factors constituting the species' habitat. For example, critical habitat may be designated for an upstream area maintaining the hydrology of the species' habitat downstream. [Clarification of usage]

Wildlife - See "fish or wildlife".

BASIC PROCEDURES AND RESPONSIBILITIES

The timeframes and data requirements in the following procedures are the same for all Federal agencies, and follow the section 7 consultation regulations at 50 CFR §402, except that as an internal policy established by the Director, Service actions shall include consideration of candidate species as though proposed for listing.

Ask yourself the following:

(1) IS THERE A FEDERAL ACTION?

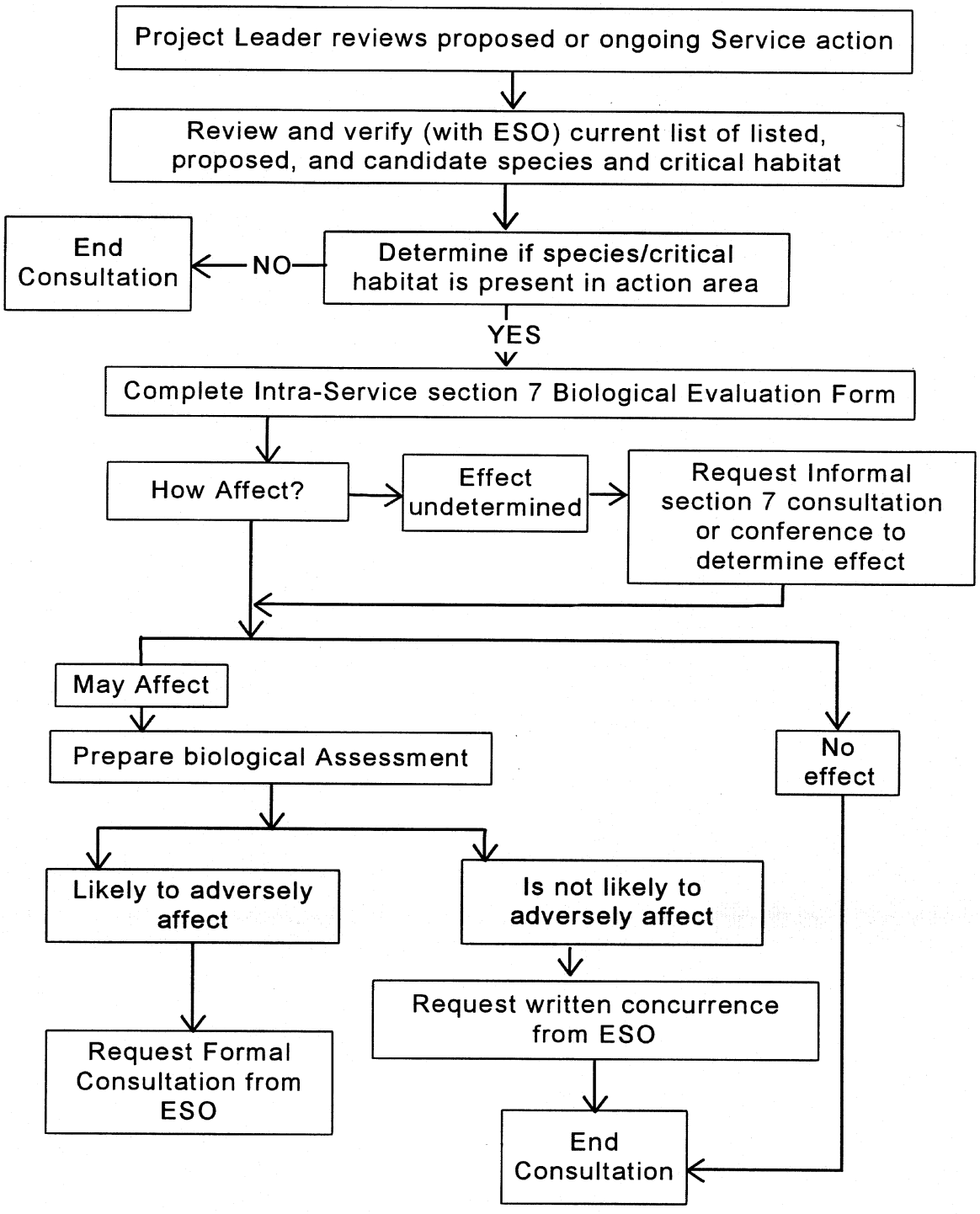
Federal actions include all activities or programs authorized, funded, carried out, or permitted -- in whole or in part -- by Federal agencies in the United States or on the high seas. Intra-Service consultations may consider either individual actions or a Service program as a whole. However, a programmatic consultation will not substitute for an individual project consultation, unless the programmatic analysis lays out the species-specific standards within which all individual activities will be conducted.

Example of a non-Federal action: Within a Service unit, an inholding of private party is undertaking an action affecting a listed, proposed, or candidate species pursuant to a private interest in land over which Service has no control.

(2) ARE LISTED, PROPOSED, OR CANDIDATE SPECIES OR THEIR HABITAT PRESENT?

The Project Leaders must first determine whether candidate species, proposed, or listed species (or their habitats) occur -- or have the potential to occur -- in the action area. This may be done by reviewing agency records, contacting knowledgeable sources (State agencies, Natural Heritage Program offices, etc.), conducting surveys, and/or requesting a species list from the appropriate ESO. The ESOs are the primary contacts for intra-Service section 7 consultation. Project Leaders may contact the appropriate ESO to begin informal section 7 consultation or conference on the proposed action. ESO responsibilities include conducting informal section 7 consultation, assisting Project Leaders in evaluating effects of their proposed and existing actions, responding to species information requests, responding to concurrence requests, conducting informal conferences and issuing conference reports, and preparing draft biological and conference opinions.

Figure E-1. Intra-Service Consultation or Conference Process.



(3) IS THE PROPOSED FEDERAL ACTION A MAJOR CONSTRUCTION ACTIVITY?

Major construction activities include dams, buildings, pipelines, roads, water resource developments, channel improvements, and other such projects that modify the physical environment and that constitute major Federal actions. Major construction activities do not include those activities that are exempted from NEPA review as a categorical exclusion for the Service under 516 DM 2.3A(2). As a rule of thumb, if an Environmental Impact Statement is required for the proposed action and construction-type impacts are involved, it is considered a major construction activity.

3.a. Major construction activity

For major construction activities, the Project Leader is required to request a species list from the ESO or submit a species list to the ESO for confirmation. When a species list is requested, the ESO has 30 days to respond. The species list is effective for 90 days. If either (1) listed, proposed, or candidate species and/or (2) proposed or designated critical habitat are present or suspected to be present, the Project Leader is required to begin a biological assessment. This assessment must be initiated within 90 days of receiving the list. It must be completed, along with a determination of the likely effects (if any) of the action, within 180 days; otherwise, the species list must be updated.

If the Project Leader determines that a listed species or its habitat does not occur in the action area, or does not have the potential to occur, and if the ESO concurs with that determination, a biological assessment is not required and the intra-Service section 7 process ends.

A biological assessment is not *required* if only proposed or candidate species or proposed critical habitat are present. However, a biological assessment is *recommended* for these species so that the Service can be proactive in conserving candidate/proposed species or proposed critical habitat, and an assessment will be required if the species is listed/critical habitat is designated before or during implementation of the proposed action.

3.b. No major construction activity

Even if the action is not a major construction activity, intra-Service consultation may be necessary. The Project Leader may initiate or continue informal consultation to determine if formal consultation is required. The Project Leader may submit a species list for confirmation or request a species list from the ESO. When the Project Leader determines that a listed species or its habitat does not occur or potentially occur in the action area, the intra-Service section 7 process ends.

If a listed, proposed, or candidate species, its habitat, or proposed or designated critical habitat is present, the Project Leader should determine whether the action "may affect" those species or habitat or may destroy or adversely modify critical habitat. Completing the **INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM** (hereafter referred to as "Service Evaluation Form" - see Appendix 2) will assist the Project Leader in determining the potential effect of the proposed action.

(4) IS THERE A "MAY AFFECT" SITUATION?

The Service Evaluation Form or a biological assessment, as appropriate, is used for informal analysis of all actions affecting species or critical habitat subject to intra-Service section 7 consultation. Review the instructions for this form for determinations of "no effect," "may affect," "is not likely to adversely affect," and "is likely to adversely affect."

In determining the potential effect of the action, the Project Leader needs to review enough information on the species and its habitat to assess whether the action may affect the species' population, reproductive capability, food supply, cover needs, pollinators, symbionts, predators/competitors, or other such biological factors. For designated or proposed critical habitat, the assessment should address the potential effect on important components of the critical habitat (some of which are identified as constituent elements) and the conservation role of the critical habitat unit.

When the Project Leader determines that the proposed action will have "no effect" on the listed, proposed, or candidate species or its habitat and will not destroy or adversely modify proposed or designated critical habitat, the intra-Service consultation/conference process ends. Concurrence from the ESO is not required, but if the ESO is aware of and disagrees with the no effect determination, a memorandum outlining the disagreement and requesting continued intra-Service consultation/conference will be provided to the Project Leader. If a high level of sensitivity or controversy is associated with the action or the species, written concurrence from the ESO is recommended.

Project Leaders should use the informal consultation process whenever possible. The Service Evaluation Form should be completed for this purpose. As required of all other Federal agencies, the Service program (i.e., Refuges, Federal Aid, Ecological Services, Fisheries, Management Assistance, Endangered Species, etc.) that initiates a new action or continues an existing activity is responsible for obtaining the best scientific and commercial information available to complete the intra-Service consultation. Much of the information may already be available through the ESO. The intra-Service consultation may require surveys in the project

area to determine species' presence and status, seasonal use pattern, condition of the species' habitat, juxtaposition to the action/activity, etc.

(5) WHAT ARE THE OPTIONS FOR "MAY AFFECT" SITUATIONS?

When the Project Leader determines the action "may affect" a listed species, a designated or proposed critical habitat, or proposed or candidate species, the options are (1) to continue informal consultation with the ESO or (2) to initiate formal consultation or conference. The "may affect" evaluation looks not only at effects on the entire species or local management unit, but also considers the effect on individual members of the species. If even one individual may be affected, the biologist must conclude that there is a "may affect" situation. Project modifications agreed upon during informal consultation may result in a "no effect" determination, thus eliminating the need for formal consultation or conference.

When the Project Leader finds that the proposed action may affect, but is "not likely to adversely affect," listed, proposed, or candidate species, or designated or proposed critical habitats, a request for concurrence with that finding is sent to the appropriate ESO. The Project Leader can make such a finding only if all of the effects of the proposed action will be discountable, insignificant, or completely beneficial (see definition of "is not likely to adversely affect"). A copy of the Service Evaluation Form supporting the Project Leader's determination should be forwarded to the appropriate ESO within 30 days of that determination. The ESO will respond to the Project Leader's written request for concurrence within 30 days of receiving the request. Concurrence with the "not likely to adversely affect" finding completes the requirements for intra-Service section 7 consultation. If any adverse effect or any incidental take of listed species or critical habitat is likely to occur, formal consultation must be initiated; if any candidate or proposed species are likely to be jeopardized and if proposed critical habitat may be adversely modified, then conference is required.

Formal consultation must be conducted prior to issuing permits for the incidental take of listed species, even for activities conducted during recovery efforts for these species. These permits must include appropriate conditions to avoid or minimize incidental take, and to ensure the disposition of any dead or injured specimens in a way that preserves their potential use in other recovery activities.

(6) WHAT ARE THE PROCEDURES FOR FORMAL CONSULTATION OR FORMAL CONFERENCE?

Once an ESO receives a Project Leader's written request for a formal intra-Service consultation or formal intra-Service conference, this stage of the process will be concluded within 90 days. After the consultation or conference is concluded, a biological opinion or conference report will be delivered by the ESO within an additional 45 days. Extensions are available only by mutual agreement.

These timetables begin when the ESO receives a written request and all the information needed to proceed. The information can be provided by means of (1) a Service Evaluation Form, (2) a biological assessment, or (3) a report containing the following data: (a) a description of the proposed action; (b) a description of the specific area that may be affected by the proposed action; (c) a description of any listed, proposed, or candidate species, or any designated or proposed critical habitat, that may be affected by the proposed action; (d) a description of how the proposed action may affect these species or habitats and an analysis of any cumulative effects in the action area; (e) relevant reports, including any environmental impact statement, environmental assessment, or biological assessment prepared; (f) any other relevant information available [taken from 50 CFR §402.14 (c)]. The ESO can assist in determining what type of data will be needed for the formal consultation or conference.

A biological opinion looks beyond the effects of the proposed action. It also considers the overall status of the species, and the environmental baseline and cumulative effects in the action area. Additionally, if incidental take is anticipated as a result of the proposed action, the incidental take statement that accompanies the biological opinion will lay out nondiscretionary reasonable and prudent measures to minimize that take, consistent with the requirements of sections 7(a)(2) and 7(b(4).

Draft **jeopardy** and **adverse modification** biological opinions and conference reports will be forwarded by the ESO to the Regional Office Division of Endangered Species at least 2 weeks prior to the end of the 90-day consultation period. These biological opinions and conference reports must be signed by the Regional Director (if warranted). The Service Evaluation Form, along with other pertinent information, is transmitted with the draft biological opinion or conference report. The Project Leader is offered an opportunity to review the draft document when the draft determination is **jeopardy** and/or **adverse modification**, or when incidental take is anticipated. In these instances, it is beneficial to coordinate the development of reasonable and prudent alternatives and/or reasonable and prudent measures. If disagreements arise during this process, they can be elevated through the appropriate Assistant Regional Directors for resolution.

Consistent with current delegations of authority, Regional Directors sign intra-Service section 7 biological opinions and conference reports finding **jeopardy** or **adverse modification**. **Non-jeopardy/no adverse modification** biological opinions and conference reports can be

signed by the pertinent ESO supervisor, if the Regional Director has delegated that authority in his/her Region.

(7) WHAT ARE THE OPTIONS IF A JEOPARDY/ADVERSE MODIFICATION OPINION IS RECEIVED?

If a final **jeopardy** or **adverse modification** biological opinion or conference opinion is issued, the Project Leader must notify the ESO of the final decision on the proposed action. The Project Leader has three options: (a) to implement the reasonable and prudent alternative(s) provided with the biological opinion; (b) to refrain from funding, approving, or undertaking the project; or (c) to apply for an exemption from section 7 of the Act. However, the Service (and the Department of the Interior) does not anticipate that an action proposed under its programs will ever justify an exemption application.

OTHER INTRA-SERVICE CONSULTATION CONSIDERATIONS

The Service must be held to the same rigorous consultation standards that other Federal agencies are required to meet under section 7. An ESO cannot prepare the draft biological opinion, draft conference report, or concurrence document for its own action. Biological opinions required for section 10(a)(1)(B) permits are handled by separate organizational entities in the Regional Office's Division of Endangered Species.

This means, in part, that internal Service consultations under section 7 should be as impartial as possible. However, it is also important that a section 7 consultation does not result in otherwise avoidable delays when meeting target processing times. Such delays may result if the section 7 consultation is assigned to an office too far removed from the location and circumstances of the proposed action. In order to eliminate this problem, the biological opinion should be drafted by staff member(s) independent of the section 7 consultation, but who are familiar with the biological requirements of the species involved, and the geographic area of the proposed action.

In order to minimize possible biases, the biological opinion should not be drafted by the Service program taking the proposed action. Also, the Service program taking the proposed action should not be the program providing technical assistance to the applicant, if any. It is important that the staff member conducting the section 7 consultation be involved early in the development of the proposed action, so that the requirements of section 7 are addressed in the

proposed action. The Service also recommends that the biologist(s) that conduct the section 7 consultation and the biologist that provide technical assistance to the applicant, if any, should not have the same supervisor. This will help prevent any unintentional biases being shared in the development of the proposed action and the biological opinion. The biological opinion is then reviewed and finalized by the Regional Office processing the consultation. This ensures a good balance between independent review and timely permit processing. The non-jeopardy biological opinion may also be finalized and signed by the Field Office supervisor, if the Regional Director and the Assistant Director for Ecological Services have delegated the authority to do so.

Regional Office Divisions of Endangered Species have lead coordination responsibilities for national and inter-regional consultations. In addition, Regional Offices provide oversight of the consultation program for quality control. For expedience in processing consultations, a Service Project Leader may assume the lead responsibility for formal consultation in multi-agency actions if the Service's role is significant.

All Project Leaders have a continuing responsibility to determine if discretionary ongoing activities of the Service (no matter when the activities were initiated) comply with these guidelines and procedures.

Appendix 1

EXAMPLES OF STEP-BY-STEP PROCEDURES FOR INTRA-SERVICE SECTION 7 CONCURRENCE, FORMAL CONSULTATION, AND CONFERENCE

A. Intra-Service Section 7 Concurrence

Situation: The Division of Federal Aid (FA) receives a project proposal from a State. The project is eligible for funding under the Wildlife Restoration Grant Program.

Step:

1. The Project Leader assesses which listed, proposed, candidate species and proposed or designated critical habitats may occur within action areas. The Project Leader has the option of requesting a list of listed, proposed, candidate species and proposed or designated critical habitats from the ESO. This request includes information on the specifics of the State request. Within 30 days of receiving the request, ESO furnishes FA with a list of species that may be present in the action area. Or, the Project Leader provides a list of species/critical habitats to the ESO for ESO concurrence.

2. Upon receipt of any requested species information, FA conducts a "may affect" analysis on listed, proposed, and candidate species.

3. If a "may affect" determination is made, then FA completes the Service Evaluation Form and determines the action "is not likely to adversely affect" the listed, proposed, candidate species, or designated/proposed critical habitats and requests in writing that the ESO concur with this evaluation.

4. ESO responds within 30 days of receiving FA's request that there is concurrence, and therefore no need for formal intra-Service section 7 consultation.

5. If FA determines "no effect," then a request for concurrence is unnecessary. If species/critical habitats are present but the Project Leader determines there will be no affect, he/she may proceed with the funding proposal.

B. Intra-Service Section 7 Formal Consultation

Situation: The Division of Fisheries (DF) receives a request from a State for an action.

Step:

1. The Project Leader assesses which listed, proposed, candidate species and proposed or designated critical habitats may occur within action areas. To assist in this determination DF may request a list of listed, proposed, and candidate species from the ESO. This request includes information on the specifics of the State request.

2. Within 30 days of receiving the request, the ESO furnishes DF with a list of species that may be present in the action area.

3. Upon receiving any requested species information, DF conducts a "may affect" analysis on listed, proposed, and candidate species that ESO said may be present.

4. DF concludes that the proposed action is likely to adversely affect listed species.

5. DF requests, in writing, initiation of formal intra-Service section 7 consultation. A completed Service Evaluation Form is submitted with the request.

6. ESO acknowledges the request for formal intra-Service section 7 consultation.

7. ESO prepares the draft biological opinion and submits to the ARD/ES for review.

8. The RD signs the biological opinion and forwards it to DF with a copy to the ARD/DF.

C. Intra-Service Section 7 Conference

Situation: Refuges proposes an action in an area containing a proposed or candidate species.

Step:

1. The Project Leader assesses which listed, proposed, candidate species and proposed or designated critical habitat may occur within action areas. To assist in this

determination, Refuges may request a list of listed, proposed, and candidate species from the ESO. This request includes information on the specifics of the request.

2. Within 30 days of receiving the request, the ESO furnishes Refuges with a list of species that may be present in the action area.

3. Upon receiving any requested species information, Refuges conducts a "may affect" analysis on listed, proposed, and candidate species that ESO said may be present.

4. Refuges works with the ESO to assess whether or not their proposed action may jeopardize the continued existence of the proposed or candidate species. Refuges evaluates their proposal for its potential effect on the proposed or candidate species.

5. As a result of the evaluation, Refuges concludes their proposal is likely to jeopardize the proposed or candidate species. Refuges requests conference with ESO on the Service Evaluation Form and asks for additional information.

6. The conference is held and ESO submits a draft conference report (the format follows that of a biological opinion issued through formal consultation) to the ARD/ES for review. The report contains advisory recommendations for minimizing or avoiding adverse effects.

7. The Regional Director signs the conference report and forwards it to Refuges with a copy to the ARD/Refuges. Refuges reviews the conference opinion and implements the actions that will avoid adverse effects to the proposed or candidate species.

Appendix 2

INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM

[Note: This form provides the outline of information needed for intra-Service consultation. If additional space is needed, attach additional sheets, or set up this form to accommodate your responses.]

Originating Person: _____
Telephone Number: _____
Date: _____

I. Region:

II. Service Activity (Program)

III. Pertinent Species and Habitat:

A. Listed species and/or their critical habitat within the action area:

B. Proposed species and/or proposed critical habitat within the action area

C. Candidate species within the action area:

D. Include species/habitat occurrence on a map.

IV. Geographic area or station name and action:

V. Location (attach map):

A. Ecoregion Number and Name:

B. County and State:

C. Section, township, and range (or latitude and longitude):

D. Distance (miles) and direction to nearest town:

E. Species/habitat occurrence:

VI. Description of proposed action (attach additional pages as needed):

VII. Determination of effects:

A. Explanation of effects of the action on species and critical habitats in items III. A, B, and C (attach additional pages as needed):

B. Explanation of actions to be implemented to reduce adverse effects:

VIII. Effect determination and response requested: [* = optional]

A. Listed species/designated critical habitat:

Determination	**Response requested**
no effect/no adverse modification (species:_____)	**____*Concurrence**
may affect, but is not likely to adversely affect species/adversely modify critical habitat (species: _____)	**____Concurrence**
may affect, and is likely to adversely affect species/adversely modify critical habitat (species: _____)	**____Formal Consultation**

B. Proposed species/proposed critical habitat:

Determination	**Response requested**
no effect on proposed species/no adverse	

Throughout Section choices use some fo the phrase "adverse modify" critical habi implies a determina regarding likelihood destruction or adver modification of desi critical habitat, rathe just effects. In the c this section this is p not what was intend more appropriate ch would be phraseolo a form describing "a effects" to critical ha wording equivalent phraseology used fo listed species.

modification of proposed critical habitat
(species: _____) ____*Concurrence

is likely to jeopardize proposed species/
adversely modify proposed critical habitat
(species: _____) ____Conference

C. Candidate species:

Determination	**Response requested**
no effect	
(species: _____)	**____*Concurrence**
is likely to jeopardize candidate species	
(species: _____)	**____Conference**

_____ _____
signature date
[Title/office of supervisor at originating station]

IX. Reviewing ESO Evaluation:

A. Concurrence _____ Nonconcurrence _____

B. Formal consultation required _____

C. Conference required _____

D. Informal conference required _____

E. Remarks (attach additional pages as needed):

_____ _____

signature **date**

[Title/office of reviewing official]

INSTRUCTIONS

Originating Person: The person(s) or unit (field office, refuge, program) proposing an action for which the Intra-Service Section 7 Biological Evaluation Form is being prepared.

Date: Date the information on the form was finalized.

I. Region: The Region in which the proposed action will occur.

II. Service activity: The Service program initiating the proposed action.

III. Pertinent species and habitat.

A. Listed species and/or their critical habitat within the action area: The action area includes the immediate area where the proposed action will occur, as well as any other areas where direct or indirect impacts of the action may be expected. For example, effects of an action in the headwaters of a stream may affect endangered fish that occur 20 miles downstream. A compilation of listed species or critical habitats that possibly occur in the action area may be generated by the Project Leader, or it may be requested from the appropriate ESO.

Note: All experimental populations of listed species are treated as threatened species. However, for the purposes of intra-Service section 7 consultation, they are treated as species *proposed* for listing if they occur off National Wildlife Refuge or National Park System lands and they are classed as "non-essential" experimental populations.

List all threatened and endangered species and critical habitat that may be affected by the proposed action. An effect exists even if only one individual or habitat segment may be affected. Consider both beneficial and adverse effects, regardless of their magnitude.

It is necessary to list all threatened and endangered species and critical habitats in the action area that will not be affected at any level of significance. This informs the reviewer that such species have been considered.

B. Proposed species and/or proposed critical habitat within the action area: Lists of proposed species and critical habitat that could occur in the action area may be generated by the project leader or may be requested from the appropriate ESO.

List all species and habitats in the action area for which a proposed listing rule (but not a final rule) or proposed critical habitat designation has been published in the Federal

Register. The list should include not only proposed species that may be affected, but also those that will not be affected. Use the same consideration as in Item III (A) above.

C. Candidate species within the action area: Service actions shall include consideration of candidate species as though proposed for listing. Lists of candidate species that could occur in the action area may be generated by the project leader or may be requested from the appropriate ESO.

List all candidate species that may be affected by the proposed action. Because listing candidates may be added to, or dropped from, candidate species lists between the typically biannual printings of the Notice of Review, it is necessary to check candidate lists with the appropriate ESO.

Include in the list of candidate species in the action area those that will not be affected by the proposed action.

IV. Geographic area or station name and action:

Briefly describe the proposed action and where it will occur. (For example: The proposed action is to directly stock, or transfer to the State of X for stocking, channel catfish and smallmouth bass. These stockings would occur in both Blue Water and Minnow River drainages). A more detailed description of the proposed action will be presented under Section VI.

V. Location (attach map):

In addition to the following four specific descriptions, it is vital to attach a map(s). The reviewer may not be familiar with the project area and will need the maps to precisely relate the proposed project to the affected species. 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.

A. Ecoregion Number and Name: Self-explanatory

B. County and State: Self-explanatory.

C. Section, township, and range (or latitude and longitude):

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.

D. Distance (miles) and direction to nearest town: Self-explanatory.

E. Species/habitat occurrence: Depict on the location map the species and habitat occurrences.

VI. Description of proposed action:

What is the purpose of this proposed action and how do you plan to accomplish it? Describe the project area as well as the project. These descriptions should be detailed enough so that the reviewer can fully understand what the components of the action include and how the project will affect the species. Do not assume that the reviewing office will understand procedures that are taken for granted within your program. Details can be provided here, or by attaching copies of project plans, management plans, stocking schedules, or other project documents. National Environmental Protection Act documents are usually helpful attachments. Sketches or blueprints of the proposed action should be attached. Proposed project dates should be provided. Attach a biological assessment if the project is considered a "major construction activity." Include any measures agreed to through informal consultation to reduce any adverse impacts.

VII. Determination of effects

A. Explanation of effects of the action:

Discuss either the effects of the action on each listed, proposed, or candidate species and critical habitat in the action area, or why those species or critical habitats will not be affected. For species or critical habitats affected by the proposed action, provide the following information: [Note: candidate species will have no proposed critical habitat.]

(1) Status of species in action area; is it native (natural and/or stocked) or non-native in the action area? Include population and/or distribution trends (provide survey information).

(2) Species habitat in the action area and its significance to spawning, feeding, migratory habits (or behavior), cover, roost, etc. Is the area currently occupied or unoccupied historic range for the species?

(3) Impacts of the proposed action on species and/or critical habitat, including direct, indirect, interdependent, interrelated, and cumulative impacts.

(4) Quantification of effects - acres of habitat, miles of habitat, number of individuals, etc.

(5) Summary of effects - include the basis for your conclusion - best judgment, literature, citations, studies, etc.

B. Describe, if known, project modifications that would promote the conservation of the affected species. Project modification ideas may be found in recovery plans. Although section 7 of Act prohibits only those actions by Federal agencies which are likely to jeopardize listed species or adversely modify critical habitat, the Service has a commitment to recovering listed species and trying to prevent the need to list additional species.

The comment and explanation above a applies to the use of "adversely modify" c and E36.

VIII. Effect determination and response requested:

Enter the species in the appropriate determination. For each determination, place an X on the response requested.

A. Listed species/critical habitat:

No effect/no adverse modification. This conclusion is reached if the proposed action and its interrelated and interdependent actions will not directly or indirectly affect listed species or destroy/adversely modify designated critical habitat. Formal section 7 consultation is not required when the no effect conclusion is reached. However, a request for the optional written concurrence is encouraged to facilitate a complete administrative record.

May Affect, but is not likely to adversely affect species/adversely modify critical habitat. This conclusion is appropriate when effects to the species or critical habitat are expected to be discountable, insignificant, or completely beneficial. Beneficial effects are contemporaneous positive effects without any adverse effects to the species or habitat. Insignificant effects relate to the size of the impact (and should never reach the scale where take occurs), while discountable effects are those that are extremely unlikely

to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur. If the ESO concurs in writing with the Project Leader's determination of "is not likely to adversely affect" listed species or critical habitat, the intra-Service section 7 consultation process is completed.

If formal section 7 consultation is required for other species affected by this proposed action, then it may be easier and less confusing to fold the "is not likely to adversely effect" concurrence into the formal section 7 consultation rather than doing a separate concurrence.

May affect, and is likely to adversely affect species/adversely modify critical habitat. This conclusion is reached if any adverse effect to listed species or critical habitat may occur as a direct or indirect result of the proposed Service action or its interrelated or interdependent actions, and the effect is not discountable, insignificant or beneficial (see definition of "is not likely to adversely affect". In the event the overall effect of the proposed action is beneficial to the listed species or critical habitat, but may also cause some adverse effect on individuals of the listed species or segments of the critical habitat, then the determination should be "is likely to adversely affect." Such a determination requires formal section 7 consultation.

> Example: A refuge proposes prescribed burning for a prairie remnant to improve the habitat for the endangered Karner blue butterfly. The burn will substantially improve the habitat for the species and promote its recovery in subsequent years. However, individual Karner blue butterfly eggs and larvae will be killed during the burn. Even though the net effect of the burn will be highly beneficial to the listed species, the burn must be considered to have an adverse effect. A finding of "is likely to adversely affect" is necessary.

B. Proposed species/proposed critical habitat:

No effect on proposed species/no adverse modification of proposed critical habitat. This conclusion is reached if the proposed action and its interrelated and interdependent actions will not directly or indirectly affect proposed species or proposed critical habitat. A request for the optional written concurrence is encouraged.

Is likely to jeopardize proposed species/adversely modify proposed critical habitat. For proposed species and proposed critical habitats, the Service is required to evaluate whether the proposed Service action is likely to jeopardize the continued existence of the proposed species or adversely modify an area proposed for designation as critical

habitat. If this conclusion is reached, a section 7 conference is required. If this conclusion is reached, intra-Service conference is required.

C. Candidate species:

No effect on candidate species. This conclusion is reached if the proposed action and its interrelated and interdependent actions will not directly or indirectly affect candidate species. A request for the optional written concurrence is encouraged.

Is likely to jeopardize candidate species. For candidate species, the Service is required to evaluate whether the proposed Service action is likely to jeopardize the continued existence of the candidate species. If this conclusion is reached, intra-Service section 7 conference is required.