

**Endangered Species Act
Section 7 Consultation Process
for FHWA-funded Projects in North Carolina
(Final Version 8.7.07)**

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List of Acronyms

BA	=	Biological Assessment
BE	=	Biological Evaluation
BO	=	Biological Opinion
CFR	=	Code of Federal Regulations
CH	=	Critical Habitat
EIS	=	Environmental Impact Statement
ESA	=	Endangered Species Act
FHWA	=	Federal Highway Administration
IP	=	Initiation Package
ITS	=	Incidental Take Statement
NCDOT	=	North Carolina Department of Transportation
NCNHP	=	North Carolina Natural Heritage Program
NCWRC	=	North Carolina Wildlife Resources Commission
NEPA	=	National Environmental Policy Act
NOAA-Fisheries	=	National Oceanographic & Atmospheric Administration-- National Marine Fisheries Service
RPA	=	Reasonable and Prudent Alternative
RPA	=	Reasonable and Prudent Measure
T&C	=	Terms and Conditions
USFWS	=	United States Fish & Wildlife Service

Purpose

This document is intended to provide a step-by-step process for complying with Section 7 of the [Endangered Species Act](#) (ESA) for North Carolina Department of Transportation (NCDOT) project managers. The ESA directs all federal agencies to participate in endangered species conservation. Specifically, Section 7 charges federal agencies with the responsibility for aiding in the conservation of listed species (Section 7(a)(1)) and requires them to ensure their activities won't jeopardize the continued existence of listed species or adversely modify designated critical habitat (Section 7(a)(2)). Through the section 7(a)(2) process, set forth in the Act and outlined in the accompanying regulations (50 CFR 402.10-16), federal agencies must evaluate projects they fund or authorize for their impacts—direct, indirect, and cumulative—to federally listed species and critical habitat and work to minimize or eliminate those impacts.

Scope

This process applies only to projects that are funded by the Federal-Aid Highway Program, as administered by the [Federal Highway Administration](#) (FHWA).

Consultation

The ESA Section 7 consultation process has both informal and formal stages. Informal consultation (50 CFR 402.13) is an optional process that is designed to help the applicant and the action agency determine whether formal consultation is needed. It includes all discussions, correspondence, etc., between the United States Fish & Wildlife Service (USFWS) and or the National Oceanographic & Atmospheric Administration—National Marine Fisheries Service (NOAA-Fisheries), hereinafter referred to as the “Service”, the action agency and the applicant, and has no specified timeframe for completion. Federal agencies and the designated non-Federal entity (NCDOT) may use this period to work with the Service on project design and conservation actions that would remove all adverse effects and alleviate the need for formal consultation. Informal consultation begins when the funding or authorizing federal agency (action agency) makes a determination as to whether a listed species or critical habitat will be affected by their project. If the action agency determines that there will be no effect, the consultation process ends. If the action agency determines that the project “may affect, but is not likely to adversely affect”, a listed species or critical habitat (and the Service agrees in writing), the consultation process ends. The Service strongly encourages the use of informal consultation so that projects can be designed with minimal impact to listed species, possibly resulting in a determination of “may affect, not likely to adversely affect”, eliminating the need for formal consultation.

If the action agency determines that the project “may affect, likely to adversely affect” a listed species or designated critical habitat, the consultation process then moves into formal consultation. Formal consultation is a mandatory process for proposed projects that may adversely affect listed species. The action agency prepares a biological assessment for the project and submits it to the Service. A biological assessment

includes a description of the project's impacts and what conservation measures will be implemented to minimize or eliminate harm to the species or its critical habitat. If the biological assessment is complete, the Service responds with a biological opinion, which states whether the project will jeopardize the species or adversely modify critical habitat. If a jeopardy or adverse modification determination is made, the biological opinion typically identifies any reasonable and prudent alternatives that could allow the project to move forward. If the Service determines that the action will not jeopardize the species or adversely modify critical habitat, the biological opinion may include an incidental take statement authorizing the take ("take" is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting a listed animal or attempting to engage in any such conduct) of a limited number of individuals during the course of the project. The biological opinion also outlines terms and conditions the action agency must follow to minimize/eliminate impacts to the species.

Designation as Non-Federal Representative

50 CFR 402.08 allows for the designation of a non-Federal representative to act on a Federal agency's behalf for certain steps in the Section 7 consultation process. The FHWA has designated (see Appendix A) the NCDOT as its non-federal representative to perform informal consultation with the United States Fish & Wildlife Service (USFWS) and the National Oceanographic & Atmospheric Administration (NOAA-Fisheries). This allows NCDOT to coordinate with the USFWS and/or NOAA-Fisheries (hereinafter referred to as the "Service") on informal consultation steps (e.g. request species lists, make determinations of effect).

Occasionally, other Federal agencies with discretionary approval authority (U.S. Army Corps of Engineers, Tennessee Valley Authority, U.S. Coast Guard) will be a Cooperating Agency (with FHWA as the Lead Federal Agency). When this occurs, the independent Section 7 responsibilities of Cooperating Agencies can be satisfied by FHWA.

Absent Cooperating Agency status or a written designation of NCDOT as these other agencies' non-Federal representative, NCDOT is not authorized to consult with the Service(s) pursuant to Section 7 of the ESA. Although this routinely occurs, it puts these other agencies at risk for a lawsuit under the Administrative Procedures Act for not properly complying with the ESA.

Notes:

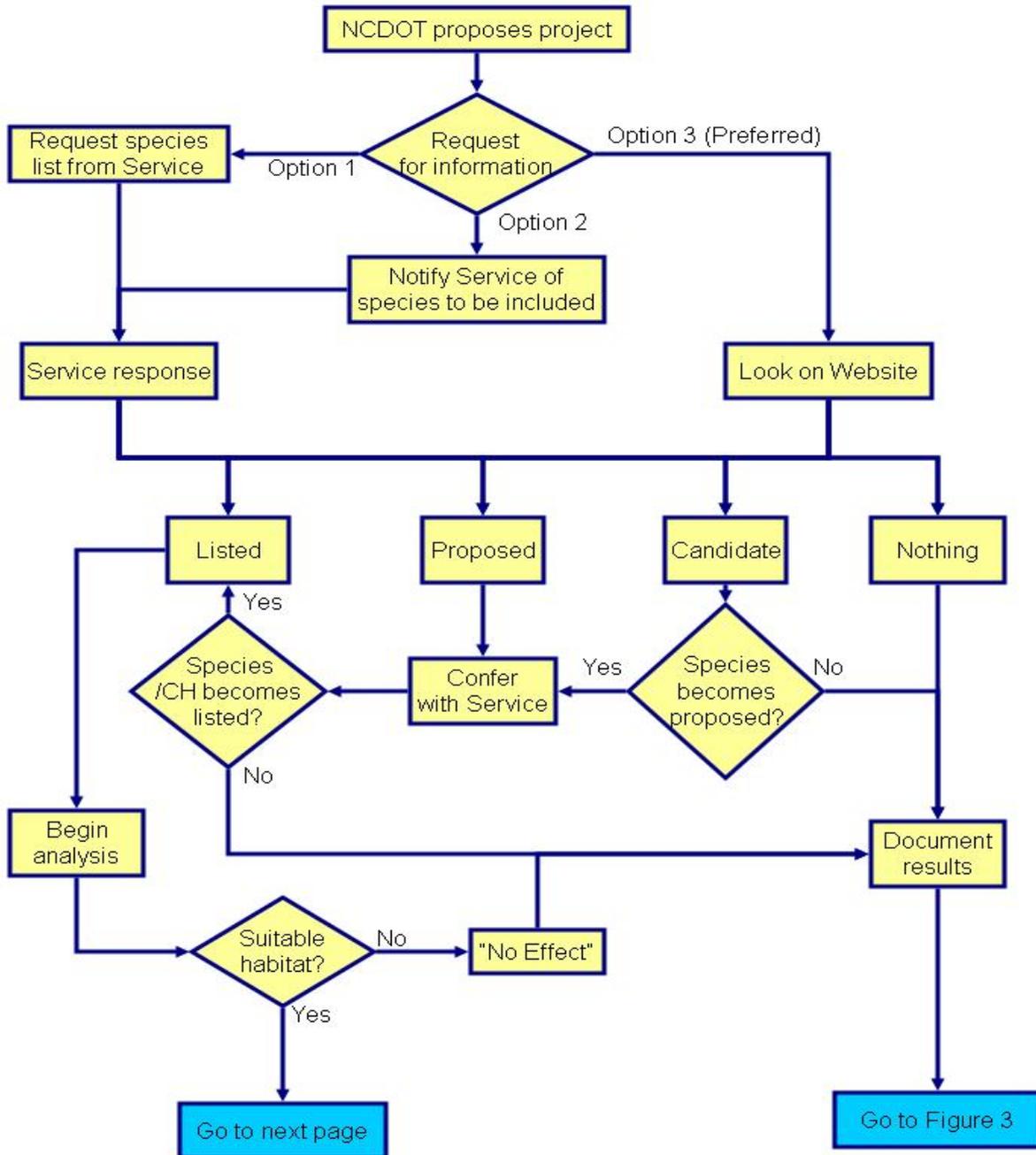
- In the case where there is no federal nexus but the NCDOT will be "taking" a federally listed species, NCDOT must consult with the Service pursuant to Section 10 of the ESA (not Section 7).
- Third party recipients of federal funds (e.g. local governments) have not been designated as non-federal representatives by FHWA. NCDOT may not further delegate "non-federal representative" status to third parties. Therefore, NCDOT (not the third party fund recipients) must perform consultation requirements for these projects since the federal-aid funds flow through NCDOT.

Informal Consultation

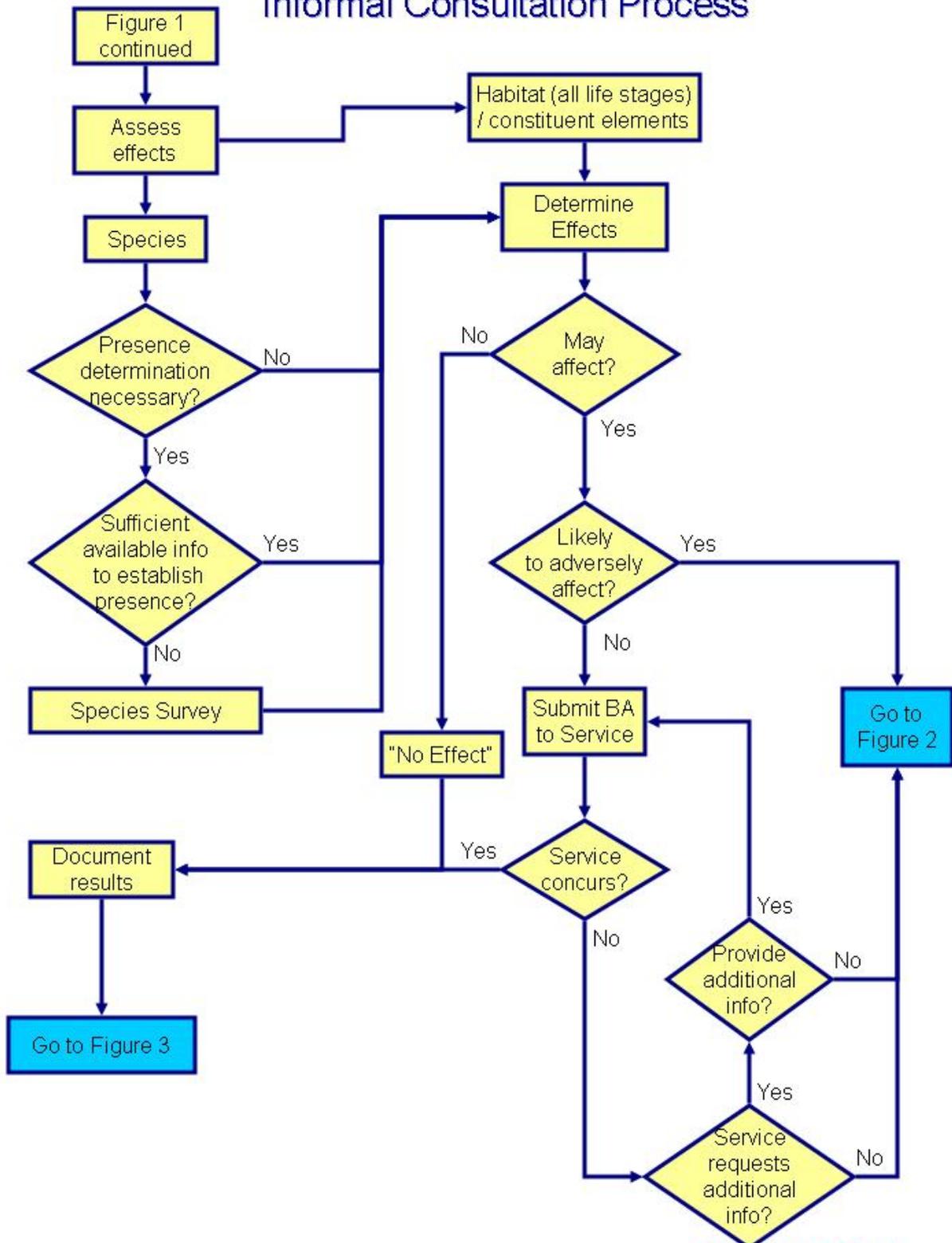
The flowchart below outlines the ESA Section 7 Informal Consultation process for FHWA-funded projects. The reader should use the flowchart as the primary tool for following the process. The accompanying text provides descriptive information related to the steps in the flowchart.

Figure 1: Informal Consultation

Informal Consultation Process



Informal Consultation Process



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NCDOT proposes project

NCDOT identifies a project to be implemented. Environmental analysis pursuant to the National Environmental Policy Act (NEPA), the Endangered Species Act and other federal and state environmental laws must be undertaken.

Request for information

The first step is to request basic information from USFWS and/or NOAA-Fisheries (50 CFR 402.12(c)). This is to initially determine whether listed (Threatened and/or Endangered) or proposed species and/or designated or proposed critical habitat may be in the project area. There are three options.

Notes:

- The USFWS maintains a website of listed species by county: www.fws.gov/southeast/es/county%20lists.htm. Should NCDOT choose to provide a website list to the Service, only this website should be used. There are other USFWS, NCWRC and NCNHP websites containing listed species, but none of these should be used since they are not accurate.
- For a particular project, communication with both agencies may be warranted. Generally, USFWS manages land and freshwater species, while NOAA-Fisheries manages marine and anadromous species. There are two USFWS Ecological Services field offices in North Carolina. Each office is responsible for a geographic portion of the state.
- If NCDOT chooses to obtain the list of species from the Internet, NCDOT still needs to provide this list to the Service and the Service needs to respond. NCDOT must be able to document in the project file that a request was made and a response was received.

“Option 1: Request species list from Service”

NCDOT requests a species/critical habitat list from the Service;

“Option 2: Notify Service of species to be included”

NCDOT notifies the Service of the species/critical habitat included in the analysis.

“Option 3 (Preferred): Look on Website”

The USFWS has determined (Appendix B) that by checking the USFWS website (<http://www.fws.gov/southeast/es/county%20lists.htm>), this action serves to satisfy the “request/notify” requirement and also the “service response” (below) requirement.

Note:

The NCNHP database is another reference source for information on whether a species may be present within the action area. If the NHP source indicates possible presence of species but the USFWS county species list does not list the species for that county, consult with the USFWS.

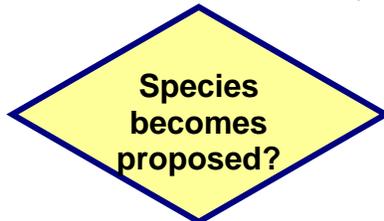
Service response

The Service’s Consultation Handbook states that the Service will respond within 30 days when possible from receipt of the request to respond in writing (50 CFR 402.12(d)). If NCDOT requests a list from the Service (“Option 1”), the Service will respond with a list. If NCDOT notifies the Service of the species/critical habitat that are being included in the analysis (“Option 2”), the Service will either concur with the list or

revise the list. The Service could indicate that either listed/proposed/candidate species/critical habitat may be present or that none may be present.

Candidate

If the Service indicates that Candidate species may be present in the action area, then NCDOT needs to monitor the species status throughout project development (typically until Construction Authorization is obtained from FHWA).



Should the status of the species change from “Candidate” to “Proposed” during project development (typically until Construction Authorization is obtained from FHWA), then NCDOT needs to confer with the Service.

Proposed

If the Service indicates that Proposed species and/or Proposed critical habitat may be present, then NCDOT needs to confer with the Service. NCDOT also needs to monitor the species status throughout project development (typically until Construction Authorization from FHWA) in case the designation changes from “Proposed” to “Listed”.

Confer with Service

FHWA needs to confer (50 CFR 402.10) with the Service on any action which is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat. The conference is designed to assist FHWA/NCDOT in identifying and resolving potential conflicts at an early stage in the planning process. The conference consists of informal discussions in which the Service will make advisory recommendations, if any, on ways to minimize or avoid adverse effects. Conclusions reached during a conference and any recommendations shall be documented by the Service and provided to FHWA/NCDOT.



Should the status change from “Proposed” to “Listed” (for species) or “Designated” (for critical habitat) during project development, then NCDOT may need to either update the Biological Assessment (if ESA consultation has not been completed) or re-initiate consultation (if ESA consultation has been completed) to address the newly listed species (50 CFR 402.16(d)(1)).

Listed

If the Service indicates that listed species and/or designated critical habitat may be in the action area (50 CFR 402.12(d)(2)), the Service will provide available information (or references thereto) regarding these species and critical habitat, and may recommend discretionary studies or surveys that may provide a better information base for the preparation of an assessment. NCDOT will need to prepare a Biological Assessment.

Nothing

If the Service indicates no listed species, proposed species, candidate species, designated critical habitat or proposed critical habitat may be present in the action area, then NCDOT does not need to consult with the Service.

**Document
results**

When the Service indicates no listed species, proposed species, candidate species, designated critical habitat or proposed critical habitat may be present in the action area, then NCDOT documents this response. ESA compliance for purposes of the NEPA document is satisfied upon receipt of the Service indication that no listed species, proposed species, candidate species, designated critical habitat or proposed critical habitat may be present in the action area.

**Begin
analysis**

If the Service indicates that listed species and/or designated critical habitat may be present, then NCDOT will undertake an analysis of the effects of the project on the listed species/critical habitat.

Notes:

- NCDOT needs to define the project:
 - What activities will occur;
 - Where (“action area”) will activities occur;
 - When will activities occur;
 - How will activities occur.
- If the project is a “major construction activity” (i.e. an Environmental Impact Statement (EIS) will be prepared), then the analysis must be referred to as a Biological Assessment. If the project is not a “major construction activity” (does not require the preparation of an EIS), this analysis can either be referred to as a “Biological Evaluation” (BE) or a “Biological Assessment (BA)”. These terms are sometimes used interchangeably (although the regulations do not include the term “Biological Evaluation”).
- The “action area” (50 CFR 402.02) must be defined for the project. The action area includes all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.
- The Service suggests (50 CFR 402.12(f)) the following information be considered for inclusion in a BA:
 - The results of an on-site inspection of the area affected by the action to determine if listed or proposed species are present or occur seasonally.
 - The views of recognized experts on the species at issue.
 - A review of the literature and other information.
 - An analysis of the effects of the action on the species and habitat, including consideration of cumulative effects, and the results of any related studies.
 - An analysis of alternate actions considered by the Federal agency for the proposed action.”

- The Service regulations also state that the “contents of a BA are at the discretion of the Federal agency and will depend on the nature of the Federal action”. Therefore, **it is up to NCDOT/FHWA to decide what information will be included in a BA**. The Service may request additional information (e.g. survey for species, construction/demolition techniques, etc.) in order to provide a better information base for preparation of the BA (50 CFR 402.12(d)(2)); however, NCDOT/FHWA makes the decision whether to generate new data.
- If the action agency decides not to provide the additional requested information, then the Service will make a conservative decision erring on the side of the species. This may result in a different decision than one made with the requested information provided.
- Service regulations allow for some information to be incorporated by reference (50 CFR 402.12(g)). In the case where the proposed action is identical, or very similar, to a previous action for which a biological assessment was prepared, the Federal agency may fulfill the biological assessment requirement for the proposed action by incorporating by reference the earlier biological assessment, plus any supporting data from other documents that are pertinent to the consultation, into a written certification that:
 - The proposed action involves similar impacts to the same species in the same geographic area;
 - No new species have been listed or proposed or no new critical habitat designated or proposed for the action area; and
 - The biological assessment has been supplemented with any relevant changes in information.”
- Analysis for the BA should begin within 90 days from receipt of or concurrence with the species list from the Service (50 CFR 402.08(e)). If analysis for the BA has not begun within 90 days from receipt of or concurrence with the species/critical habitat list from the Service (50 CFR 402.12(e)), NCDOT must verify that the species/CH list is still current. Essentially this regulation serves as a reminder to NCDOT that species/critical habitat lists can be dynamic, and thus it is prudent (and required) for NCDOT to verify the accuracy of the list.

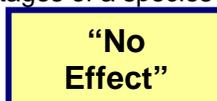


If listed species may be present in the action area, NCDOT will need to determine if suitable habitat exists in the action area. This can be accomplished by a review of existing data from previous studies/projects and/or a site visit by qualified biologist familiar with species.

- **“No”**: If analysis indicates that suitable habitat does not exist within the action area for a listed species, then the effects determination should be “no effect” for that species. NCDOT documents the decision and consultation with the Service is not required. ESA compliance is satisfied for such species.
- **“Yes”**: If analysis indicates that suitable habitat exists within the action area for a listed species, then the effects determination cannot be made at this time and additional analysis is needed.

Note:

- Suitable habitat pertains to all life stages of a species (feeding, breeding, migration, shelter, etc.)



If suitable habitat for the species does not exist within the action area, then the effects determination is “no effect”. NCDOT is not required to consult with the Service.

Assess effects

If suitable habitat is present within the action area, effects to individual species, habitat and designated critical habitat must be assessed.

Species

Effects to individual species within the action area must be assessed.

Presence determination necessary?

NCDOT should decide whether it is necessary to determine presence/absence of species within the action area. In other words, NCDOT should ask the question *“would I do anything differently [about the project] if I knew the species were present?”*

In some cases, the project could be implemented without affecting individual species regardless of whether they are present or not. In this scenario, additional effort to determine presence/absence would not change the effects determination and likely is not necessary. In other cases, presence/absence of species could influence aspects of the project and thus it would be prudent to establish presence/absence.

- **“No”:** Determining presence/absence would not affect project implementation or the effects determination.
- **“Yes”:** Determining presence/absence is necessary either for making an effects determination or for implementation project changes. Additional information is needed.

Sufficient available info to establish presence?

If presence/absence information is desired, NCDOT should first determine if sufficient available information (e.g. review of existing data from previous studies/projects) exists to establish presence.

- **“No”:** If existing information is not sufficient to determine presence of listed species in the action area, NCDOT will likely need to undertake a survey for the species.
- **“Yes”:** If existing information indicates presence of listed species in the action area, a survey likely is not necessary.

Species Survey

When a survey for species is needed, NCDOT will undertake such survey.

Notes:

- In order to survey for certain listed species, a biologist must hold a permit from either the North Carolina Wildlife Resources Commission or the USFWS to survey for such species. The listed species requiring a permit for survey work include all listed aquatic species (fish & mussels) and bats. A permit is not required to survey for listed plant species. For all other listed species beyond fish, mussels, bats and plants, the survey methodology dictates whether a permit is necessary—if the survey methodology involves “take” (e.g. touching, chasing, etc.), then a permit is needed to survey for the listed species.
- Certain species have survey “windows” (e.g. surveys for plant species should be undertaken during the flowering season).
- The NCDOT Biological Surveys Unit has established an optional process to “screen” for freshwater mussels where marginal habitat is present. “Screening” involves the search for any type of mussel—not just protected species. If screening results in no mussels (of any species) being found, then a full survey by a permitted biologist is not necessary. If screening results in any mussels (of any species) being found, then a full survey by a permitted biologist is necessary. If a mussel is picked up for identification purposes, then a permitted biologist needs to be doing the screening since “touching” a listed species is considered a “take”.

**Habitat (all life stages)
/ constituent elements**

For species: Beyond any effects on individual species found within the action area, the analysis must also consider the effects of the project on the species “life requirements”. “Life requirements” are those functions necessary for survival of the species (e.g. breeding, spawning, feeding and sheltering).

For critical habitat: If designated critical habitat is present within the action area (even if species are not present), the analysis will need to assess how the project would affect the primary constituent elements. Primary constituent elements (50 CFR 424.12.9b)) are physical and biological features of designated or proposed critical habitat essential to the conservation of the species, including, but not limited to:

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

**Determine
Effects**

The outcome of the analysis is a determination of effects of the project on each species and/or designated critical habitat.

Notes:

- The effects determination must be made within 180 days from receipt of or concurrence with the species/critical habitat list from the Service (50 CFR 402.12(i)). If the effects determination has not been made within 180 days from receipt of or concurrence with the species/critical habitat list, NCDOT must obtain a time extension (in writing) from the Service. In practice, the Service will grant a time extension upon request.
- For plant species only: If survey results indicate absence of listed species, life requirements will not be adversely affected by the project and if there is no chance of seed dispersion from outside the action area into the action area, then the effects determination can be “no effect”.

**“No
Effect”**

If there is no potential to affect the listed species (including any suitable habitat) and/or designated critical habitat, then the effects determination is “no effect”. NCDOT is not required to consult with the Service.

**May
affect?**

The first step in determining effects is to conclude whether there is any potential (no matter whether beneficial or adverse, small or large) to affect the species, suitable habitat or the designated critical habitat.

- **“No”:** There is absolutely no potential to affect the species/designated critical habitat.
- **“Yes”:** There is the potential to affect the species/designated critical habitat.

**Likely
to adversely
affect?**

If the effects determination is “may affect—likely to adversely affect, formal consultation is required and NCDOT must consult with the Service (50 CFR 402.12(k)).

- **“No”:** The determination is “may affect—not likely to adversely affect”. NCDOT must obtain written concurrence from the Service.
- **“Yes”:** The determination is “may affect—likely to adversely affect”. NCDOT and FHWA will enter into formal consultation with the Service.

Note:

- When reaching a determination of “may affect—not likely to adversely affect”, the project biologist should identify aspects (e.g. best management practices, avoidance alternatives, etc.) of the project that help to minimize the impact of the project on the species/critical habitat.

**Submit
BA
to Service**

The Biological Assessment is the document that contains the NCDOT effects determinations for listed species and/or critical habitat and supporting information on how NCDOT arrived at such determinations. If the effects are “may affect—not likely to adversely affect”, NCDOT must submit the BA to the Service who must determine whether or not they concur with the effects determination.

Notes:

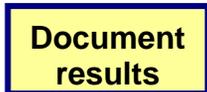
- When there are both “no effect” and “may affect—not likely to adversely affect” determinations for different species and/or designated critical habitat for the same project, the “may affect—not likely to adversely affect” effects dictates the course of action. For example, if there are three listed species of which two have “no effect” determinations and the third has a “may affect—not likely to

adversely affect” determination, then the “may affect—not likely to adversely affect” determination results in the requirement to obtain Service concurrence.



The Service has 30 days to respond in writing whether the Service concurs (or not) with the determination (50 CFR 402.12(k)).

- **“No”:** If the Service does not concur with the “may affect—not likely to adversely affect” determination, then additional consultation is necessary.
 - If the Service does not provide an answer (they do not state whether they concur or not), NCDOT will ask the Service again for their concurrence.
 - If the Service suggests that a “no effect” determination is more appropriate than a “may affect—not likely to adversely affect”, NCDOT will document that by virtue of the Service suggesting “no effect”, a “may affect—not likely to adversely affect” is also being concurred with.
- **“Yes”:** If the Service concurs with the “may affect—not likely to adversely affect” determination, NCDOT documents such concurrence and ESA compliance is satisfied for such species.



In the environmental document, NCDOT must document the results of the ESA consultation process in order to show compliance with the law.

- For all effects determinations, the following information must be included:
 - Verification of request for a species list or notification of a species list.
 - Listed species, proposed species, designated critical habitat and/or proposed critical habitat that may be present in the action area.
 - Conference results for proposed species and/or critical habitat (if applicable).
 - Approvals of consultation time extensions (if applicable)
 - Discussion of the effects of the project on the species and/or critical habitat.
 - Determination of effects of the project on the species and/or critical habitat.
- In addition:
 - For a “no effect determination, documentation must include a discussion about the lack of suitable habitat and (for plant species) negative survey results for presence of plant species.
 - For a “may affect—not likely to adversely affect” determination, documentation must include written Service concurrence.



If the Service does not concur with the “may affect—not likely to adversely affect” determination, the reason for non-concurrence is either due to the Service outright not concurring, or, the Service may be requesting additional information which will assist the Service in possibly concurring.

- **“No”:** The Service is not requesting additional information. The Service does not concur. NCDOT should notify FHWA that formal consultation is likely.
- **“Yes”:** The Service is requesting additional information that may assist them in concurring.



If the Service does not concur with the “may affect—not likely to adversely affect” determination and has requested additional information, NCDOT will decide whether to provide the requested information. If the requested information is available, the information should be provided. If the requested information is not available, NCDOT should consult with FHWA.

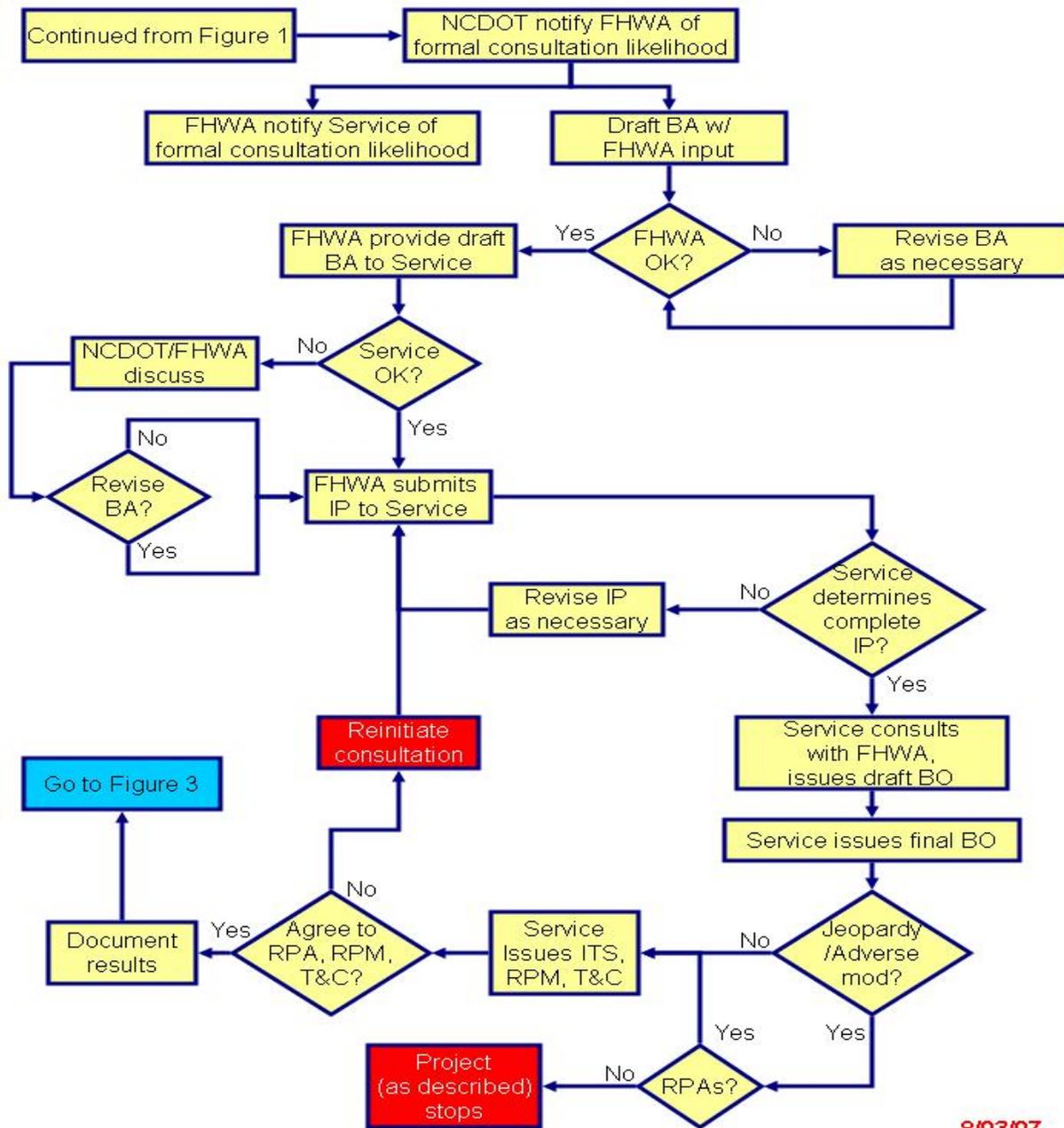
- **“No”:** NCDOT will not provide the requested information. NCDOT should notify FHWA that formal consultation is likely.
- **“Yes”:** NCDOT will provide the requested information to the Service and the Service will again decide whether to concur in the effects determination.

Formal Consultation

The flowchart below outlines the ESA Section 7 Informal Consultation process for FHWA-funded projects. The reader should use the flowchart as the primary tool for following the process. The accompanying text provides descriptive information related to the steps in the flowchart.

Figure 2: Formal Consultation

Formal Consultation Process



8/03/07

NCDOT notify FHWA of formal consultation likelihood

If NCDOT determines that formal consultation (50 CFR 402.14) is likely, FHWA should be notified. Formal consultation is likely under the following situations:

- NCDOT has determined “may affect—likely to adversely affect” for one or more species or for designated critical habitat within the action area.
- The Service does not concur with a “may affect—not likely to adversely affect” determination.
- The Service has requested additional information but NCDOT will not/cannot provide such information.

Formal consultation is a mandatory process for proposed projects that are likely to adversely affect listed species and/or designated critical habitat. FHWA has not delegated formal consultation responsibilities to NCDOT. Therefore, when formal consultation is needed, FHWA assumes the lead role in consultation with the Service.

FHWA notify Service of formal consultation likelihood

If formal consultation is likely, FHWA should notify the Service as a courtesy “heads up”.

Draft BA w/ FHWA input

NCDOT will draft the Biological Assessment (BA) with input from FHWA. Under formal consultation, the BA must be labeled as a BA (not as a Biological Evaluation).



NCDOT will send a draft of the BA to FHWA for internal review.

- **“No”**: FHWA internal review results in needed modifications.
- **“Yes”**: FHWA internal review results in satisfactory draft BA to be released for external review.

Revise BA as necessary

If FHWA internal review results in needed modifications, NCDOT will revise the BA.

FHWA provide draft BA to Service

Although not required, it is prudent to have the Service review the draft BA prior to initiation of formal consultation, especially to get input on whether the Service feels the BA would be considered “complete” when formal consultation is initiated.



Service comments on the draft BA are helpful in determining completeness and sufficient analysis.

- **“No”**: The Service indicates that there are critical flaws or missing required information.
- **“Yes”**: The Service indicates that there are no critical flaws or missing required information of the draft BA. The Service could still have suggestions or ideas that could make the BA better, but the BA is still acceptable.

**NCDOT/FHWA
discuss**

If the Service is not OK with the draft BA, NCDOT and FHWA will discuss the Service comments/recommendations/suggestions.

**Revise
BA?**

FHWA and NCDOT will decide whether to revise the draft BA based on Service input. An example of when FHWA/NCDOT may decide not to revise the BA would be information requested by the Service that is not currently available. Since there is no requirement that FHWA/NCDOT generate new data, a decision must be made as to whether FHWA/NCDOT will agree to provide the recommended data.

- **“No”**: FHWA (in consultation with NCDOT) decides not to revise the BA based on Service input.
- **“Yes”**: FHWA (in consultation with NCDOT) decides to revise the BA based on Service input.

Note:

- The BA (effects determination) must be submitted (initiating formal consultation) within 180 days from receipt of or concurrence with the species/critical habitat list from the Service (50 CFR 402.12(i)). If more than 180 days has passed since receipt of or concurrence with the species/critical habitat list, a mutually agreed upon time extension must be requested from (and received by in writing) the Service. In practice, the Service will grant a time extension upon request.

**FHWA submits
IP to Service**

Formal consultation begins when FHWA submits a complete Initiation Package (IP) to the Service. The Initiation Package includes the Biological Assessment.

**Service
determines
complete
IP?**

The following information is required in order for the Initiation Package to be considered “complete” by the Service (50 CFR 402.14(c)):

- 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.

50 CFR 402.14(d) requires that FHWA provide the Service with the best scientific and commercial data available or which can be obtained during the consultation for an adequate review of the effects that an action may have upon listed species or critical habitat.

- **“No”**: The Service determines that the IP is not complete.
- **“Yes”**: The Service determines that the IP is complete.

**Revise IP
as necessary**

If the Service determines that the IP is not complete, FHWA/NCDOT must revise the IP to include the missing information and resubmit the IP to the Service.

**Service consults
with FHWA,
issues draft BO**

Once the service determines that the Initiation Package is complete, the Service has 90 days to formally consult with FHWA (50 CFR 402.14(e)).

Service responsibilities (50 CFR 402.14(g)) during formal consultation include:

- Review all relevant information provided by FHWA/NCDOT or otherwise available.
- Evaluate the current status of the listed species or critical habitat.
- Evaluate the effects of the action and cumulative effects on the listed species or critical habitat.
- Formulate its biological opinion as to whether the action, taken together with cumulative effects, is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.
- Discuss with FHWA/NCDOT:
 - the Service's review and evaluation;
 - the basis for any finding in the biological opinion; and the availability of reasonable and prudent alternatives (if a jeopardy opinion is to be issued) that FHWA/NCDOT can take to avoid violation of section 7(a)(2).
 - The Service will utilize the expertise of FHWA/NCDOT in identifying these alternatives.
- If requested, the Service shall make available to FHWA the draft biological opinion for the purpose of analyzing the reasonable and prudent alternatives.

- Formulate discretionary conservation recommendations, if any, which will assist the Federal agency in reducing or eliminating the impacts that its proposed action may have on listed species or critical habitat.
- Formulate a statement concerning incidental take, if such take may occur.
- In formulating its biological opinion, any reasonable and prudent alternatives, and any reasonable and prudent measures, the Service will use the best scientific and commercial data available and will give appropriate consideration to any beneficial actions taken by the Federal agency or applicant, including any actions taken prior to the initiation of consultation.
- The biological opinion shall include (50 CFR 402.14(h)):
 - A summary of the information on which the opinion is based;
 - A detailed discussion of the effects of the action on listed species or critical habitat; and
 - The Service's opinion on whether the action is likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (a "jeopardy biological opinion"); or, the action is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (a "no jeopardy" biological opinion). A "jeopardy" biological opinion shall include reasonable and prudent alternatives, if any. If the Service is unable to develop such alternatives, it will indicate that to the best of its knowledge there are no reasonable and prudent alternatives.

Notes:

- It is prudent to request a copy of the draft Biological Opinion before the 90-day period ends. This is so NCDOT/FHWA can review the "reasonable and prudent alternatives" (if any), "reasonable and prudent measures" and "terms and conditions" and make sure they can be accomplished and are within the authority of FHWA to implement.
- Reasonable and prudent measures, along with the terms and conditions that implement them, cannot alter the basic design, location, scope, duration, or timing of the action and may involve only minor changes.
- 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.

When the Service determines that additional data would provide a better information base from which to formulate a biological opinion, the Service may request an extension of formal consultation and request that FHWA obtain additional data to determine how or to what extent the action may affect listed species or critical habitat (50 CFR 402.14(f)). The 90 day consultation period can be extended by mutual agreement between FHWA and the Service. If an extension of more than 60 days is desired, such extension must be with the consent of NCDOT applicant.

If formal consultation is extended, FHWA/NCDOT shall obtain, to the extent practicable, that data which can be developed within the scope of the extension. The responsibility

for conducting and funding any studies belongs to FHWA/NCDOT, not the Service. The Service's request for additional data is not to be construed as the Service's opinion that FHWA has failed to satisfy the information standard of Section 7(a)(2) of the Act. If no extension of formal consultation is agreed to, the Service will issue a biological opinion using the best scientific and commercial data available.

Service issues final BO

The outcome of formal consultation is the issuance of a Biological Opinion (BO) by the Service. The BO is the document that states the opinion of the Service as to whether or not the Federal action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.

Within 45 days after concluding formal consultation, the Service shall deliver a biological opinion to FHWA/NCDOT (50 CFR 402.14(e)). The Service will not issue its biological opinion prior to the 45-day or extended deadline while the draft is under review by FHWA. However, if FHWA submits comments to the Service regarding the draft biological opinion within 10 days of the deadline for issuing the opinion, the Service is entitled to an automatic 10-day extension on the deadline.



The Service will determine whether the proposed action “Jeopardizes the continued existence of the species” or “Adversely modifies the critical habitat”.

- **“No”**: The Service determines no Jeopardy or Adverse Modification.
- **“Yes”**: The Service determines Jeopardy and/or Adverse Modification.



If the Service determines “Jeopardy” or “Adverse Modification”, the Service will attempt to identify reasonable and prudent alternatives (RPA) in the biological opinion that FHWA/NCDOT can take to avoid violation of Section 7(a)(2).

- **“No”**: The Service is unable to identify RPAs.
- **“Yes”**: The Service has identified RPAs to avoid jeopardy/adverse modification.

Note:

- Section 7 regulations (50 CFR §402.02) limit reasonable and prudent alternatives to those that:
 - the Services believe will avoid the likelihood of jeopardy or adverse modification;
 - can be implemented in a manner consistent with the intended purpose of the action;
 - can be implemented consistent with the scope of the action agency's legal authority and jurisdiction; and
 - are economically and technologically feasible.

**Project
(as described)
stops**

FHWA cannot approve the environmental document (and thus cannot commit federal funds to the project) without an exemption under Section 7(g) of the ESA when one of the following scenarios occurs:

- The Service issues a Jeopardy and/or Adverse Modification opinion and there are no Reasonable and Prudent Alternatives.
- The Service issues a Jeopardy and/or Adverse Modification opinion with Reasonable and Prudent Alternatives (RPA), but FHWA/NCDOT chooses not to implement one of the RPAs.

**Service
Issues ITS,
RPM, T&C**

In those cases where the Service concludes that an action (or the implementation of any reasonable and prudent alternatives) and the resultant incidental take of listed animal (but not plant) species will not violate section 7(a)(2), and, in the case of marine mammals, where the taking is authorized pursuant to section 101(a)(5) of the Marine Mammal Protection Act, the Service will provide with the biological opinion an Incidental Take Statement (ITS) (50 CFR 402.14(i)) that:

- Specifies the impact, i.e., the amount or extent, of such incidental taking on the species;
- Specifies those reasonable and prudent measures that the Service considers necessary or appropriate to minimize such impact;
- In the case of marine mammals, specifies those measures that are necessary to comply with section 101(a)(5) of the Marine Mammal Protection Act and applicable regulations with regard to such taking;
- Sets forth the terms and conditions (including, but not limited to, reporting requirements) that must be complied with by the Federal agency or any applicant to implement the measures specified under paragraphs (i)(1)(ii) and (i)(1)(iii) of this section; and
- Specifies the procedures to be used to handle or dispose of any individuals of a species actually taken.

Note:

- Since there is no “take” for plant species, an ITS will not be issued for plant species.

**Agree to
RPA, RPM,
T&C?**

In the Biological Opinion, the Service will identify Reasonable and Prudent Alternatives, Reasonable and Prudent Measures (RPM) and Terms and Conditions (T&C). If RPAs are identified, FHWA/NCDOT must be able and willing to implement at least one. All RPMs and T&C must be implemented by FHWA/NCDOT. Otherwise, consultation must

be reinitiated. This should already be worked out during the formal consultation period when the Service is formulating their BO, but could occur after issuance of the final BO.

- **“No”:** FHWA/NCDOT is not able/willing to implement:
 - One of the RPAs;
 - All of the RPMs; and
 - All of the T&C.
- **“Yes”:** FHWA/NCDOT is able/willing to implement:
 - At least one of the RPAs;
 - All of the RPMs; and
 - All of the T&C.

Note:

- FHWA/NCDOT should ensure that the RPAs, RPMs and T&C identified by the Service are within the authority of the Service to require and the authority of FHWA to implement.

**Reinitiate
consultation**

If FHWA/NCDOT don't agree with RPAs, RPMs and/or T&C, then reinitiate consultation.

**Document
results**

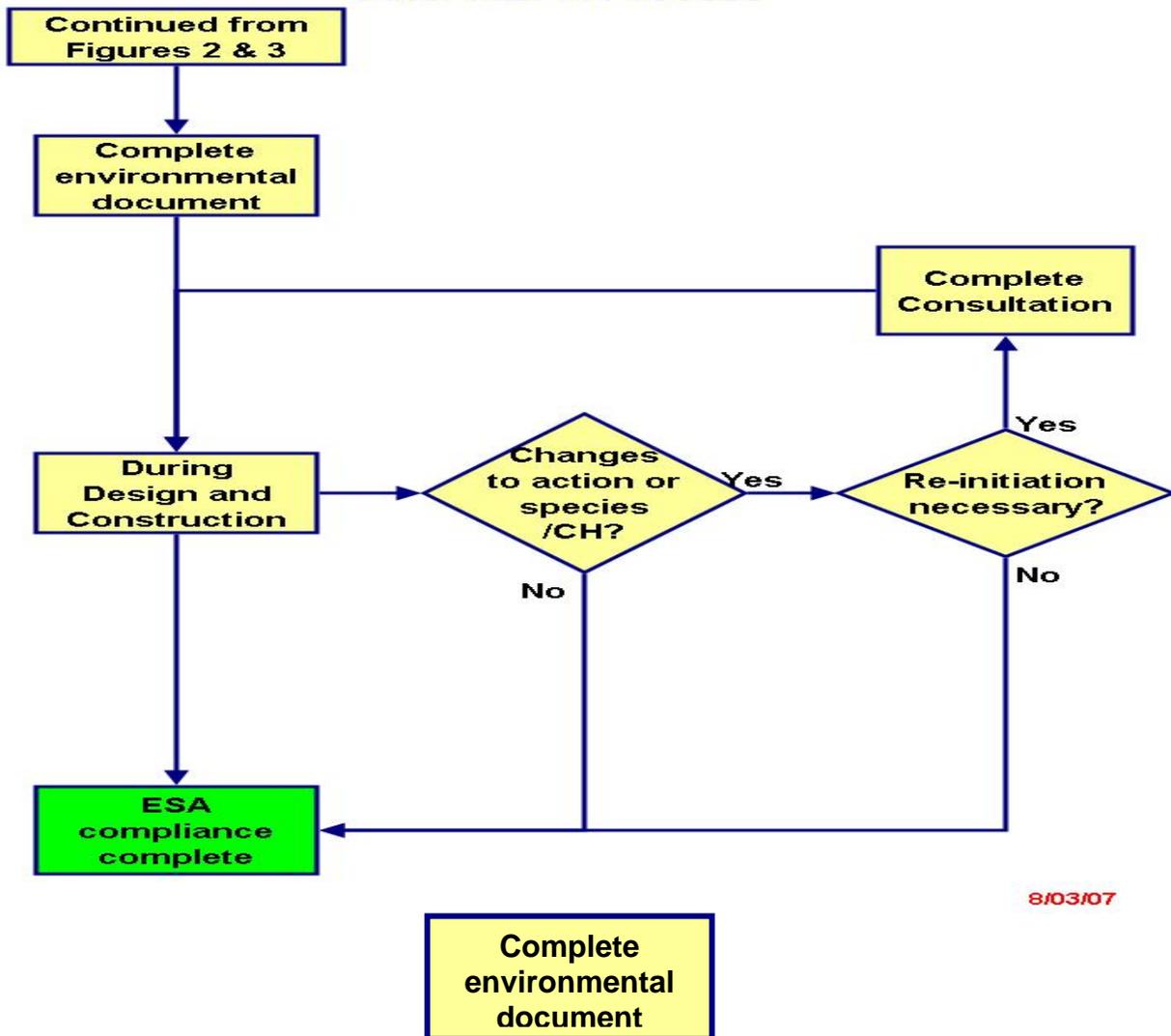
In the environmental document, NCDOT must document the results of the ESA consultation process in order to show compliance with the law.

- For all effects determinations, the following information must be included:
 - Verification of request for a species list or notification of a species list.
 - Listed species, proposed species, designated critical habitat and/or proposed critical habitat that may be present in the action area.
 - Conference results for proposed species and/or critical habitat (if applicable).
 - Approvals of consultation time extensions (if applicable)
 - Discussion of the effects of the project on the species and/or critical habitat.
 - Determination of effects of the project on the species and/or critical habitat.
- For a “no effect determination, the following information must be included
 - A discussion about the lack of suitable habitat and (for plant species) negative survey results for presence of plant species.
- For a “may affect—not likely to adversely affect” determination, the following information must be included:
 - Written Service concurrence must be included.
- For a “may affect—likely to adversely affect” determination, the following information must be included:
 - Summary of the Service Biological Opinion, including:
 - “Jeopardy” opinion (for species).
 - “Adverse Modification” opinion (for designated critical habitat).
 - Reasonable and Prudent Alternatives (if applicable)
 - Reasonable and Prudent Measures
 - Terms and Conditions.

Consultation After NEPA

The flowchart below outlines the ESA Section 7 Consultation process for FHWA-funded projects after the completion of consultation during the NEPA phase and through construction. The reader should use the flowchart as the primary tool for following the process. The accompanying text provides descriptive information related to the steps in the flowchart.

Figure 3: After NEPA
After NEPA Process



Once resolution on effects occurs, the environmental document can be completed and approved. Resolution is defined as:

- A “no effect” determination; or
- A “may affect—not likely to adversely affect” determination with written Service concurrence; or

- A “may affect—likely to adversely affect” determination with a Biological Opinion that provides for the project to move forward:
 - either a “No Jeopardy/No Adverse Modification” conclusion; or
 - a “Jeopardy/Adverse Modification” with Reasonable and Prudent Alternatives that FHWA/NCDOT agree to implement.

Notes:

- All project commitments associated with informal consultation as well as all requirements from the BO (under formal consultation) should be incorporated (either verbatim or by reference) into the project “greensheets”.
- When in formal consultation, FHWA will likely not sign the environmental document until ESA resolution has been achieved.
- In cases where formal consultation is unlikely, there may be circumstances that warrant completion of ESA compliance **after** signing the environmental document. FHWA will consider requests by NCDOT to sign the environmental document without completing ESA on a case-by-case basis. For example, prior to selecting a preferred alternative, a project may have multiple alternatives with different effects determinations. In this case, the informal consultation prior to identification of the preferred alternative is very important so as to provide NCDOT/FHWA with early “warning” if an alternative may be a jeopardy call. Timing for informal consultation is important. In some cases, NCDOT and/or the Service may desire a higher level of design information than is currently available, so it may be prudent to submit the Biological Assessment at a later time.

**During
Design and
Construction**

Compliance with ESA does not end with the signing of the environmental document. It continues through design and construction until the project (action) is complete.

**Changes
to action or
species/CH?**

Throughout the design and construction of the project (action), the project manager must be aware that changes to the project or the environment could cause ESA compliance to be revisited.

- **“No”:** None of the following has occurred:
 - new species becomes listed;
 - new critical habitat becomes designated;
 - the action (description, location, timing, techniques, commitments etc.) does not change to a point where effects determinations change.
 - (For formal consultation only) “reasonable and prudent measures” and “terms and conditions” are still being followed.
- **“Yes”:** One or more of the following has occurred:
 - new species becomes listed;
 - new critical habitat becomes designated;
 - the action (description, location, timing, techniques, commitments etc.) changes to a point where effects determinations change.

- (For formal consultation only) “reasonable and prudent measures” and “terms and conditions” are not being followed.



If NCDOT does not comply with all greensheet commitments related to ESA compliance, NCDOT will need to reinitiate consultation with the Service.



If reinitiation of consultation is necessary, consult again (either informal or formal consultation—whichever form was used last) with the Service.



ESA compliance is only complete after construction has finished.

Appendix A

ATTACHMENT 2



U.S. Department
of Transportation
Federal Highway
Administration

400 Seventh St., S.W.
Washington, D.C. 20590

AUG 07 1985

In Reply Refer To:
HEV-20

Mr. Marvin E. Moriarty
Chief, Office of Endangered Species
U.S. Fish and Wildlife Service
1000 N. Glebe Rd., Suite 500
Arlington, Virginia 22201

Dear Mr. Moriarty:

This letter is in reference to the final rule published on June 3 concerning Interagency Cooperation--Endangered Species Act of 1973--as amended (55 CFR, Part 402). The Federal Highway Administration (FHWA) is pleased with your response to the many concerns expressed on the draft rule. The flexibility incorporated into the final rule will allow the Federal-aid highway program to progress in an orderly manner.

Section 402.08 of the final rule permits a non-Federal representative to conduct the informal consultation and/or prepare the biological assessment. To reduce the volume of designation documents, this letter will serve as the FHWA nationwide designation of non-Federal representatives. The FHWA hereby designates the State highway or transportation agency as the non-Federal representative unless a FHWA Division Office desires to make all contacts with the U. S. Fish and Wildlife Service or the National Marine Fisheries Service. The FHWA field offices will continue active involvement in the biological assessment process. We will furnish the necessary guidance and shall independently review and evaluate the scope and contents of the biological assessment. Ultimate responsibility for compliance with Section 7 remains with the FHWA, as mandated in 23 CFR, Part 771. A similar letter has been sent to the National Marine Fisheries Service.

Unless you have reservations concerning the procedures outlined above, we will notify our Regional Offices in the near future. If you have any questions, please contact Mr. Charles DesJardins at 366-2068.

Sincerely yours,

Ali F. Sevin, Director
Office of Environmental Policy

An identical letter has been sent to:
Charles Karnella
Office of Protected Species
& Habitat Conservation
National Marine Fisheries
Service



**U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration
310 New Bern Avenue, Suite 410
Raleigh, North Carolina 27601**

April 8, 2003

IN REPLY REFER TO
HPP-NC

Mr. Roy E. Crabtree
Regional Administrator
NOAA Fisheries
9721 Executive Center Drive
St. Petersburg, Florida 33702

Subject: Designation of Non-Federal Representative to Conduct Informal Consultation
Under Section 7 of the Endangered Species Act pursuant to 50 CFR 402.08

Dear Mr. Crabtree:

Section 7, Interagency Cooperation, of the Endangered Species Act of 1973, as amended, requires Federal Agencies to ensure that their actions are not likely to jeopardize the continued existence of threatened or endangered species, or result in the destruction or adverse modification of designated Critical Habitat for such species.

Implementing Section 7 provisions found at 50 CFR 402.08 allows Federal action agencies to designate a non-Federal representative to conduct informal consultations and prepare biological assessments. Based on these provisions, the North Carolina Division Office of the Federal Highway Administration (FHWA) hereby designates the North Carolina Department of Transportation (NCDOT) to conduct informal Endangered Species Act consultations on behalf of our agency on a program-wide basis. This arrangement shall remain in effect until such time as either FHWA or NOAA Fisheries Protected Resources Division request a renewal of this designation.

If you have any questions, please contact Rob Ayers, Environmental Programs Coordinator, at 919.856.4330x116 or rob.ayers@fhwa.dot.gov.

Sincerely,

A handwritten signature in black ink that reads "Donald J. Voelker". The signature is written in a cursive style.

Donald J. Voelker
Acting Division Administrator

cc: Roy Shelton, NCDOT
Paul Garrett, Ecologist, FHWA-HEP
Rob Ayers

Appendix B



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Asheville Field Office
160 Zillicoa Street
Asheville, North Carolina 28801

February 6, 2007

John F. Sullivan III, PE
Federal Highway Administration
Attn: Rob Ayers
310 New Bern Avenue, Suite 410
Raleigh, NC 27601-1418

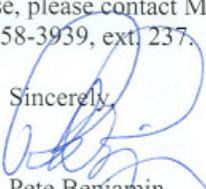
Dear Mr. Sullivan:

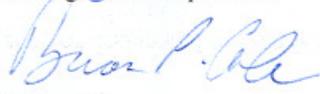
This letter is in response to conversations with your staff regarding the use of the U.S. Fish and Wildlife Service's (Service) web-based list of Federally endangered and threatened species. The Raleigh and Asheville Field Offices maintain a website at <http://www.fws.gov/nc-es/es/countyfr.html>. This site gives a county-by-county list of Federally endangered species, Federally threatened species, designated critical habitat, Federal species of concern and candidate species. In addition, biological, distribution and other information is given for Federally endangered and threatened species.

As per 50 CFR 402.12 (c), the Federal action agency or designated non-Federal representative shall request a list of any listed or proposed species or designated or proposed critical habitat that may be present in the action area, or shall provide notification of the species and critical habitat that are being included in the biological assessment. 50 CFR 402.12 (d) describes the Service's response. To streamline the process and to facilitate the review of the large number of transportation projects, the Raleigh and Asheville Field Offices consider the viewing of the aforementioned website to satisfy the requirements of 50 CFR 402.12 (c) and (d).

If you have any questions regarding our response, please contact Mr. Gary Jordan at (919) 856-4520, ext. 32 or Ms. Marella Buncick at (828) 258-3939, ext. 237.

Sincerely,


Pete Benjamin
Raleigh Field Supervisor


Brian Cole
Asheville Field Supervisor

Appendix C: Additional Resources

ESA (US Code): [16 USC 1531-1543](#)

USFWS:

- ❖ USFWS Species List By County:
<http://www.fws.gov/southeast/es/county%20lists.htm>
- ❖ USFWS Endangered Species Program: <http://www.fws.gov/endangered/>
- ❖ USFWS Threatened and Endangered Species System (TESS):
http://ecos.fws.gov/tess_public/StartTESS.do

NOAA-Fisheries:

- ❖ NOAA-Fisheries Office of Protected Resources:
<http://www.nmfs.noaa.gov/pr/laws/esa/>

FHWA:

- ❖ FHWA Environmental Guidebook—ESA Chapter:
<http://www.environment.fhwa.dot.gov/guidebook/chapters/v1ch4.asp>
- ❖ FHWA letter to NOAA-Fisheries regarding delegation of informal consultation:
http://www.fhwa.dot.gov/ncdiv/docs/noaa_esa.pdf

NCDOT:

- ❖ NCDOT Natural Environment Unit:
<http://www.ncdot.org/doh/preconstruct/pe/neu/default.html>
- ❖ Bd

NC Wildlife Resources Commission:

- ❖ NCWRC: http://www.ncwildlife.org/fs_index_07_conservation.htm

USFWS contacts:

Marella Buncick, Endangered Species Biologist	Dale Suiter, Endangered Species Biologist
USFWS Asheville Field Office	USFWS Raleigh Field Office
160 Zillicoa Street	P.O. Box 33726
Asheville NC 28801	Raleigh, NC 27636-3726
Phone: 828.258.3939x237	Phone: 919.856.4520x18
marella_buncick@fws.gov	dale_suiter@fws.gov

NOAA-Fisheries contact:

Ron Sechler, Fishery Biologist
NOAA-Fisheries Beaufort Field Office
101 Pivers Island Road
Beaufort, NC 28516-9722
Phone: 252.728.5090
ron.sechler@noaa.gov