

## **PART 2, CHAPTER 16**

# **PROTECTED SPECIES AND HABITAT**

### **TABLE OF CONTENTS**

16.1 OVERVIEW .....	16-1
16.1.1 Purpose and Use .....	16-1
16.1.2 Definitions .....	16-1
16.1.3 Legislative and Regulatory Framework .....	16-7
16.1.4 Protected Species and Habitat Evaluation Process Summary .....	16-9
16.1.5 Key Points for Protected Species and Habitat Coordination Process ....	16-10
16.2 REGULATORY AGENCY PROCESS.....	16-11
16.2.1 Coordination/Consultation/Engagement with Agencies .....	16-11
16.2.2 Endangered Species Act Process .....	16-12
16.2.2.1 Consultation With Federal Agencies .....	16-13
16.2.2.1.2 “No Effect” Determinations.....	16-16
16.2.2.1.3 Section 7 Consultation.....	16-16
16.2.2.1.4 Informal Consultation .....	16-17
16.2.2.1.5 Formal Consultation.....	16-18
16.2.2.1.6 Consultation Completion.....	16-20
16.2.2.1.7 Proposed and Candidate Species.....	16-20
16.2.3 Other Federal Protections.....	16-21
16.2.4 Coordination with State Agencies .....	16-22
16.2.5 Listed Plant Species- Federal and State.....	16-22
16.3 PROCEDURE.....	16-23

---

16.3.1	Level of Assessment.....	16-23
16.3.1.1	Projects Not Qualifying for Screening .....	16-24
16.3.1.2	Projects Qualifying for Screening .....	16-25
16.3.1.2.1	ETDM Process Contribution to PD&E.....	16-26
16.3.2	PD&E Phase.....	16-27
16.3.2.1	Describe Existing Conditions.....	16-27
16.3.2.1.1	Identify Action Area.....	16-27
16.3.2.1.2	Identify Protected Species and Critical Habitat that May Occur in the Action Area .....	16-28
16.3.2.1.3	Collect Data and Map Habitat .....	16-28
16.3.2.1.4	Conduct Field Surveys.....	16-29
16.3.2.2	On-going Agency Coordination .....	16-30
16.3.2.3	Conduct Protected Species and Habitat Analysis/Impact Assessment .....	16-30
16.3.2.4	Technical Memo.....	16-32
16.3.2.5	Biological Assessment and Natural Resources Evaluation .....	16-32
16.3.2.5.1	Content of the Natural Resources Evaluation .....	16-32
16.3.2.5.2	Submittal to and Review by OEM and Resource Agencies ..	16-35
16.3.2.6	PD&E Documentation .....	16-36
16.3.2.6.1	Project File.....	16-36
16.3.2.6.2	Environmental Document.....	16-36
16.3.2.6.3	Commitments.....	16-39
16.3.3	Design and Construction Phases.....	16-40
16.3.3.1	Re-evaluation .....	16-40
16.3.3.2	Design Considerations .....	16-40

---

16.3.3.3 Permitting .....	16-41
16.3.3.3.1 Federal and State Protected Species Permits .....	16-42
16.3.3.4 Contractor Requirements .....	16-42
16.3.3.5 Off-project Activities .....	16-43
16.3.3.5.1 Procedure .....	16-43
16.3.3.6 Maintenance Activities.....	16-44
16.4 EMERGENCY CONSULTATION.....	16-44
16.5 REFERENCES .....	16-45
16.6 FORMS.....	16-48

## **LIST OF TABLES**

Table 16-1 Effect Determinations .....	16-49
--	-------

## **LIST OF FIGURES**

Figure 16-1 Protected Species and Habitat Evaluation Process .....	16-50
Figure 16-2 Federally Listed Species Process .....	16-51
Figure 16-3 State Listed Species Process .....	16-52

## PART 2, CHAPTER 16

# PROTECTED SPECIES AND HABITAT

### 16.1 OVERVIEW

#### 16.1.1 Purpose and Use

This chapter provides procedures for determining effects of transportation projects on protected species and habitat. The chapter also provides guidance on coordinating with natural resource agencies to ensure compliance with the ***Endangered Species Act (ESA) of 1973***, as amended, and the ***Florida Endangered and Threatened Species Act, Section 379.2291, Florida Statutes (F.S.)***. The term protected species is used throughout this chapter as a general term for species that are protected by law, regulation, or rule. When the term listed species is used, it refers to species that are identified as threatened or endangered at the federal or state level. This chapter also provides guidance on documenting protected species and habitat impacts, coordination with natural resource agencies, and related commitments. Guidance on consultation with natural resource and regulatory agencies, documentation, and procedures during Design (permitting) and Construction phases, as well as emergency consultation with resource agencies is also provided.

#### 16.1.2 Definitions

**Action agency** – Any department or agency of the United States proposing to authorize, fund, or carry out an action under existing authorities (***Endangered Species Glossary***).

**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 Code of Federal Regulations (CFR) § 402.02***].

**Adverse modification (or destruction) of critical habitat** - A direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species (***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,” “discountable effects,” “effects of the action,” and “no effect”.

**Biological Assessment (BA)** - Information prepared by, or under the direction of, a Lead 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. **BA**s must be prepared for "major construction activities". The outcome of the **BA** determines whether formal consultation or a conference opinion is necessary (**50 CFR § 402.02, 50 CFR § 402.12**).

**Biological Opinion (BO)** - Document which includes: (1) the opinion of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) as to whether 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 pursuant to the **ESA**. These are taxa for which USFWS 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 Federal Register (FR) 7596-7613 (February 28, 1996)**].

**Compensatory Mitigation** - Serves to compensate for unavoidable impacts to species or habitat by replacing or providing substitute resources having similar functions of equal or greater ecological value.

**Conference** - Process of early interagency cooperation involving informal or formal discussions between a federal agency and USFWS or NMFS pursuant to **Section 7(a)(4)** of the **ESA** 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 the continued existence of a proposed 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 measures** - 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 resource 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 **BA** or similar document.

**Conservation recommendations** - The Service(s)'s 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) suggestions on how an action agency can

assist species conservation as part of its action and in furtherance of the authorities under **Section 7(a)(1)** of the **ESA**; **50 CFR § 402.02**.

**Constituent elements** - Designated or proposed critical habitat essential to the conservation of the species. Takes into consideration both physical and biological features, 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 as prescribed by **50 CFR § 424.12(b)**. **Primary constituent elements** are specific elements of physical or biological features that provide for a species' life history processes and are essential to species conservation.

**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 **ESA**, 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 **ESA**, upon a determination by the Secretary that such areas are essential for the conservation of the species [**16 United States Code (U.S.C.) §§ 1532-1533**]. Designated critical habitats are described in **50 CFR § 17 and § 226**. Evaluations of critical habitat make a determination of whether the proposed action will result in the "destruction or adverse modification of critical habitat." This determination language is used for critical habitat under the purview of both the NMFS and the USFWS.

**Effects of the action** – All consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action but that are not part of the action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (**50 CFR § 402.02**).

**Environmental baseline** – Refers to the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated critical habitat caused by the proposed action. The environmental baseline includes the past and present impacts of all federal, state, or private actions and other human activities in the action area, the anticipated impacts of all proposed federal projects in the action area that have already undergone formal or early **Section 7** consultation, and the impact of state or private actions which are contemporaneous with the consultation in process. The impacts to listed species or designated critical habitat from federal agency activities or existing federal agency facilities that are not within the agency's discretion to modify are part of the environmental baseline (**50 CFR § 402.02**).

**Essential Fish Habitat (EFH)** - Those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. For the purpose of interpreting the definition of essential fish habitat: "Waters" include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate; "substrate" includes sediment, hard bottom, structures underlying the waters, and associated biological communities; "necessary" means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and "spawning, breeding, feeding, or growth to maturity" covers a species' full life cycle. EFH is described in ***Fishery Management Plans*** and is approved by the Secretary of Commerce acting through the National Oceanic and Atmospheric Administration (NOAA) Fisheries (**50 CFR § 600.10**).

**Formal consultation** - A process between USFWS or NMFS 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 USFWS or NMFS. If a proposed federal action may affect a listed species or designated critical habitat, formal consultation is required (except when USFWS or NMFS concur, in writing, that a proposed action "may affect, is not likely to adversely affect" listed species or designated critical habitat) (**50 CFR § 402.02, 50 CFR § 402.14**).

**Findings** - A determination made by the lead agency on the level of impact a proposed action has on a resource. This determination is derived from all known information including coordination/consultation with the resource/regulatory agency.

**Incidental take (federal)** - 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, or contractors working on behalf of the applicant (**50 CFR § 402.02**).

**Incidental Take (state)** - Any taking otherwise prohibited, if such taking is incidental to, and not the purpose of the carrying out of an otherwise lawful activity [**Chapter 68A-27.001(5), Florida Administrative Code, (F.A.C.)**].

**Incidental Take Statement (federal)** - The part of a non-jeopardy **BO** that estimates the amount or extent of incidental take of listed species anticipated from the action subject to consultation as authorized under **50 CFR § 402.14(i)** and the resulting incidental take will not violate **ESA Section 9 (16 U.S.C. § 1538)** take prohibitions.

**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 (**USFWS and NMFS, 1998**).

**Informal consultation** - An optional process that includes all discussions and correspondence between the Service(s) 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 USFWS or NMFS concur, in writing, that a proposed action "may affect, is not likely to adversely affect" listed species or designated critical habitat) (**50 CFR § 402.02, 50 CFR § 402.13**).

**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**).

**Listed species (federal)** - Any species of fish, wildlife or plant which has been determined to be endangered or threatened under **Section 4** of the **ESA**. Listed species are found in **50 CFR § 17.11-17.12 (50 CFR § 402.02)**.

**Listed species (state)** - Animal species listed as state-designated threatened by the Florida Fish and Wildlife Conservation Commission (FWC) in **Chapter 68A-27, F.A.C.**; plant species listed by the state as Endangered, Threatened, or Commercially Exploited on the **Regulated Plant Index (5B-40.0055, F.A.C.)**.

**Major Construction Activity** - A construction project (or other undertaking having similar physical impacts) which is a major federal action significantly affecting the quality of the human environment as referred to in the **NEPA, [42 U.S.C. § 4332(2)(C), 50 CFR § 402.02]**. Under **NEPA** major construction activities require Environmental Impact Statements.

**May affect** - The appropriate conclusion when a proposed action may pose **any** effects, detrimental or beneficial on listed species or designated critical habitat. May affect includes both "may affect not likely to adversely affect" and "may affect, likely to adversely affect" determinations. A determination of "may affect" without a "not likely to adversely affect" or "likely to adversely affect" determination should not be submitted to the Service(s) as a finding (**USFWS and NMFS, 1998**).

**May affect, 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 a 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 (**USFWS and NMFS, 1998**).

**May affect, likely to adversely affect** - The appropriate finding in a **BA** (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 actions or interdependent actions, and the effect is not: discountable, insignificant, or beneficial (see definition of "may affect, 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 an incidental take is anticipated to occur as a result of the proposed action, a "may affect, is likely to adversely affect" determination should be made. A "may affect, is likely to adversely affect" determination requires the initiation of formal **Section 7** consultation (**USFWS and NMFS, 1998**).

**Natural Resources Evaluation (NRE)** - An FDOT technical report that provides documentation of protected species and habitat, wetland, and EFH issues to supplement the Environmental Document. The **NRE** may be sent to USFWS or NMFS to serve as a **BA** when necessary but also includes information on state listed species and other protected species and habitat.

**No effect** - The appropriate conclusion when the action agency determines its proposed action will not affect a listed species or designated critical habitat (e.g., no effect whatsoever, neither detrimental nor beneficial). Concurrence from USFWS or NMFS is not required (**USFWS and NMFS, 1998**).

**Primary constituent element** – see Constituent Element definition.

**Proposed critical habitat** - Habitat proposed in the **FR** to be designated as critical habitat, or habitat proposed to be added to an existing critical habitat designation, under **Section 4** of the **ESA** for any listed or proposed species (**50 CFR § 402.02**).

**Proposed species** - Any species of fish, wildlife or plant that is proposed in the **FR** to be listed under **Section 4** of the **ESA** (**50 CFR § 402.02**).

**Protected species** - In this chapter this term is used for species that are protected by federal or state regulations such as the **ESA**, **Migratory Bird Treaty Act (MBTA) of 1918**, **Marine Mammal Protection Act (MMPA) of 1972, F.S., F.A.C.**, etc.

**Reasonable and prudent alternatives** - 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 USFWS or NMFS believe would avoid the likelihood of jeopardizing the continued existence of listed species or the destruction or adverse modification of designated critical habitat. These are applicable only when the Service determines an action is likely to result in jeopardy or adverse modification (**50 CFR § 402.02**).

**Reasonable and prudent measures** - Actions the Service(s)'s Director considers necessary or appropriate to minimize the impact of the incidental take on the species (**50 CFR § 402.02**). These measures are considered nondiscretionary (mandatory) if a jeopardy or adverse modification opinion is to be avoided.

**Service(s)** - USFWS or NMFS (or both).

**Take (federal)** - To harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct [**16 U.S.C. § 1532(19)**]. "Harm" is further

defined by USFWS 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 USFWS as intentional or negligent acts or omissions 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**).

**Take (State)** - To harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct (**Chapter 68A-27, F.A.C.**). The term “harm” in the definition of take means an act which kills or injures fish or wildlife. Such act may include significant habitat modification or degradation where it kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. The term “harass” in the definition of take 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 behavioral patterns which include, but are not limited to, breeding, feeding or sheltering.

**Technical Assistance** – any coordination between FDOT and the Service(s) outside of defined **Section 7** consultation procedures, primarily when FDOT is not the action agency.

**Technical memo** - A brief memorandum documenting the species evaluation for projects with little to no impacts on protected species and habitat and do not require consultation with the Service(s) or coordination with FWC or the Florida Department of Agriculture and Consumer Services (FDACS).

### 16.1.3 Legislative and Regulatory Framework

**Section 7(a)(2)** of the **Endangered Species Act (ESA) (16 U.S.C. § 1536)** requires federal agencies to consult with U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS), as appropriate, to ensure that federally funded or authorized actions are not likely to jeopardize the continued existence of federally endangered or threatened species, or result in the destruction or adverse modification of designated critical habitat. The term “critical habitat” has a specific legal meaning and is a term defined and used in the **ESA (16 U.S.C. § 1532)**. It pertains to specific geographic areas that contain features essential to the conservation of threatened or endangered species and may require special management and protection (**USFWS, 2013**). Generalized maps and detailed legal descriptions of critical habitat can be obtained through USFWS and/or **Federal Register (FR)** notices.

The Secretary of the U.S. Department of Interior (DOI), acting through USFWS, and the Secretary of the U.S. Department of Commerce, acting through NMFS, hereinafter referred to as the Services, are mandated to protect and conserve all forms of wildlife, plants, and marine life they find in serious jeopardy. In general, USFWS coordinates **ESA** activities for terrestrial and freshwater species and NMFS coordinates **ESA** activities for marine and anadromous species. Consultation responsibilities are shared for some species, (e.g., marine sea turtles and the anadromous Gulf sturgeon) which may be

present in different habitats depending on the season or their life cycle stage.

Amendments to the **ESA** in 1978, 1979 and 1982 changed the consultation requirements of **Section 7** and established the implementing regulations (**50 CFR Part 402**). These procedures allow federal agencies to consolidate **Section 7** requirements with interagency cooperation procedures required by other statutes, such as **National Environmental Policy Act (NEPA) (42 U.S.C. § 4321 et seq.)**. **Section 7** requirements are met through the environmental review process, **NEPA** and environmental permitting.

**Section 404** of the **Clean Water Act of 1972 (CWA)** regulates the discharge of dredged or fill material into waters of the United States. The Environmental Protection Agency (EPA) provides oversight of the **Section 404** program and policies, while the U.S. Army Corps of Engineers (USACE) administers the day-to-day program and is responsible for federal wetland determinations and wetland permitting. **Section 10** of the **Rivers and Harbors Appropriations Act of 1899** is administered by the USACE and applies to any dredging or disposal of dredged materials, excavation, filling, rechannelization, or any other modification of a navigable water of the US. See [Part 1, Chapter 12, Environmental Permits](#) for more information. Impacts to wetlands and other surface waters provide a “nexus” for involvement of the Services as cooperating federal agencies, where the Services advise the USACE or other Lead Federal Agency on the potential for permitted actions to affect federally listed species and their habitat. See [Section 16.3.3.3](#) for more information on permitting.

**Section 9** of the **Rivers and Harbors Appropriations Act of 1899** and the **General Bridge Act of 1946** gives the U.S. Coast Guard (USCG) the regulatory authority to prevent interference of navigable waters by bridges or other obstructions. The USCG approves the location, plans, and navigable clearances of bridges through the issuance of bridge permits or bridge permit amendments. Bridge permits issued by the USCG also provide a “nexus” for involvement of the Services as cooperating federal agencies, where the Services advise the USCG on the potential for permitted actions to affect federally listed species and their habitat.

The USACE and/or USCG may be required to prepare **NEPA** documents for permit issuance and may participate as a cooperating agency on a transportation project. As cooperating agencies, USACE and USCG routinely adopt FDOT’s **NEPA** document for projects for which they provide federal permits under **Section 404** of the **CWA** or **Sections 9 and 10** of the **Rivers and Harbors Appropriations Act of 1899**.

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**), often based on which agency has the principal responsibility for the project (**USFWS and NMFS, 1998**). For FDOT Federal Projects, FDOT serves as the Lead Federal Agency and is responsible for consulting with the Service(s) for potential impacts to listed species and critical habitat. For FDOT State Projects, [e.g., Non-Major State Action (NMSA) or State Environmental Impact Report (SEIR)] the **Section 7** consultation will not be conducted until permitting and the USACE or USCG is the lead agency; however, FDOT can coordinate with the Service(s) for Technical Assistance during PD&E or prior to permitting.

Just as the federal agencies oversee the protection of certain species and resources, the Florida Constitution establishes the Florida Fish and Wildlife Conservation Commission (FWC), **Article IV, Section 9, Fla. Const.**, entrusted to “exercise the regulatory and executive powers of the state with respect to wild animal life and fresh water aquatic life, and...marine life.” These powers and duties are further carried out through the legislative directives enacted in **Chapter 379, F.S.**, and embodied in the implementing regulations adopted in **Chapter 68, F.A.C.** Similarly, the Florida Department of Agriculture and Consumer Services (FDACS) oversees the protection of native plants through **Chapter 5B-40, F.A.C.**

## 16.1.4 Protected Species and Habitat Evaluation Process Summary

[Figure 16-1](#) provides a flow chart of the protected species and habitat evaluation process. Involvement with protected species and wildlife habitat is evaluated for both FDOT Federal Projects and FDOT State Projects. Similarly, this evaluation should take place regardless of whether the project qualifies for screening through the Efficient Transportation Decision Making (ETDM) process. See [Part 1, Chapter 2, Class of Action Determination for Federal Projects](#), for project types qualifying for ETDM screening. [Section 16.3.1.1](#) provides guidance for documenting protected species and habitat evaluation for projects not qualifying for ETDM screening.

For projects that qualify for screening, species and habitat evaluation begins during the Planning or Programming Screen as explained in [Part 1, Chapter 3, Preliminary Environmental Discussion and Advance Notification](#). As part of the screening event, the District requests an official species list from the Service(s) Environmental Technical Advisory Team (ETAT) members and a list from the FWC ETAT members for state listed, or other protected species.

The District first reviews information from the **Programming Screen Summary Report**, then gathers information from various sources to aid in the determination of potential involvement with a federally listed threatened or endangered species, proposed threatened or endangered species, or designated or proposed critical habitat ([Section 16.3.1.2.1](#)) within the action area. Information should also be collected on state listed species, habitat connectivity, areas that are ecologically important, and species that are otherwise protected by regulation. This information is field verified during project development and then evaluated to determine the effects of the proposed action to each species and habitat. This evaluation on protected species and habitats is compiled into an **Natural Resources Evaluation (NRE)**, or technical memo when appropriate, and submitted to federal and state agencies for concurrence and/or review (see the **Natural Resources Evaluation Outline and Guidance** on FDOT’s [Protected Species and Habitat Website](#)). Draft **NREs** for FDOT Federal Projects are reviewed by Office of Environmental Management (OEM) prior to submittal to the resource agencies. **NREs** for FDOT State Projects are not required to be reviewed by OEM. **NREs** are final documents once they are submitted to the resource agencies and should not be revised. If changes to the **NRE** are needed, an addendum to the original **NRE** document is required.

If federally listed species or critical habitat have the potential to be within the action area, then consultation with the Service(s) may be necessary. Consultation may be as simple as a brief informal consultation or may require a more in-depth formal consultation ([Section 16.2.2.1](#)). In addition, if state listed species have the potential to be present within the action area, then coordination with FWC and/or FDACS is recommended.

A project requires an official federal document, called a **Biological Assessment (BA)**, if federally listed species or critical habitat may be present in the action area that requires an Environmental Impact Statement (EIS) (**50 CFR § 402.12**) or if a project's proposed action results in a determination of "may affect, is likely to adversely affect" (see [Section 16.1.2](#) for definitions of the different effect determinations). In these cases, the District requests that OEM initiate formal consultation under **Section 7** of the **ESA** ([Section 16.2.2.1](#)) for FDOT Federal Projects. For projects where **Section 7** consultation will be conducted by USACE or USCG during permitting, FDOT can request Technical Assistance from the Service(s). An **NRE** can be submitted to the Services for use as a **BA**. Formal consultation results in a **Biological Opinion (BO)** from the Services that determines whether a proposed action is likely to jeopardize the continued existence of a listed species (jeopardy) or destroy or adversely modify critical habitat (adverse modification).

Information on state listed species and valuable natural habitats should also be collected for the project. FDOT must evaluate projects for compliance with the **Florida Endangered and Threatened Species Act of 1977 (Chapter 379, F.S., Chapter 68A-27, F.A.C., Chapter 5B-40, F.A.C.)**. Involvement with state listed or otherwise protected species and natural areas [e.g., Strategic Habitat Conservation Areas (SHCAs), Florida Natural Areas Inventory (FNAI) rare natural communities, Aquatic Preserves, and Marine Protected Areas (MPA)] should be discussed. Impacts to these species and habitats should be discussed in the Environmental Document and associated technical reports (i.e., **NRE**, technical memo).

For off-project activities associated with construction of the project the District follows the same procedures for identifying possible involvement with protected species or habitat ([Section 16.3.3.5](#)).

### **16.1.5 Key Points for Protected Species and Habitat Coordination Process**

1. Engage in early, continual, and strategic coordination with resource and regulatory agencies (i.e., USFWS, NMFS, FWC, USACE, and FDACS).
2. For projects qualifying for ETDM screening, information from the screening should be used to prepare the scope of services for the PD&E Study and provide focus for the protected species and habitat analysis/impact assessment.
3. Projects with protected species and habitat involvement need to be evaluated and addressed regardless of the type of Environmental Document. This evaluation should be appropriate to the scope of the project. The level of detail should be

weighed according to the ecological importance and distribution of affected species and intensity of potential impacts of the project.

4. Coordinate internally with FDOT PD&E, Design, and Construction staff (as applicable) throughout the process (e.g., ETDM screening, analysis, impact assessment, making commitments). Since PD&E Studies may result in commitments developed to address the specific protected species and habitat issues of a project, it is critical that appropriate internal coordination efforts within the District occur before commitments are made.
5. Consultation may be needed with the applicable Service when federally listed species and/or critical habitat may exist within the action area. This may be informal consultation or may require the initiation of formal consultation by the Lead Federal Agency.
6. Request concurrence from the Services. Concurrence is not required for determinations of “no effect” or when use of a programmatic key or a programmatic approach indicates that a “may affect, not likely to adversely affect” determination does not require further consultation. A species key can only be used when the scope of the key is applicable to the project and all appropriate conservation measures are carried out, as required.
7. If an issue is identified during consultation that could affect the completion of the consultation process, the District must inform OEM to determine the appropriate course of action.
8. The contents of the **NRE** are summarized in the Environmental Document, including effect determinations, dates of concurrence, and/or outcomes of consultation.

## 16.2 REGULATORY AGENCY PROCESS

### 16.2.1 Coordination/Consultation/Engagement with Agencies

Effectively addressing protected species and habitat for transportation projects depends on engaging the various federal and state resource and regulatory agencies by adhering to the three generalized coordination principles outlined below. The key elements of successful agency coordination can be summarized as follows: “**Early, continual, and strategic coordination**”.

**Early coordination** - Engagement with federal and state agencies should occur as early in the project as appropriate. For projects screened through the ETDM process, official agency engagement may occur during the Planning Screen, or more commonly during the Programming Screen (see [Section 16.3.1.2.1](#)). The overall goal of early engagement during the PD&E phase is to be **proactive** in identifying potentially protected species and habitat, and then **actively coordinating** with wildlife and other agencies to formulate strategies and responses that address those resources. Early coordination with agencies provides an important opportunity for the agencies to review data and analyses that have been developed, and to discuss the steps for advancing protected species/habitat

coordination for the PD&E Study. It also aids in the development of alternatives and informs permitting and future phases.

**Continual coordination** - Continual engagement with agencies involves communication to determine the level of assessment and documentation required; confirm which species and/or habitats may be affected by the project; decide whether informal or formal **Section 7** consultation is required; and obtain agency confirmation for effect determinations, as appropriate. Continual coordination promotes an **ongoing dialog** between FDOT and the resource and regulatory agencies, minimizing the chances of miscommunication or misunderstandings that could delay, complicate, or compromise a project.

**Strategic coordination** - Each project possesses unique circumstances and “facts on the ground.” Strategic coordination involves thoughtful consideration of an **overall strategy** for handling protected species and habitat throughout Planning, PD&E, Design, Construction and Maintenance.

The advantages of developing a strategic approach include:

1. Early awareness of potential protected species/habitat;
2. Avoidance/minimization of potential impacts;
3. Aids in the development of alternatives;
4. A decrease in timeframes for resource and regulatory agency approvals;
5. Supports short or long term surveys, research, species studies, which may be required;
6. Complete documentation for the administrative record; and
7. Seamless transfer of information and commitments into the Design and Construction phases.

## 16.2.2 Endangered Species Act Process

For Federal Projects, **Section 7** of the **ESA** requires consultation with the Service(s) to ensure that actions are not likely to jeopardize the continued existence of federally endangered or threatened species, or result in the destruction or adverse modification of critical habitat. Data collected on federally listed species and critical habitats should be included in an **NRE** or technical memo per the **Natural Resources Evaluation Outline and Guidance** document on FDOT’s [Protected Species and Habitat Website](#). The **NRE**, coordination meetings, commitments, and consultation with the Services should be summarized in the Environmental Document ([Section 16.3.2.6.2](#)).

It is highly recommended that the District reference the **Endangered Species Consultation Handbook (USFWS and NMFS, 1998)**, if involvement with a federally listed species is possible.

For FDOT State Projects, the Districts **must** coordinate with the Service(s) if the project has the potential to affect federally listed species or critical habitat. The Districts can request Technical Assistance from the Services. In accordance with the ***Endangered Species Consultation Handbook***, “Technical assistance from the Services may take a variety of forms: it includes the species list provided by the Services, information on listed species, and candidate species, as well as names of contacts having information on other sensitive species or State listed species. The Services may recommend that the action agency conduct additional studies on species’ distribution in the area affected by the action.” It is highly recommended that the data collection process be the same as or similar to what is compiled for Federal Projects. This can be important in the event that a Federal Action (e.g., federal funding or federal permit) is identified later on in project development.

When Technical Assistance is requested, the Services may respond in several ways. If species are not likely to be present, the consultation requirement is met, and the Services may advise the District 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 determines it will not be adversely affected, the Services should notify the agency of that opinion.

If no Federal Action exists and listed species may be present, consultation with the Service(s) may determine that **Section 10** of the **ESA**, which authorizes incidental take permit(s) and requires submittal of a Habitat Conservation Plan(s) (HCP), may apply to the project. More information on **Section 10 of the ESA** and how to prepare an HCP can be found in the ***Habitat Conservation Plans: Section 10 of the Endangered Species Act*** document. District staff should coordinate closely with OEM if no apparent Federal Action exists to determine if **Section 10** consultation may be necessary, as these consultations are usually lengthy and more complex than the **Section 7** process. OEM will coordinate with the Service(s) to determine the process.

### **16.2.2.1 Consultation With Federal Agencies**

Interagency consultation with the Service(s) is an administrative review that operates in parallel with the science-based review process used for effects determinations. Overall, the information used for consultation should focus on conducting a thorough review of the effects of the alternative(s) for each listed species and/or critical habitat(s) potentially affected by the action.

Under federal law, each agency shall use the best scientific and commercial data available to complete an interagency consultation (**16 U.S.C. § 1536**). The consultation documentation should lead the reviewer (i.e., the Service) through a discussion of effects to a logical, well-supported conclusion. It is essential that FDOT, as an **action agency** (through **NEPA** Assignment), evaluate and summarize project effects in a logical, objective and scientific manner that clearly supports the ultimate effect determinations and consultation conclusions. For example, **NREs** should not only include appropriate

effect determinations, but need to include sufficient supporting evidence and rationale to adequately justify these determinations.

Coordination with the Service(s) involves more than simply submitting documentation and obtaining review comments. **Early** coordination should identify listed species and/or critical habitat present in the action area, and which species and habitats have the potential to be affected by the project. **Continual** coordination requires ongoing communication with the Service(s) to document consensus, to identify areas of disagreement, and to resolve outstanding issues. **Strategic** coordination requires an evaluation of project-related listed species and habitat issues, thoughtful consideration of how to minimize project impacts to listed species and habitats, and an overall approach for conducting an efficient federal coordination/consultation process. Coordination could also include discussion on other protected species.

The coordination/consultation process must be performed for **each** listed species and/or **each** type of critical habitat within the action area that may be affected by the project. The level of federal coordination required (no consultation, informal consultation, or formal consultation) will be determined by each effect determination. [Table 16-1](#) provides a step by step process to follow for each effect determination.

The starting point for an effect determination is the environmental baseline (see [Section 16.1.2](#) for definition). The term “environmental baseline” is not synonymous with “existing conditions.” The environmental baseline “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**” (**USFWS and NMFS, 1998**). It therefore considers not only “existing conditions,” but past activities that have already affected listed species and designated critical habitat, and any other existing/proposed private, local, state, or federal actions that are contemporaneous with FDOT’s proposed action.

The possible effect determinations are “no effect,” “may affect, not likely to adversely affect,” or “may affect, likely to adversely affect” for species listed under the **ESA** or “destruction or adverse modification” or “no destruction or adverse modification” of critical habitat. For proposed or candidate species or proposed critical habitat, a determination of “is likely to jeopardize proposed/candidate species” or “adversely modify proposed critical habitat” is possible.

Species and/or critical habitat receiving a “no effect” determination are not subject to consultation but are required to have the appropriate documentation as described in [Section 16.2.2.1.2](#).

Species and/or critical habitat(s) subject to a “may affect, not likely to adversely affect” determination are handled via informal consultation ([Section 16.2.2.1.4](#)) unless otherwise agreed upon through a programmatic approach or effect determination key ([Section 16.2.2.1.1](#)).

Formal consultation occurs when a “may affect, likely to adversely affect” determination is made for listed species and/or critical habitat ([Section 16.2.2.1.5](#)), and must be initiated

through OEM. If one species has a “may affect, likely to adversely affect” determination, then the Service will likely include all potentially involved species in the formal consultation process, regardless of effect determination.

[Figure 16-2](#) provides a flow chart for the federal coordination/consultation process. The flow chart serves as a useful aid for each listed species and/or critical habitat that may be subject to federal coordination, as an effect determination and subsequent coordination will be required for each one.

The NMFS Southeast Regional Office has procedures for action agencies to submit **Section 7** consultation requests electronically. See FDOT’s *How To Guide for submission of Natural Resource Evaluations to the National Marine Fisheries Service (NMFS) for Endangered Species Act (ESA) and Essential Fish Habitat (EFH) Consultations* and accompanying flowchart on the FDOT’s [Protected Species and Habitat Website](#) under the Consultation Guidance Documents section.

Re-initiation of consultation with the Service(s) is required to occur when the **BO** terms and conditions are exceeded. Re-initiation may also be required after initial consultation has been completed due to changes in scope or design of the project, discovery of the presence of listed species, or the listing of new species or designation of critical habitat.

### 16.2.2.1.1 Programmatic Keys and Approaches

When appropriate, species effect determination keys may be used to determine anticipated species effects. FDOT in agreement with USFWS has identified effect determination keys commonly used by FDOT. See *FDOT Use of Programmatic Effect Determination Keys* on FDOT’s [Protected Species and Habitat Website](#). There is also a link to the *USACE Source Book* where specific species keys can be located. A species key can only be used when the scope of the key is applicable to the project and all appropriate conservation measures are carried out, as required.

Programmatic approaches may be used to determine anticipated species effects. See FDOT’s [Protected Species and Habitat Website](#) for links to programmatic approaches available for use such as the *FDOT Programmatic Approach for Minor Transportation Activities* as well as others developed for specific species.

The *FDOT Programmatic Approach for Minor Transportation Activities* includes activities conducted by FDOT that result in none to moderate amounts of ground-disturbing work as a result of routine maintenance or modernization activities (.). The activities are limited to those within existing FDOT ROW and coverage is not provided for new construction activities in newly acquired ROW. It covers specific species and specific activities and is completed using the Minor Activities Programmatic Approach tool in the StateWide Environmental Project Tracker (SWEPT). The SWEPT report from the Minor Activities Programmatic Approach tool (*Programmatic Approach Form*) is saved in the project file.

Concurrence from the USFWS is not required when the use of a programmatic key or a programmatic approach indicates that a “may affect, not likely to adversely affect”

determination and the application of required conservation measures will satisfy consultation requirements. For FDOT State Projects when **Section 7** is not applicable, the ***FDOT Programmatic Approach for Minor Transportation Activities*** can be used to provide guidance for avoiding and minimizing adverse effects to federally protected species. However, any conservation measures required by a key or programmatic approach determination must be included as a commitment to provide the USFWS with regulatory assurance. Please note these keys and programmatic approaches are only for species under the jurisdiction of USFWS, not NMFS.

#### **16.2.2.1.2 “No Effect” Determinations**

Where FDOT determines that an action will have “no effect” on a listed species or critical habitat (see [Section 16.1.2](#)), consultation with the Service(s) is not required. A “no effect” determination means no effect whatsoever (neither detrimental or beneficial) to a species or critical habitat, in the short term or long term. Although consultation is not required for a “no effect” determination, the analysis supporting it should be documented in the project file, technical memo, or **NRE** as appropriate and in the final Environmental Document. Concurrence from the Service(s) is not required for this determination.

#### **16.2.2.1.3 Section 7 Consultation**

When federally listed species and/or designated critical habitat have the potential to be within the action area and a “may affect, not likely to adversely affect” or “may affect, is likely to adversely affect” determination applies, consultation with the Service(s) is necessary. There are two types of **Section 7** consultation processes: informal and formal. Informal consultation is a process designed to help determine whether formal consultation is needed. In contrast, formal consultation is a required process when the effect of a proposed action is “may affect, is likely to adversely affect”.

As stated in the ***Endangered Species Consultation Handbook (USFWS and NMFS, 1998, E-21)***, “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.”

The interaction between effect determinations and consultation procedures are primarily determined by existing conditions (e.g., ecological importance and distribution of listed species, potential listed species presence), combined with the project scope and intensity of potential impacts. In some cases, formal consultation may be unavoidable, as in cases where major construction unavoidably impacts listed species that have a restricted range or impacts designated critical habitat for a relatively long distance. However, in other cases, avoidance and minimization efforts can limit impacts to listed species and/or designated critical habitat to a degree that may change an initial “may affect, likely to adversely affect” determination (formal consultation) to a “may affect, not likely to adversely affect” determination that triggers informal consultation.

An effect determination is made for each listed species and/or each designated critical habitat within the action area. It takes only one “may affect, likely to adversely affect” determination to trigger formal consultation. If a project impacts only one listed species to a degree where formal consultation is required, it may be advisable to avoid or minimize the impact of a project (if possible) to an extent that justifies a “may affect, not likely to adversely affect” determination.

#### **16.2.2.1.4 Informal Consultation**

Informal consultation is initiated when federally listed species or designated critical habitat are potentially present within the project’s action area and may be affected by the action. This consultation can provide FDOT the opportunity to implement project scope revisions or conservation activities prior to project implementation. If informal consultation is needed with the Service(s), documentation in the form of an **NRE** is developed by the District.

After OEM review of the **NRE**, the District initiates informal consultation by submitting an **NRE** to the Service(s) for review along with a request for concurrence on the effect determination(s). This information should include reasons supporting the determination, any modifications to the project and/or implementation measures or commitments to reduce impacts, and, if applicable, compensatory mitigation. Upon receipt of a written request for concurrence, the Service must provide written concurrence or non-concurrence within 60 days. This timeframe may be extended upon mutual consent of all parties, but cannot exceed 120 days.

For USFWS, contact the local office. Contact information is provided in the [Guidance for Part 2, Chapter 16](#). Informal consultation with the NMFS is initiated by following the guidance in FDOT’s *How To Guide for submission of Natural Resource Evaluations to the National Marine Fisheries Service (NMFS) for Endangered Species Act (ESA) and Essential Fish Habitat (EFH) Consultations* and accompanying flowchart on FDOT’s [Protected Species and Habitat Website](#).

During informal consultation, the District(s) and the Service(s) work together to evaluate potential impacts on listed species and eliminate or reduce potential impacts where possible. In many cases, the ultimate effect determinations may be influenced by project modifications. FDOT and the Service(s) may engage in continual coordination to reach agreement on effect determinations and project modifications necessary to accommodate federally listed species. During informal consultation, coordination with OEM may occur as necessary.

If the Service agrees with the effect determination, they will document that agreement in a concurrence letter. If the Service does not concur with the “may affect, not likely to adversely affect” determination, the Service will send a non-concurrence letter to FDOT and FDOT must either 1) initiate formal consultation through OEM, or 2) modify the project to avoid adverse impacts. Either option will require continued coordination with the Service(s). It is also possible that the Service may not have enough information to complete consultation (see [Section 16.2.2.1.6](#)).

### 16.2.2.1.5 Formal Consultation

Formal consultation may be required for any project regardless of the Environmental Document needed. FDOT and the Service(s) work together to determine if options exist that could allow the action to advance without jeopardizing the species' existence or destroying or adversely modifying critical habitat. Although OEM must initiate formal consultation, the Districts work closely with OEM and the Services throughout the formal consultation process.

The differences between informal consultation and formal consultation are that formal consultation:

1. Occurs when there is a “may affect, likely to adversely affect” determination;
2. Must be initiated by OEM;
3. Results in a **BO** which may determine whether the proposed activity will jeopardize the continued existence of a listed species (jeopardy) or destroy or adversely modify critical habitat (adverse modification).

In short, formal consultation is a manageable process that involves a higher level of scrutiny and analysis.

Formal consultation cannot be initiated until the **NRE** is completed by the District and reviewed by OEM. If the District determines that the action “**may affect, is likely to adversely affect**” listed species or designated critical habitat, then OEM as the action agency initiates formal consultation. OEM, with assistance from the District, sends a written request to the Service(s) through the EST Document Review module. The submitted information includes an initiation package (**NRE** for FDOT projects) describing the project and its relevance to federally listed species and habitats (see **USFWS and NMFS, 1998, 4-4**) and a cover letter requesting initiation of formal consultation. Once the initiation package is received, the Service has 30 working days to review the package for completeness and should provide a written acknowledgement of the consultation request to the action agency. Within the 30-day period, the Service must advise the action agency of any data deficiencies and request additional information to complete the initiation package (see **USFWS and NMFS, 1998, 4-1**).

The formal consultation period officially begins when the Service determines that the initiation package is complete. The **ESA** and **Section 7** regulations require that formal consultation be completed within 90 calendar days [**50 CFR § 402.14(e)**]. The Service strives to issue the **BO** during the formal consultation period, but must deliver the **BO** to the action agency no later than 45 calendar days after the conclusion of formal consultation [**50 CFR § 402.14(e)(3)**]. This 45-day period is often used by the action agency and the Service to review and refine the **BO**. The entire process can take up to 135 days to complete after the initiation of formal consultation, underscoring the need for “early, continual, and strategic coordination”.

In response to a request for formal consultation and submittal of a **BA** (usually in the form of the **NRE**), the Service issues a **BO**, which is the document with the Service's opinion as to whether the project "action" is likely to jeopardize the continued existence of a federally listed species or destroy or adversely modify designated critical habitat.

Jeopardy is determined by the Service at the listed species population level. "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" (**USFWS and NMFS, 1998, 4-36**).

For non-jeopardy opinions from the Service(s), the **BO** will contain an **Incidental Take Statement**, which provides exemption from the **ESA Section 9** prohibitions to address actions that may cause an unintentional taking of non-plant species. The **ESA** does not prohibit incidental take of listed plants; however, cautions may be provided in the **BO** on prohibitions against deliberate removal or destruction of plants. Any terms and conditions provided in the **Incidental Take Statement** are "non-discretionary measures that are necessary and appropriate to minimize the impact of incidental take," in order for the exemption in **Section 7(a)(2)** of the **ESA** to apply (**USFWS and NMFS, 1998, 4-49 and 4-53**). During formal consultations, the key to reaching non-jeopardy opinions is to focus on the avoidance and minimization of project impacts.

If the **BO** reaches a jeopardy or adverse modification conclusion, it will also include reasonable and prudent alternatives and associated reasonable and prudent measures for implementing the project to avoid jeopardy or adverse modification. Note that the Services should include the action agency and applicant in developing reasonable and prudent alternatives and measures. Depending upon project-specific circumstances, several reasonable and prudent alternatives may exist, only one alternative may exist, or no alternatives may exist. Reasonable and prudent measures are the nondiscretionary (mandatory) actions developed for each alternative, which are necessary for a given alternative to avoid a jeopardy or adverse modification opinion. The reasonable and prudent measures developed for each of several alternatives may be the same or different, depending upon the specific alternative. In response to the Services proposed reasonable and prudent alternatives/measures, FDOT may:

1. Adopt the reasonable and prudent alternatives/measures;
2. Not advance the project;
3. Request an exemption from **Section 7(a)(2)**;
4. Modify the action or offer reasonable and prudent alternatives/measures not yet considered, and reinitiate consultation; or
5. Proceed with the action if upon review of the **BO**, FDOT believes that such action satisfies **Section 7(a)(2)**.

FDOT must notify the Service(s) of its final decision on any proposed action that receives a jeopardy or adverse modification biological opinion. If FDOT adopts the reasonable and prudent measures, then these nondiscretionary actions must be incorporated into the Environmental Document as commitments.

### 16.2.2.1.6 Consultation Completion

For FDOT Federal Projects with a PD&E Study, **ESA** consultation is expected to be completed during the PD&E phase, and summarized in the Environmental Document as required in [Section 16.3.2.6.2](#). In some instances, consultation cannot be completed at this project phase, especially if one of the Services does not have enough information (i.e., project details may not yet be available) to concur with (or not concur with) an FDOT effect determination. In these situations, the Districts should coordinate with OEM. Together OEM and the District will determine the appropriate course of action to advance the project. When consultation cannot be completed during the PD&E phase, the Environmental Document should include a summary of the consultation to date, the reasons why it cannot be completed, documentation that the Service(s) agree to complete consultation prior to construction and that the Service(s) does not anticipate a jeopardy opinion, and any other information that may provide reasonable assurance the requirements will be fulfilled consistent with **23 CFR § 771.133**. Commitments made during this coordination should be included in the Commitments section of the Environmental Document. An update to the commitment(s) must be provided in subsequent project Re-evaluations and **Project Commitment Record (PCR)**.

### 16.2.2.1.7 Proposed and Candidate Species

**Proposed** species are those that are proposed in the **FR** to be listed under **Section 4** of the **ESA**. Species and critical habitat proposed for listing may require a **conference** with the Service(s), according to **ESA Section 7(a)(4)** and **50 CFR § 402.10**, if agency action is likely to jeopardize the continued existence of such proposed species or result in the destruction or adverse modification of proposed critical habitat. Informal conference is an early interagency coordination, similar to informal consultation, where the Service(s) assist in determining effects and may advise on ways to avoid and minimize adverse effects to proposed species or proposed critical habitat. Following informal conference, the Service(s) issue a conference report containing recommendations for reducing adverse effects. These recommendations are advisory until a listing becomes effective – but following the report’s recommendations helps avoid future conflicts and the need to reinitiate a consultation once the species is listed or critical habitat is designated.

Formal conference must be initiated by OEM and is required when a project is likely to jeopardize the continued existence of a proposed species, or is likely to adversely modify proposed critical habitat. Formal conference procedures are the same as formal consultation. The opinion at the end of formal conference is a conference opinion and follows the contents and format of a **BO**. When the species is listed or critical habitat is designated, the Services have the option of adopting the conference opinion as the **BO** for the project. OEM must request the Services to adopt the conference opinion as the **BO** after the species is listed or critical habitat designation is made. An **Incidental Take**

**Statement** issued with a conference opinion does not become effective unless the Services adopt the conference opinion as the **BO** once the species is listed and/or critical habitat is designated (**50 CFR § 402.10; FHWA, 2002**).

**Candidate species** are not proposed for listing but are species for which the development and publication of proposed rules for listing are anticipated. Effective candidate species conservation may reverse the species decline, ultimately eliminating the need for **ESA** protection. **Section 7** consultation is not required for candidate species though consideration of conservation measures may help to minimize project delays if a candidate species becomes federally listed before construction of a project has been completed (**FHWA, 2002**). While consultation and protections are not required for candidate species, reinitiation of consultation for these species will be required once the species is officially listed. For this reason and to prevent work stoppages, OEM will at times work with the USFWS to derive conservation measures, which if applied to the project as commitments, will be considered as a “may affect not likely to adversely affect” determination and can receive concurrence as part of the **NRE**. However, since no protections are afforded candidate species, the inclusion of commitments for a candidate species is not required.

### 16.2.3 Other Federal Protections

Several species that are not federally listed and therefore not subject to **ESA** review may be protected by other federal regulations such as the **Migratory Bird Treaty Act (MBTA)** and/or the **Bald and Golden Eagle Protection Act (BGEPA)**. During the protected species and habitat evaluation, the District should evaluate the project’s potential effects on these species.

Pursuant to the **MBTA**, it is unlawful to take, possess, buy, sell, purchase, or barter any migratory bird including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations. It should be noted that all non-exotic birds in the state of Florida are protected by the **MBTA**. Rules promulgated under the **MBTA (50 CFR Part 21)** prohibit the destruction of active nests (i.e., nests which contain eggs or flightless young) without a federal permit.

The federal **Bald and Golden Eagle Protection Act [16 U.S.C. § 668-668(d)]** prohibits anyone from taking, possessing, or transporting a bald eagle or golden eagle, or the parts, nests, or eggs of such birds without prior authorization. This includes inactive nests as well as active nests. The USFWS has Bald Eagle Monitoring Guidelines (**USFWS, September 2007**) that provides information for applicants proposing construction activities occurring within 660 feet of an active bald eagle nest during the nesting season. See [Part 1, Chapter 12, Environmental Permits](#), for guidance on permits for the bald eagle, Florida burrowing owl, and osprey. Effect determinations using **Section 7** verbiage are not made for species protected under the **MBTA** or the **Bald and Golden Eagle Protection Act**. However, an evaluation of impacts to those species is included in the **NRE** discussion, using verbiage separate from listed species determination language, and also summarized in the Environmental Document.

## 16.2.4 Coordination with State Agencies

The procedures for coordination with the FWC are not as rigidly prescribed as those for the federal process, but the general process, overall goals, and documentation requirements are similar. FDOT places the same emphasis on “early, continual, and strategic coordination” with FWC, to ensure that state-protected species and habitat issues are considered from the earliest planning phase and carried through the PD&E, Design, and Construction phases of the project. [Figure 16-3](#) provides a flow chart for the state protected species process.

Coordination with FWC focuses on state listed wildlife species and habitats as well as other protected species (e.g., Florida black bears, bat species). In order to avoid regulatory duplication for threatened and endangered species, the following state rule applies: “Activities that result in take or incidental take of federally-designated Endangered and Threatened Species do not require a permit from the Commission when authorized by the U.S. Fish and Wildlife Service or the National Oceanic and Atmospheric Administration’s National Marine Fisheries Service...” (**Rule 68A-27.007, F.A.C.**). Some species that are federally protected may also require coordination with FWC, such as Florida manatees and sea turtles.

For projects that qualify for ETDM screening, the ETDM process initiates the project-level coordination with FWC, as FWC is represented on the ETAT that participates in the Planning and/or Programming Screens ([Section 16.3.1.2](#)). The FWC ETAT should provide focused comments and a list of state listed species, or otherwise protected species that should be considered/analyzed during the PD&E Study ([Section 16.3.1.2.1](#)).

As the coordination with FWC progresses, through the PD&E Study, issues related to particular state listed species, other protected species, and habitats are addressed, and FWC comments are documented via correspondence and/or memos. The FWC typically requests that effect determinations, similar to those made for federally listed species ([Section 16.2.2.1](#), see also the **Natural Resources Evaluation Outline and Guidance** FDOT’s [Protected Species and Habitat Website](#)), be made for state listed species. State imperiled wildlife species effect determinations are made using the determination language “No effect anticipated”, “No adverse effect anticipated”, or “Potential for adverse effect”. The coordination process continues throughout the PD&E process, and commitments to FWC (e.g., wildlife crossing, species-specific survey) are recorded in the Environmental Document. Species-specific surveys or permitting may be necessary after conclusion of the PD&E phase.

## 16.2.5 Listed Plant Species- Federal and State

Under federal law, activities that may impact federally-listed plant species are subject to regulation under the **ESA**. Destruction, damage or relocation of protected plants is not prohibited unless these activities take place on federal lands or are otherwise in violation of state law on other lands.

In cases where projects may impact lands under federal jurisdiction (commonly National Forests, National Park Service lands, National Wildlife Refuges, military bases, and areas designated as critical habitat), USFWS can determine through **Section 7** consultation that there are no other options available and that the action will not jeopardize the continued existence of the species. In those cases, USFWS may authorize destruction of plants on federal lands.

Input from the ETAT representatives during ETDM screening should identify federally listed plant species that may occur within the action area. Coordination with the appropriate agencies for federally listed plant species is always included as part of the federal consultation process, if any listed plant species are potentially present. Should federally listed plant species be identified within the action area, they need to be considered together with listed wildlife species during consultation to avoid and minimize overall project impacts. Based on consultation with USFWS, listed plants may be transplanted to suitable habitats or removed for propagation (typically in coordination with conservation agencies) in order to avoid direct impacts.

State listed plant species are regulated by the FDACS, but state regulation only addresses the harvesting, transport, and/or sale of listed plant species. Plant species listed by the state as Endangered, Threatened, or Commercially Exploited are included on the Regulated Plant Index (**Rule 5B-40.0055, F.A.C.**). State rules do not specifically regulate or prohibit the incidental taking of state listed plants in the course of project activities, but general principles of avoidance and minimization (such as transplanting) apply to projects impacting listed plant species.

If it is determined during the preparation of the **NRE** or technical memo that state listed plants could be impacted by the project, the District forwards the **NRE** or technical memo to FDACS, Division of Plant Industries, for review. Upon evaluation, FDACS will in turn notify the Endangered Plant Advisory Council or interested native plant Nongovernmental Organizations (NGOs) to alert them to the potential for plant salvage activities. If the NGO is interested in plant conservation efforts within FDOT Right of Way (ROW), they will coordinate directly with the District. Once the **NRE** is forwarded to FDACS, and if NGOs have not expressed an interest in plant conservation efforts, no additional follow up is required by the District until the project is ready to be advertised. The District notifies FDACS and the Endangered Plant Advisory Council when bids for construction projects are first advertised as indicated by **Section 581.185(10), F.S.**, For additional guidance on state listed plants as well as non-listed plants of interest or concern to NGOs, please refer to FDOT's [Protected Species and Habitat Website](#) under the Plant Guidance Documents section.

## 16.3 PROCEDURE

### 16.3.1 Level of Assessment

The level of assessment and documentation during the PD&E phase depends on the potential for protected species and habitat impacts, the scope of the project, ecological

importance and distribution of the affected species, and intensity of potential impacts of the project.

Detailed evaluations are generally not warranted for transportation projects not qualifying for screening in the ETDM Environmental Screening Tool (EST) [typically Type 1 Categorical Exclusions (CEs) and NMSAs]. See [Part 1, Chapter 2, Class of Action Determination for Federal Projects](#) for clarification on projects that qualify for screening. Projects that do not require screening, based on analysis, have no significant effects. The evaluation for these types of projects can usually be streamlined.

A higher potential for protected species and habitat involvement usually exists with transportation projects qualifying for screening [typically Type 2 Categorical Exclusion (Type 2 CE), Environmental Assessment (EA), EIS, or SEIR]. These project classifications may warrant a more detailed level of analysis and documentation. Most PD&E projects will have received prior consideration of protected species and habitat issues during the ETDM process. The results of the Programming Screen are available in a **Final Programming Screen Summary Report**. The protected species and habitat evaluation in the PD&E Study builds on issues identified during the Programming Screen.

### 16.3.1.1 Projects Not Qualifying for Screening

Protected species and habitat involvement must be identified for projects regardless of the type of Environmental Document, including those that do not require EST screening and advance straight to the Design phase. For projects not qualifying for EST screening, the protected species and habitat evaluation should be in sufficient detail to ensure that the project considers protected species and habitat. If consultation is not needed with the Service(s), documentation can be in the form of a technical memo ([Section 16.3.2.4](#)). If informal consultation is needed with the Service(s), additional documentation in the form of an **NRE** is developed ([Section 16.3.2.5](#)). If during this coordination it is determined that formal consultation may be needed, the District must coordinate with OEM. Decisions and conditions should be documented in the project file, summarized in the Environmental Document, and addressed through incorporation into the final design plans. Documentation in the Environmental Document is as follows:

1. **Type 1 Categorical Exclusions (CEs)** - Type 1 CEs may involve listed species and critical habitat as long as the documentation demonstrates the proposed project has no significant effects on them and supports the effect determinations made. For these projects, a summary of the evaluation of listed species and habitat impacts, agency coordination and compensation for impacts (as appropriate) is included in the **Type 1 Categorical Exclusion Checklist** ([Part 1, Chapter 5, Categorical Exclusion](#)). If species keys or programmatic approaches were used to make an effect determination for a species, then they are referenced in the checklist and the steps used in the key should be outlined in the supporting documentation. Any conservation measures required by a key or programmatic approach become a project commitment and are included in the **PCR**. If the Programmatic Approach for Minor Transportation Projects applies, a **Programmatic Approach Form** resulting from the SWEPT analysis is included in

the project file. If a technical memo or **NRE** was prepared, it is referenced in the checklist and uploaded to the SWEPT project file. Agency coordination letters are also included in the project file, while concurrence letters are attached to the checklist. Required conservation measures should be included as commitments in the checklist and a **PCR** developed for the project.

2. **Non-Major State Actions (NMSAs)** - For a NMSA “No” is selected for the protected species topic on the **Non-Major State Action Checklist** to document that there are no listed species or critical habitat affected by the project ([Part 1, Chapter 10, State, Local or Privately Funded Project Delivery](#)). If “Yes” is selected, the project may not meet the criteria of a NMSA and a SEIR may be necessary. For these projects a summary of the evaluation of listed species and habitat impacts, agency coordination and compensatory mitigation for impacts (as appropriate) is included in the project file as supporting information to the NMSA. If a technical memo or **NRE** was prepared, it is referenced and included in the project file. If applicable, a **Programmatic Approach Form** should also be included in the project file.
3. **Type 2 Categorical Exclusions** - Some Type 2 CEs may not require screening through the EST. For these projects listed species and habitat impacts are documented as if the project was screened. See [Section 16.3.2.6.2](#) for guidance on documenting Type 2 CEs.

### 16.3.1.2 Projects Qualifying for Screening

Transportation projects qualifying for EST screening are generally more complex. In accordance with [Part 1, Chapter 2, Class of Action Determination for Federal Projects](#), qualifying projects must complete the ETDM Programming Screen and may also have completed the Planning Screen. As projects advance, protected species and habitat issues should be considered as follows:

1. **Planning Screen Evaluation** - Potential listed species and/or critical habitat within the project area that could affect the advancing of the project in a timely manner is identified and may assist with the elimination of fatally flawed alternatives, or require consideration of avoidance, minimization, or mitigation measures at this early planning stage. Protected species may also be identified during this evaluation.
2. **Programming Screen Evaluation** - Commentary about effects is provided and scoping recommendations are summarized to further understand the level of potential listed species and habitat impacts. Existing conditions are prepared for the Environmental Document. Protected species may also be identified during this evaluation.
3. **PD&E Evaluation** – The PD&E evaluation builds upon previous evaluations by filling information gaps. Coordination occurs with the Services and FWC on issues of concern identified in planning and programming screens, an impact assessment is performed, and alternatives are compared. The appropriate level of protected

species and habitat documentation is completed based on the project and associated impacts to listed species and commitments are documented.

4. **Design** - Any commitments made are incorporated. If there are changes or updates identified during a review of the final plans, they are documented in a Re-evaluation ([Part 1, Chapter 13, Re-evaluations](#)). Additional coordination with the Service(s) and FWC may be necessary if impacts have changed or if commitments require it (e.g., survey results will be shared prior to construction). Consultation may need to be re-initiated prior to permitting. The project must meet federal and state regulations.
5. **Construction** - Implementation of any protected species and habitat commitments (e.g., avoidance, inclusion, installation) and compliance with federal and state regulations is verified. For construction guidance for some specific species interactions see FDOT's [Protected Species and Habitat Website](#).

#### 16.3.1.2.1 ETDM Process Contribution to PD&E

For projects qualifying for EST screening, the proposed project is entered into the EST (see the [ETDM Manual, Topic No. 650-000-002](#)). The Advance Notification (AN) package may be distributed as part of the Programming Screen in the EST and includes a Preliminary Environmental Discussion (PED) ([Part 1, Chapter 3, Preliminary Environmental Discussion and Advance Notification](#)). Protected species and habitat information is included in the PED, reflecting the District's initial understanding of the project's potential involvement with protected species and habitat resources. The PED should also identify the location of federally designated critical habitat and provide a description of how protected species and habitat are to be evaluated in the PD&E Study. The AN package may also include a list of permits and technical studies that may be needed.

The District uses the EST to send the AN to the Services and FWC along with other ETATs, state and federal agencies, and other organizations. If sent during the Programming Screen it initiates the project-level coordination with the Services and FWC. As ETAT members, the Services and FWC review the proposed project, respond with comments, provide a species list, and identify any critical habitat(s) within the action area. The ETAT should provide focused comments and actionable recommendations to avoid or minimize potential effects to protected species and their habitat. They should also identify potential permits, compensatory mitigation opportunities, technical studies, and other items within their jurisdiction/responsibility.

The EST reports and stores the ETAT review in the **Programming Screen Summary Report**, which includes comments related to protected species and habitat issues as well as wildlife connectivity issues. This report provides a foundation for the District to coordinate directly with the Services and FWC. For example, the ETAT should provide a list of potential listed species and/or critical habitats that warrant further review with the Services and/or FWC, as well as information on otherwise protected species. The

Districts should use this list of species as a starting point for preparing the existing conditions for the **NRE** (see [Section 16.3.2.1.2](#)).

Information from the ETDM screening process should be used to prepare the PD&E scope of services and focus the protected species and habitat analysis/impact assessment. During PD&E, FDOT determines the project's involvement with federally listed threatened or endangered species, proposed (under review) threatened or endangered species, or designated or proposed critical habitat from resource agency comments and information included in the **Programming Screen Summary Report**. The Districts should review ETAT comments and Degree of Effect (DOE) determinations for the "Protected Species and Habitat" issue in the **Programming Screen Summary Report** as well as ETAT comments on other issues such as "Coastal and Marine," "Wetlands and Surface Waters," and "Water Resources." However, the associated DOE from the agencies is not a finding.

FDOT should focus on comments from the Services and FWC as resource experts. The **Programming Screen Summary Report** may identify an **NRE** as being needed in the "Anticipated Technical Studies" section of the report. Other sections of the report may be useful such as the "General Project Recommendations" and "Anticipated Permits" sections. Information from the screening should be used in preparing the existing conditions for the Environmental Document.

The ETDM Coordinator and Project Manager should coordinate internally with District Environmental Permits Coordinators, District Environmental Offices, and others who may be involved in the project following the screening.

## 16.3.2 PD&E Phase

### 16.3.2.1 Describe Existing Conditions

The District should coordinate with the Services and/or FWC to discuss comments from the **Programming Screen Summary Report** and ensure that potential protected species and habitat have not changed since the screening. The District should collect data and conduct field surveys to identify the initial existing conditions in the action area, such as the protected species and federally designated critical habitat that may occur there, as well as habitat types. The District begins preparing existing conditions based on ETAT commentary. However, presence or absence of some species can change over time and initial screenings or surveys may be considered out of date by the Services or FWC at the time a project is scheduled to begin construction, if they are done too far ahead of time.

#### 16.3.2.1.1 Identify Action Area

The action area is defined as "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 (USFWS and NMFS 1998)**). The action area boundaries for the project are established in coordination with the Services. This coordination is important, as any disagreement

regarding the action area boundaries can affect subsequent listed species and habitat analyses. Coordination with other FDOT offices is suggested to determine any additional areas (e.g., maintenance of traffic) that may need to be included in the action area.

### **16.3.2.1.2 Identify Protected Species and Critical Habitat that May Occur in the Action Area**

The species of concern identified by the Services and/or FWC during the ETDM process should form the basis of a list of species to be analyzed in the PD&E Study. During the Programming Screen, the Service(s) should provide the official species list. Coordination with the Service(s) and/or FWC in PD&E may identify additional species to be included on the list.

The Service(s) online species lists, available data sources, current literature, and species specialists may also be consulted to help identify what federally listed species may be in the action area. Species and critical habitats “proposed” for federal listing, as well as federal “candidate” species, are included on the list. Federally designated critical habitat within the action area also needs to be identified.

The District should also review official lists of state listed animals regulated by the FWC and plants regulated by the FDACS using online species lists and data, as well as other data sources. See [Guidance for Part 2, Chapter 16](#) for listed species information sources.

### **16.3.2.1.3 Collect Data and Map Habitat**

The best and most current scientific and commercial data available should be gathered from various sources to help determine the possibility for species occurrence within the action area. Sources include the Service(s)’ websites, Geographic Information System (GIS) species occurrence data, existing studies or surveys, information from past **BOs**, and **NREs**, status reports and listing rules, critical habitat designations, recovery plans, habitat management guidelines, and species specific studies. Information on wide ranging or migratory species that may not be listed by state or federal regulations should be collected since migratory bird species are protected by the **MBTA of 1918**, as amended.

Habitat maps provide a baseline for analysis of species presence/absence and potential impacts. Land covers/land uses, the presence/absence and quality of suitable habitats, and rare natural communities in the project site should be mapped and described. The presence of critical habitat, and/or SHCAs, consultation areas, natural areas and focal areas should also be identified and mapped. The habitat mapping effort should include the evaluation of various existing digital data sets and historical and recent aerial photography.

A field survey conducted by a biologist is needed to compare existing site conditions with digital data and to map the presence, extent, and configuration of existing land uses/land covers, potential habitats, and rare natural communities. Photo-interpretation and

extrapolation may also prove valuable in mapping large projects, and should be based on observations during field surveys.

### **16.3.2.1.4 Conduct Field Surveys**

Appropriate field surveys should be conducted to determine and record the presence of protected species individuals, evidence of listed species utilization, and document the presence and quality of existing habitats. Areas in which listed species (federal and state) or species' habitat is known or suspected to occur within the action area should be surveyed for individuals or signs of individuals of the listed species. The field survey may result in observations of additional, previously unidentified listed species or habitats. All observations of listed species, signs of listed species, and species' habitat should be recorded, Global Positioning System (GPS) coordinates taken, and the quality of habitats should be assessed and recorded.

It is recommended that field surveys for federally and state listed species and habitats, as well as otherwise protected species, be conducted concurrently. This survey is often conducted concurrently with field verification of habitat mapping. During this survey, plant species should be identified and recorded for each vegetative community and dominant species noted for each stratum present (e.g., canopy, subcanopy, shrub/understory, and ground cover).

Field surveys for specific species may be required and should be designed to account for life histories and behaviors (e.g., breeding, foraging, resting, migration, flowering, seeding) of the listed species that are expected to be, or could potentially be, present on a given site. Survey design should consider appropriate time of day and season of the year for species identification, as well as species' habitat quality and current site conditions including, but not limited to, recent and long-term fire and hydrologic history; recent and current climatic events (e.g., drought, flooding) and weather conditions; soil, topographic, and vegetative health or disturbances; noise levels; and typical human usage. Some listed species have agency developed or approved survey methodologies, including season-specific timeframes, which should be followed.

Consultation/coordination with the Services or FWC may identify the need to obtain quantitative data for a specific species; in those instances, a more intensive survey than is usually required may be warranted. Examples of quantitative data are percent cover for plants and population size for wildlife such as gopher tortoises. Methods for collecting quantitative data should be provided by the Services or FWC during consultation/coordination. Copies of survey results and associated field notes should be provided to the Services or FWC soon after surveys are completed. Note that some survey information, such as nest sites, may become outdated after one season. Through consultation with the Service(s) and OEM, species-specific surveys for federally listed species may be delayed until permitting to support permit issuance ([Section 16.3.3.3](#)). During the PD&E Study, a commitment to conduct a species-specific survey later in the process may need to be included as a commitment in the Environmental Document ([Part 2, Chapter 22, Commitments](#)).

### 16.3.2.2 On-going Agency Coordination

When federally listed species and/or critical habitat may occur within the action area, informal consultation or formal consultation may be needed with the applicable Service ([Section 16.2.2.1](#)). Any coordination activities with the Service(s) or ETAT members during the informal consultation process should be clearly documented in the project file.

When there is potential for involvement with state listed species, or valuable natural areas, coordination with the FWC ETAT is recommended ([Section 16.2.3](#)). Early coordination with FWC is advantageous to assess potential impacts to these natural resources. Coordination may save time later in the design phase when state or federal permits may be required prior to commencement of work.

The [FDOT Wildlife Crossing Guidelines](#) are followed when wildlife crossing features are being considered, which were developed in coordination with USFWS and FWC. Wildlife crossing feature locations should be identified as early as possible in the project planning and development processes, and prior to project design. The guidelines note that “wildlife crossing feature(s)” may include, but are not limited to new or modified structures, such as bridges, bridges with shelves, specially designed culverts, enlarged culverts or drainage culverts and/or exclusionary devices such as fencing, walls or other barriers, or some combination of these features. The guidelines were developed for use by FDOT to evaluate the appropriateness of including wildlife crossings (upland or wetland) and associated features for proposed projects on the State Highway System (SHS) and establish criteria to be considered during design. In cases where a FDOT District has an off-SHS project, the District coordinates with the OEM regarding possible inclusion of any wildlife crossing features.

When making commitments to the Services or FWC to address specific protected species and habitat issues of a project, it is critical that appropriate internal coordination efforts within the District (e.g., Design, Permitting, Structures, Construction and Maintenance Offices) are completed before such commitments are made. See [Part 2, Chapter 22, Commitments](#) for more information on commitments.

### 16.3.2.3 Conduct Protected Species and Habitat Analysis/Impact Assessment

Protected species and habitat analysis begins with determining the potential for species occurrence in the action area, and identifying any designated or proposed critical habitat(s). The potential for species occurrence is derived by comparing the habitat mapping of the project site with known species ranges, habitat preferences, and the locations and proximity of known occurrences. This information is then used to evaluate the type and degree of potential impacts, if any, associated with the project.

The impact assessment includes comparing the species and habitat mapping data and field survey results ([Section 16.3.2.1](#)) (per each viable alternative as applicable), with the proposed project footprint from the plan sheets (if available) to evaluate direct, indirect, and in some instances cumulative effects to listed species and habitats (see [Section](#)

[16.1.2](#) for definitions). It is also important to consider potential project impacts related to habitat connectivity for wildlife, not just protected species, as habitat fragmentation can directly or indirectly impact multiple species. Although there are no federal or state requirements to avoid habitat fragmentation for unlisted species, this can be considered in coordination with the Services and/or FWC. If wildlife crossings are considered they should follow the [FDOT Wildlife Crossing Guidelines](#) and what details are known at this stage should be discussed in the *NRE* and the Environmental Document if being considered for the project. Refer to the results of the *Wildlife Crossings Potential Report* prepared for the project during the ETDM screening.

Since CEs are generally minor in nature and do not have significant impacts, indirect and cumulative effects assessments will generally not be warranted. There may be exceptions, which can be evaluated on a case-by-case basis. It is recommended that the District Environmental Office staff coordinate with the District Design and Permitting staff when conducting the impact assessment.

The detailed results of the protected species and habitat analysis and impact assessment are documented in an *NRE* or technical memo (per the [Natural Resources Evaluation Outline and Guidance](#) document) and summarized in the Environmental Document. If more than one alternative is proposed (typically EAs and EISs), each alternative is then compared based on impacts to protected species and habitat using the analysis performed and documented in the Environmental Document. Typically for Type 2 CEs, only the preferred alternative needs to be described and there is no need to include the no build alternative.

If designated or proposed critical habitat is identified within the action area during the ETDM process, the identified habitat(s) must be evaluated for potential impacts. The steps outlined below are taken directly from the *ESA Consultation Handbook (USFWS and NMFS 1998)*, for determining whether a proposed action is likely to cause “destruction or adverse modification” of critical habitat.

The status of the critical habitat as designated and the environmental baseline within the action area is reviewed. The status and environmental baseline for any constituent elements or primary constituent elements may have been modified by actions considered in earlier *BOs*.

1. Those *BOs* are reviewed to determine the current baseline.
2. The effects of the proposed action on the constituent elements of critical habitat are evaluated.
3. The cumulative effects in the action area on the critical habitat and its constituent elements are evaluated.
4. It is assessed 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.

#### 16.3.2.4 Technical Memo

For projects that do not require **ESA** consultation and have minimal involvement with state or other protected species and habitat, an abbreviated report in the form of a brief technical memo rather than an **NRE** is completed and may be provided to the Service(s) and/or FWC for informational purposes. Technical memos should briefly discuss potential involvement with protected species or habitat and how this involvement is not significant. The effect determinations made must be supported in the documentation.

Any technical memo prepared for an FDOT Federal Project must include the **NEPA** Assignment standard statement (see [Part 1, Chapter 4, Project Development Process](#)).

#### 16.3.2.5 Biological Assessment and Natural Resources Evaluation

A **BA** is a technical report required by the Services if federally listed or proposed species or critical habitat “may be present” in the action area of a major construction activity. A major construction activity is defined as major federal projects significantly affecting the environment; therefore, all EISs require the preparation of a **BA**. This interpretation is consistent with that of the **Federal Highway Administration (FHWA) Memo, Management of the ESA Analysis and Consultation Process (FHWA, 2002)**. A **BA** is also required for EAs or CEs that have “may affect, likely to adversely affect” determinations requiring formal consultation. If a **BA** is required, the District should prepare a protected species and habitat section of an **NRE** to be submitted to the Service(s) as a **BA**. The **NRE** includes information on listed, proposed, and candidate species, and associated critical or proposed critical habitat.

An **NRE** documents the protected species and habitat, wetlands, and Essential Fish Habitat (EFH) analysis/impact assessment. The “Protected Species and Habitat” section of the **NRE** is prepared to help make the determination of whether the proposed action is likely to: (1) adversely affect federally listed species or designated critical habitat; (2) jeopardize the continued existence of species that are proposed for listing; or (3) adversely destroy or modify proposed critical habitat. During informal consultation, the conclusions contained in the **NRE** determine the need for formal consultation or conference.

The District should consider commentary from the Services and FWC ETAT members and consult with them as necessary when preparing the **NRE**. The contents are discretionary, and coordination with the Services and FWC is recommended to determine the depth of detail needed for the **NRE**.

##### 16.3.2.5.1 Content of the Natural Resources Evaluation

The **NRE** should include the assessment of impacts to protected species and habitat, wetlands, and EFH as separate sections and as applicable to the project. If it is determined that there is no involvement with one of these resource groups, an explanation must be provided (e.g., through field reconnaissance, desktop analysis).

Additional guidance can also be found in the **Natural Resources Evaluation Outline and Guidance** document on FDOT's [Protected Species and Habitat Website](#).

The "Protected Species and Habitat" section of the **NRE** includes all state listed, federally listed threatened, endangered, proposed and candidate species and critical habitats, as well as other protected species that may be present within the action area (e.g., migratory birds, American bald eagles, bat species, Florida black bears). Information gathered from sources identified in the **Programming Screen Summary Report** can be used to support the preparation of the **NRE**.

An **NRE** prepared for a project in which OEM serves as the Lead Federal Agency must use the **Technical Report Cover Sheet, Form No. 650-050-38a**.

The content of a **BA** is described in **50 CFR § 402.12(f)**. For an example **BA** template and instructions see the link in the [Guidance for Part 2, Chapter 16](#). The FHWA template may be used for the Protected Species and Habitat section of the **NRE**.

When the Protected Species and Habitat section of the **NRE** is submitted to the Services as a **BA** the following information is included:

1. The proposed project, project location, and the purpose of the action is described. The action area, which is all areas to be affected directly or indirectly by the action and not merely the immediate area involved, is defined. The description of the proposed project should include all activities related to construction and emphasize both long-term and short-term anticipated impacts on federally listed species and suitable habitat in the action area. Project and design alternatives (including construction methods) should also be addressed. This description should be brief, and not include large amounts of information copied from the Environmental Document. Discussion of existing conditions (e.g., current typical sections, land use, soils, natural features) should be included.
2. Prior coordination with the Service(s) or FWC is summarized.
3. The federally listed species, proposed species, candidate species, critical habitat, and proposed critical habitat that occur, or could potentially occur within the action area ([Section 16.3.2.1](#)) is identified. Brief background information on these species in terms of overall range, population status, habitat needs, and life history requirements is provided. Only relevant information on the species should be included. Details such as the species description (e.g., size, coloring) and general species information are not needed. Information (such as species lists) should be summarized in tables when appropriate. A summary of any prior coordination with the Service(s) or FWC is also included.
4. The methods used to determine involvement of federally listed species and critical habitat within the action area is described. It may be useful to rank potential involvement of each species based on probability of occurrence (e.g., low, moderate, high) and define the basis for these probabilities. The probability of

occurrence given to each species discussed should agree with the defined parameters of that probability.

5. The results of the comprehensive field survey of the project area ([Section 16.3.2.1.4](#)) is discussed including discussion of survey methodology, and details on: the qualifications of persons doing surveys; what types of surveys were conducted and on what species; when they were done [for how long, what dates, what seasons (breeding, spawning, nesting, fall, spring) and what times of day]; weather conditions; and how often. The specific area(s) that may be affected by the project is described. Any information pertinent to the comprehensive evaluation of federally listed species and/or critical habitat impacts is identified. Also, the reliability and validity of the survey and assessment and whether future studies may be required to validate and/or update the survey results is discussed. If applicable, the length of time the survey remains valid is stated. Field notes should not be appended to the **NRE** but may be included in the SWEPT file as supporting documentation. However, the survey findings report may be appended.
6. Any data gaps are identified and discussion of any difficulties in obtaining data pertinent to the comprehensive survey is included. Any data gaps or lack of information should be explained and their effects addressed.
7. The methods and results of studies that contribute information relevant to determining actual and potential impacts of the proposed project or associated activities on a federally listed species or critical habitat are described. Types of studies include studies of mating, nesting, reproduction, feeding, and migration of those species that may be found in the action area.
8. The effects of the action and any cumulative effects are evaluated.
  - a. The **NRE** should describe:
    1. Effects of the action, which are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action but that are not part of the action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside of the immediate area involved in the action (**50 CFR § 402.02**).
    2. Cumulative effects of the project on a federally listed species or critical habitat. Cumulative effects are defined as “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**). Note: this definition of cumulative effects is different than what is required for **NEPA**.

9. Efforts that will be taken to avoid, minimize, or offset the effects of the action on federally listed species or critical habitat are discussed. This should include precautionary measures, design modifications, conservation measures, and special construction methods that will eliminate or reduce adverse impacts. Special conservation measures and strategies may be appropriate and necessary for the avoidance of impacts. Any planned conservation measures for candidate species should also be described (*FHWA, 2002*).
10. Conclusions should be made on the significance of impacts to federally listed species and critical habitat within the action area.
11. Any other relevant information is included.

The above information is used by the District to come to an “effect” determination for each federally listed species and designated critical habitat to be included in the **NRE** (see [Section 16.2.2.1](#)).

The **NRE** should also discuss potential impacts to state listed species and include state imperiled wildlife species effect determinations for those species (see [16.2.4](#)). The report should include information on other protected species likely to occur in the action area. The presence of natural communities, such as FWC designated SHCAs and FNAI rare natural communities, or Marine Protected Areas should also be identified. Any species-specific surveys or permits that may be needed later in the process should also be discussed. This analysis and any coordination with the FWC or FDACS should be included in the **NRE**. Generally, final agency concurrence has not yet been obtained and is not summarized in the **NRE**. The **NRE** is used to complete consultation and will become a supporting document to and summarized in the final Environmental Document.

### 16.3.2.5.2 Submittal to and Review by OEM and Resource Agencies

The District should conduct a quality control review of the draft **NRE** and must submit it to OEM for review prior to submitting to the appropriate agencies for coordination/consultation. Draft watermarks or notations should be removed from the **NRE** prior to submittal to OEM and the agencies for review.

After OEM review and comment resolution, the final **NRE** can be distributed to the Services, Cooperating Agencies, FDACS, and FWC. Informal consultation may be initiated by the District via e-mail or letter to the Service(s), requesting concurrence on the applicable federal species effect determinations. See FDOT’s ***How To Guide for submission of Natural Resource Evaluations to the National Marine Fisheries Service (NMFS) for Endangered Species Act (ESA) and Essential Fish Habitat (EFH) Consultations*** and accompanying flowchart on the FDOT’s [Protected Species and Habitat Website](#) for guidance on submitting **Section 7** consultation requests to NMFS.

If required, formal consultation will be initiated by OEM via the Manage Document Review Events screen in the EST. The District should provide OEM with the final **NRE** and a cover letter requesting formal consultation from the Service(s). OEM will forward the information to the Service(s) and the formal consultation review period is tracked by the

EST. The District remains responsible for providing the **NRE** to all other interested agencies (e.g., FWC, FDACS).

Typically, the **NRE** is submitted to the resource agencies prior to the submittal of the EA or Draft Environmental Impact Statement (DEIS) for public availability. Consultation should be completed prior to the public hearing when possible, or otherwise prior to Location and Design Concept Acceptance (LDCA). If consultation cannot be completed prior to LDCA, see [Section 16.2.2.1.6](#).

If the District receives comments from the Service(s), FDACS, or FWC, an **NRE** addendum or other correspondence (i.e., e-mail or letter) addressing the comments is prepared. **NREs** are final documents prior to submittal to the resource agencies and should not be revised. If changes to the **NRE** are needed, they should be made by drafting an addendum to the original **NRE** document.

### 16.3.2.6 PD&E Documentation

Project documentation consists of maintaining the project file in SWEPT, completing the appropriate protected species and habitat section of the Environmental Document, and documenting project commitments.

#### 16.3.2.6.1 Project File

The District Project Manager is responsible for collecting and maintaining the information gathered during the protected species and habitat evaluation as part of the project file. Information in the project file documents any formal or informal coordination or consultation with the agencies, the determination of effects on listed species and critical habitat, agency concurrence as well as commitments made during the PD&E Study. All assessment materials (e.g., maps, analyses, survey reports) are contained in the project file which resides in SWEPT. All technical reports (**NRE**, technical memo), agreements, and agency coordination should also be included.

#### 16.3.2.6.2 Environmental Document

The results of the protected species and habitat evaluation are documented in the Environmental Document as described below:

1. **Type 2 Categorical Exclusions (CEs)** - Evaluation material should be briefly summarized and included in the Protected Species and Habitat section of the **Type 2 Categorical Exclusion Determination Form**. Documentation includes a concise summary of protected species and habitat impacts and agency coordination, supported effect determinations for each species and critical habitat, and dates of agency concurrence. This includes the documentation of programmatic approaches or species keys used to reach effect determinations and what steps were used to reach those determinations. All conservation measures required by the keys/programmatic approaches must also be appropriately documented and implemented. Any protected species and habitat related

commitments should be included in the Commitments section of the form. The **NRE**, technical memo, or technical assistance meeting minutes should be referenced and placed in the SWEPT project file. If a concurrence letter or **BO** was needed from the Services, it must be attached to the **Type 2 Categorical Exclusion Determination Form** and included in the project file.

2. **Environmental Assessments (EA) and Environmental Impact Statements (EIS)** - The results of the protected species and habitat analysis/listed species impact assessment detailed in the **NRE** or technical memo are summarized in the Environmental Document.

- a. EIS Executive Summary – Federally listed species and habitat information should be included in the Executive Summary of an EIS according to [Part 1, Chapter 8, Draft Environmental Impact Statement](#) and [Part 1, Chapter 9, Final Environmental Impact Statement](#). The following standard statement must be used in the Executive Summary for EISs when a “no effect” determination is applicable:

*It has been determined by FDOT, that the project, as proposed, will have “no effect” on any federally threatened or endangered species or designated critical habitat.*

For a Final Environmental Impact Statement/Record of Decision (FEIS/ROD) this finding is included in the ROD.

If disagreements exist, they should be identified in the Unresolved Issues and Areas of Controversy section of the FEIS Executive Summary ([Part 1, Chapter 9, Final Environmental Impact Statement](#)).

- b. Environmental Analysis Section - The discussion of protected species and habitat in the Environmental Analysis section should include a description of protected species that may occur in the project area as well as habitat types that may be impacted by the proposed project alternatives. It is also discussed whether critical habitat is present and if it will be destroyed or adversely modified. Documentation should also include maps showing the relationship of the project to the protected species and/ or critical habitat identified and the relationship of the project to the habitat types. This section of an EIS or EA also includes a summary of the Protected Species and Habitat section of the **NRE** and presents the results of the impact assessment, effect determinations, and recommended avoidance, minimization, compensation for impacts, and enhancement measures. This includes the documentation of programmatic approaches or species keys used to reach effect determinations and what steps were used to reach those determinations. All conservation measures required by the keys/programmatic approaches must also be appropriately documented and implemented. This section should provide sufficient information on the impact assessment such that a reviewer can determine the validity of the methodology.

This section must describe the protected species and habitat impacts of the proposed project for each alternative. The information should have sufficient scientific and analytical substance to provide a comparison of alternatives, as well as provide enough information for the decision-maker to determine the alternatives that would have the least and most impact to listed species and habitat resources. This includes impacts to listed species, critical habitat, and may include wildlife habitat connectivity and other protected species. The use of charts, tables, maps, and other graphics to illustrate comparisons between the alternatives and their respective impacts should be used. The results of this section should be used in the Alternatives matrix ([Part 2, Chapter 3A, Alternatives Analysis](#)).

The following standard statement (findings) must be included in the Environmental Analysis section of an EIS or EA if federally endangered or threatened species or critical habitat are not present in the action area:

*This project has been evaluated for impacts on federally threatened and endangered species and designated critical habitat. A review was conducted to determine those possible threatened or endangered species which may inhabit the project area. This search resulted in findings that no federally listed species are likely to be present in the action area and no critical habitat was identified. This was determined after undertaking a listed species and habitat evaluation and a field survey of the project area by a biologist.*

*The determination was made that the project will not impact any proposed threatened or endangered species, any threatened or endangered species, or affect or modify any critical habitat. A determination of "no effect" has been made, and the project is consistent with the Endangered Species Act, as amended.*

The **NRE** (or technical memo/meeting minutes if applicable) should be, referenced, and placed in the SWEPT project file.

This section should summarize the coordination/consultation with USFWS, NMFS, FWC, or other resource or regulatory agencies regarding protected species and habitat. Correspondence (e.g., coordination letters, emails, meeting minutes, comments on technical reports, concurrence letters) should be referenced, included in the Appendix, and added to the SWEPT project file.

- c. Commitments - Protected species and habitat commitments are documented in the Commitments section of an EA or EIS (see [Section 16.3.2.6.3](#)). See [Part 2, Chapter 22, Commitments](#) for more detail on how to prepare this section of the EIS or EA. Additional guidance on commitment language can be found in FDOT's [Standard Environmental Commitments Guidance](#) document.

3. **SEIR** - The results of the protected species and habitat evaluation are included in the Protected Species and Habitat Section of the SEIR. Documentation includes a concise summary of protected species and habitat impacts and agency coordination or technical assistance. If applicable, this section includes the documentation of programmatic approaches or species keys used to reach effect determinations and what steps were used to reach those determinations. All conservation measures required by the keys/programmatic approaches must also be appropriately documented and implemented. The **NRE**, technical memo, or technical assistance meeting minutes should be referenced and placed in the SWEPT project file. Any protected species and habitat related commitments should be included in the Commitments section. See [Part 1, Chapter 10, State, Local or Privately Funded Project Delivery](#) for more detail on how to prepare a SEIR.
  
4. **Consultation Completion** - There may be some instances when one of the Services does not have enough information to concur with, or not concur with an FDOT effect determination. In these cases, the Protected Species and Habitat section of the Environmental Document will include information as described in [Section 16.2.2.1.6](#). Associated commitments must also be provided in the Commitments section of the **Type 2 Categorical Exclusion Determination Form**, EA or EIS. In these instances, a statement similar to the following is used:

*Based on coordination with (insert U.S. Fish and Wildlife Service and/or National Marine Fisheries Service) to comply with Section 7 of the Endangered Species Act, FDOT commits to reinitiate consultation and provide information necessary to complete consultation on the [insert name of specie(s)] prior to advancing the project to construction. The letter from (insert U.S. Fish and Wildlife Service and/or National Marine Fisheries Service) is intended to provide reasonable assurance, per 23 CFR § 771.133, that requirements of the ESA are able to and will be met prior to construction. The status of this commitment will be updated in any subsequent project re-evaluations.*

### 16.3.2.6.3 Commitments

Protected species and habitat commitments may be **BO** or **Incidental Take Statement** commitments, conservation measures required by a key or programmatic approach, or actions/activities required to advance the project and require action in a later project phase to implement. Commitments may include incorporating special construction provisions into the contract documents, retrofitting of structures to serve as wildlife passages, building of wildlife crossings and/or fencing, wildlife signage, crossing structure monitoring, protected species surveys during later phases, and continued coordination with federal and state resource agencies when consultation cannot be completed during the PD&E phase. See FDOT's [Standard Environmental Commitments Guidance](#) for examples of commonly made commitments. Commitments must be coordinated with other FDOT offices to ensure each commitment is feasible.

Commitments related to protected species and habitat made by FDOT over the course of the project study are documented according to FDOT [Procedure No. 650-000-003, Project Commitment Tracking](#). See [Part 2, Chapter 22, Commitments](#) for more information. These commitments are also included in the Commitments section of the Environmental Document. Commitments may be initially identified in the **NRE** submitted to the resource agencies for their review. When a concurrence letter, **BO** or other agency correspondence modifies initial commitments, the language in the resource agency response should be the commitment listed in the Environmental Document.

At the conclusion of consultation, the Services may include conservation recommendations, which are non-binding (discretionary) suggestions provided separately from a **BO** or **Incidental Take Statement (USFWS and NMFS, 1998, 4-62)**. The District should consult with District management and OEM prior to making conservation recommendations a commitment.

### 16.3.3 Design and Construction Phases

#### 16.3.3.1 Re-evaluation

The following information must be documented in a Re-evaluation per [Part 1, Chapter 13, Re-evaluations](#):

1. Changes in impacts to protected species or habitats;
2. Changes in mitigation strategies;
3. Changes in listing status;
4. Results of surveys, continued coordination, or other commitments needed to be fulfilled prior to advancing the project to the next phase.

See [FDOT's Re-evaluation Guidance for Section 3- Changes in Applicable Law or Regulation](#) for guidance on identifying information to include in the Re-evaluation depending on the date regulatory change(s) were implemented.

#### 16.3.3.2 Design Considerations

Project commitments may include construction conditions for protected species, specific design requirements (e.g., the construction of wildlife crossings, or wildlife crossing features that can minimize take) or other project specific treatments (e.g., exclusionary fencing, curb heights, etc.). In some cases, special provisions or modified special provisions may need to be considered. Plan notes are only used when absolutely necessary and must be project-specific and cannot repeat specifications, permit conditions and/or design standards.

### 16.3.3.3 Permitting

The federal and state permitting processes, as related to protected species and habitat issues, are relatively straightforward if the project team has engaged in “**early, continual, and strategic coordination**” throughout Planning, PD&E, and Design. During PD&E these issues should have been addressed with resource agencies and project commitments made, therefore it is important that the Project Manager and District Environmental Permits Coordinator coordinate during permitting. Prior to permitting, ongoing coordination and thorough documentation of resource agency decisions and commitments (if any) should have produced a well-developed basis for successful permitting.

Federal permitting authority for FDOT projects typically originates from proposed impacts to jurisdictional wetlands and/or other surface waters, or from bridge or causeway construction over navigable waters of the United States. The USACE regulates the discharge of dredged and fill material into waters of the United States, including wetlands, under **Section 404** of the **CWA** and **Section 10 of the Rivers and Harbors Appropriations Act of 1899**. The USCG administers the permitting program for bridge and causeway construction under a variety of statutes, including **Section 9 of the Rivers and Harbors Appropriations Act of 1899**, the **General Bridge Act of 1946**, and other authorities. Refer to [Part 1, Chapter 12, Environmental Permits](#), [Part 1, Chapter 16, Navigation](#), and the FDOT [Permit Handbook](#).

The issuance of federal permits requires coordination with USFWS and/or NMFS to determine if actions associated with the permitted activity will impact federally listed species, following the **ESA Section 7** consultation process outlined previously in [Section 16.2.2.1](#).

For FDOT Federal Projects, FDOT will complete consultation with USFWS and/or NMFS and provide the completed consultation information (i.e., concurrence letters) to USACE and/or USCG as part of the permit application(s) to be incorporated in the regulatory agency action. See **FDOT Lead Agency Role for Endangered Species Act Consultation** letter for details.

For FDOT State Projects requiring **ESA Section 7** consultation as a result of federal permitting, FDOT will obtain Technical Assistance from the USFWS as part of the preparation of the Environmental Document and include the results with the federal permit application(s). At the time of permitting, USACE and/or USCG will coordinate with FDOT to determine which permitting agency should act as the “lead agency” to initiate **ESA** consultation. As part of the permitting process, the Service(s) may request additional data, including recent species-specific field surveys, confirmation of habitat mapping and characterization, and data on any observed listed species occurrences. This information provides the “facts on the ground” that complement the Environmental Document.

Issuance of federal permits from USACE and/or USCG is contingent upon approval from the Service(s) that the project has “no effect,” or “may affect, is not likely to adversely affect” federally listed species and that there will be “no destruction or adverse

modification” of critical habitat, or that the action “may affect, is likely to adversely affect” one or more listed species or that “destruction or adverse modification” of critical habitat will occur and incidental take is authorized by an **Incidental Take Statement** in a **BO**.

To ensure that **ESA Section 7** consultations do not delay the issuance of federal permits for transportation projects, the Districts are encouraged to conduct “early, continual, and strategic coordination” with the permitting agency, USFWS, and/or NMFS.

Issuance of a state general, individual, or conceptual Environmental Resource Permit (ERP) from the Florida Department of Environmental Protection (FDEP) or a Water Management District (WMD) requires that the activity “will not adversely impact the value of functions provided to fish and wildlife and listed species by wetlands and other surface waters” (e.g., **Rule 62-330.301(d), F.A.C.**). As part of the state permitting procedure for the ERPs, the state permitting agency sends the permit application to other agencies (e.g., FWC and the Department of State, Division of Historical Resources). The Project Manager and District Environmental Permits Coordinator should facilitate the communication of relevant resource agency decisions documented during the preparation of the Environmental Document’s commitments to FDEP or the WMD as part of the state permit application process.

#### **16.3.3.3.1 Federal and State Protected Species Permits**

Federal and state permits may be required for unavoidable impacts to or for take of protected species. Species protected by the federal **ESA** may require an Incidental Take permit from USFWS or NMFS. The FWC also requires Incidental Take permits for activities that may result in take of state listed species.

Species such as the American Bald Eagle, Florida burrowing owl and gopher tortoise are not subject to **ESA** review, yet may require species specific permits during project permitting. Detailed guidance on the most common protected species permit types required for transportation projects is provided in the FDOT [Permit Handbook](#) and [Part 1, Chapter 12, Environmental Permits](#).

#### **16.3.3.4 Contractor Requirements**

FDOT developed [FDOT Contractor Requirements for Unanticipated Interaction with Protected Species](#) for use by contractors when interaction with protected species is not anticipated and the following conditions exist: A “no effect” determination has been made, no commitments have been made (as described in FDOT [Procedure No. 650-000-003, Project Commitment Tracking](#)), and/or no permit conditions exist. These requirements address common protected species that may be encountered on FDOT projects and provides guidance in the event that a protected species is encountered during construction activities. The Construction Project Administrator (CPA), Consultant Construction Engineering and Inspection (CCEI), Contractor, Project Manager, and Field Superintendents should be reminded of these requirements during the pre-construction meeting or at the pre-proposal meeting for Design-Build projects. A link to these

requirements is provided in **Section 7-1.4** of the [Florida Department of Transportation Standard Specifications for Road and Bridge Construction](#).

### 16.3.3.5 Off-project Activities

Off-project activities performed by FDOT or Contractor could have the potential to impact protected species or critical habitat. Examples of such activities are borrow pits, disposal sites, concrete plants, asphalt plants, and material or equipment storage sites also known as staging areas. Stormwater management facilities identified in project plans should be surveyed like the rest of the project during permitting. Off-project activities are not exempt from the requirements of **Section 7** of the **ESA** or state regulations.

A field survey is required for all Contractor activities which might involve federally listed species consideration in accordance with **Section 7-1.4** of the [Florida Department of Transportation Standard Specifications for Road and Bridge Construction](#). Survey methods in [Section 16.3.2.1.4](#) also apply to off-project locations and are to be performed by District environmental personnel. An **NRE** should be completed and **Section 7** consultation may be requested by the Services for any activity which, through reduction of habitat or physical presence, would impact a federally listed species or critical habitat. The presence of state listed species, or otherwise protected species must also be determined in off-project impact areas. The procedures for this determination are the same as described in this chapter for the project area. Coordination may be necessary with both the Services and FWC.

#### 16.3.3.5.1 Procedure

At the pre-construction conference, District staff must notify the CPA that it is the Contractor's responsibility to submit a written request for the District to conduct a biological evaluation of any site where off-project activities are proposed. The District Environmental Office must notify the CPA that the Contractor request necessary biological evaluations with sufficient lead time so they may be completed without delaying the related off-project activity.

The written request should include the location of the activity (Section, Township, Range, County, City) with a map identifying haul or access roads. The project description should be identified by Financial Management Number and Contract Number. This will provide District environmental personnel the opportunity to research if any protected species are reported for the specified area. The District environmental personnel will notify the Resident Engineer and CPA of their scheduled arrival (date, time) for the evaluation of the site.

Upon completion of the field evaluation, if no species issues are identified, the District will send a written notice to the CPA stating that the contractor may proceed with the project. The District Materials Engineer and Resident Engineer should be copied. A sample letter is provided in [Guidance for Part 2, Chapter 16](#). The District should notify the CPA if a potential listed species is identified in the off-project area and if **ESA Section 7**

consultation is required. If **ESA Section 7** consultation is required, the District Environmental Office and CPA should coordinate with the Contractor on how to proceed.

### 16.3.3.6 Maintenance Activities

Maintenance activities such as roadside mowing, culvert repair/replacement, herbicide/fertilizer application, tree/shrub trimming, guardrail repair, bridge maintenance and repair typically are undertaken without impacting protected species or wildlife habitat. District Environmental Office staff should assist the Office of Maintenance when protected species issues arise ([Section 16.3.3.4](#)) or maintenance activities that may affect protected species or wildlife habitats are planned. Examples include:

1. Culvert repair/replacement in areas known to be inhabited by the Panama City Crawfish;
2. Mowing and/or herbicide/fertilizer application on roadsides inhabited by listed plant species;
3. Bridge repair/maintenance in bridges that may be roosting sites for protected bat species;
4. Bridge repair/maintenance requiring in water work; and,
5. Tree/shrub trimming in mangrove areas

A field survey is required for maintenance activities which might involve federally listed species consideration in accordance with **Section 7** of the [Florida Department of Transportation Standard Specifications for Road and Bridge Construction](#). Survey methods in [Section 16.3.2.1.4](#) apply to off-project locations as well as the project area and are to be performed by District environmental personnel. An **NRE** or technical memo should be completed and **Section 7** consultation may be requested by the Services for any activity which, through reduction of habitat or physical presence, would impact a federally listed species or critical habitat. Coordination may be necessary with both the Services and FWC.

## 16.4 EMERGENCY CONSULTATION

In cases where emergency actions may affect federally listed species and/or critical habitats, emergency consultation with the Services is required by **Section 7** of the **ESA**, as amended (**50 CFR § 402.05**). USFWS defines an emergency to include an act of God, disasters, casualties, national defense or security emergencies, and includes response activities that must be taken to prevent imminent loss of human life or property. Consultation may be conducted informally through alternative procedures that the Service(s)'s Director determines to be consistent with the requirements of the **ESA**. Emergency consultation procedures allow federal agencies to incorporate endangered species concerns into their response actions - they are **not** intended to interfere with emergency response efforts.

The District initiates consultation by contacting the Service(s). See the ***FDOT Environmental Review Guidance for Emergency Relief Projects*** on ***FDOT's Documents and Resources Webpage*** for details on contacting the USFWS and/or NMFS for emergency **Section 7** consultation.

Recommendations from the Services may include strategies to avoid and/or minimize incidental take, and conservation recommendations to help protect federally listed species and their habitats within the emergency action area. In their recommendations, the Services should indicate if the emergency actions may result in “jeopardy” or “adverse modification” to federally listed species or critical habitat, and if any means for reducing or avoiding this effect are apparent. The District must implement and maintain the on-site protective measures that the Service(s) identified during the emergency **Section 7** consultation.

As soon as possible after the emergency is under control, formal consultation with the Services **must** be initiated if federally listed species or critical habitat have been adversely affected. Procedurally, the emergency formal consultation is treated like any other formal consultation by the Services, which means consultation must be initiated by OEM.

If OEM must initiate formal consultation after an emergency, the District should provide the following information to OEM to forward to the Services:

1. A description of the emergency;
2. A justification for the expedited consultation; and
3. An evaluation of the response to, and the impacts of, the emergency on affected species and their habitats. This includes documentation demonstrating how the Services' recommendations were implemented, and the results of implementation in minimizing take.

After concluding formal consultation, the Service(s) then issues an emergency **BO** which documents its recommendations and the results of agency implementation of the recommendations on federally listed species. This **BO** also may document the actual or estimated take occurring from the emergency response actions.

The Services' emergency consultation procedures are found in the ***USFWS/NMFS Endangered Species Consultation Handbook, Sections 8.1 and 8.2***. For additional information on current emergency coordination procedures, current contact information, executive orders, and best management practices, view the OEM website or the Service(s)' websites.

Coordination with FWC in cases where emergency actions may affect state listed and/or protected species is recommended.

## 16.5 REFERENCES

Chapter 5B-40, F.A.C., Preservation of Native Flora of Florida

Chapter 68A-27, F.A.C., Rules Relating to Endangered or Threatened Species

CWA of 1972, as amended. <https://www.epa.gov/laws-regulations/summary-clean-water-act>

ESA of 1973, as amended 1978, 1979 and 1982.  
<https://www.fws.gov/sites/default/files/documents/endangered-species-act-accessible.pdf>

FDOT, FDOT Environmental Review Guidance for Emergency Relief Projects.  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/2025-fdot-environmental-emergency-guidance\\_final.pdf?sfvrsn=6847e36c\\_1](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/2025-fdot-environmental-emergency-guidance_final.pdf?sfvrsn=6847e36c_1)

FDOT, FDOT Lead Agency Role for Endangered Species Act Consultation. March 13, 2019 letter to Jason Watts, Director of OEM from Larry Williams, State Supervisor of USFWS.  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/esa-lead-agency-consultation.pdf?sfvrsn=a3102dd6\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/esa-lead-agency-consultation.pdf?sfvrsn=a3102dd6_2)

FDOT, Florida Department of Transportation Wildlife Crossing Guidelines.  
<https://www.fdot.gov/environment/oem-divisions/env/protected-species-habitat>

FHWA, Guidance for Preparing and Processing Environmental and Section 4(f) Documents. 1987. <http://environment.fhwa.dot.gov/projdev/impta6640.asp>

FDOT, How To Guide for Submission of Natural Resource Evaluations to the National Marine Fisheries Service (NMFS) for Endangered Species Act (ESA) and Essential Fish Habitat (EFH) Consultations.  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/protected-species/nmfs\\_esa\\_and\\_efh\\_consultation\\_request\\_submission\\_process.pdf?sfvrsn=c3e5e9f3\\_7](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/protected-species/nmfs_esa_and_efh_consultation_request_submission_process.pdf?sfvrsn=c3e5e9f3_7)

FDOT, How to Guide: Submitting Natural Resource Evaluations (NRE) to the National Marine Fisheries Service (NMFS) for Endangered Species Act (ESA) and Essential Fish Habitat (EFH) Consultations Flow Chart.  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/protected-species/nmfs-flowchart\\_final.pdf?sfvrsn=42bec40\\_3](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/protected-species/nmfs-flowchart_final.pdf?sfvrsn=42bec40_3)

FHWA, Management of the ESA Environmental Analysis and Consultation Process. February 20, 2002 Memorandum to Division Administrators from the Director of Office of Natural Environment, FHWA.  
2002.[http://environment.fhwa.dot.gov/ecosystems/laws\\_esaguide.asp](http://environment.fhwa.dot.gov/ecosystems/laws_esaguide.asp)

FDOT, No Effect Determinations and Species Keys, December 12, 2018 letter to Larry Williams, State Supervisor of USFWS from Jason Watts, Director of OEM.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/protected-species/use-of-species-keys-update\\_december2019.pdf?sfvrsn=1f24318a\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/protected-species/use-of-species-keys-update_december2019.pdf?sfvrsn=1f24318a_2)

FDOT, Project Commitment Tracking, Topic No. 650-000-003. <https://pdl.fdot.gov/>

FDOT, Protected Species and Habitat Website.

<https://www.fdot.gov/environment/oem-divisions/env/protected-species-habitat>

FDOT, Re-evaluation Guidance for Section 3- Changes in Applicable Law or Regulation's. [https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/reeval-regs-laws-checklist\\_2025-0916.pdf?sfvrsn=52041e4e\\_1](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/reeval-regs-laws-checklist_2025-0916.pdf?sfvrsn=52041e4e_1)

FDOT, Standard Environmental Commitments Guidance. [https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/pde---general/commitment-guidance.pdf?sfvrsn=8df1b700\\_1](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/pde---general/commitment-guidance.pdf?sfvrsn=8df1b700_1)

FDOT, Standard Specifications for Road and Bridge Construction, Florida Department of Transportation, Section 7-1.4. <https://www.fdot.gov/programmanagement/Specs.shtm>

Fish and Wildlife Coordination Act of 1934, as amended. [https://www.law.cornell.edu/topn/fish\\_and\\_wildlife\\_coordination\\_act](https://www.law.cornell.edu/topn/fish_and_wildlife_coordination_act)

Marine Mammal Protection Act of 1972, as amended. <https://www.fws.gov/law/marine-mammal-protection-act>

MBTA of 1918, as amended. <http://www.fws.gov/laws/lawsdigest/migtrea.html>

NEPA of 1969, as amended (42 U.S.C. § 4321 et seq.). <https://www.govinfo.gov/content/pkg/COMPS-10352/pdf/COMPS-10352.pdf>

NMFS, Emergency Section 7 Webpage. <https://www.fisheries.noaa.gov/endangered-species-conservation/endangered-species-act-emergency-consultations-southeast>

Rivers and Harbors Appropriations Act of 1899

Section 163(2), F.S., Growth policy; County and Municipal Planning; Land Development Regulation Section 379, F.S., Fish and Wildlife Conservation

Section 581.185(10), F.S., Preservation of native flora of Florida

Title 23 CFR Part 771, Environmental Impact and Related Procedures. <http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=3f0e8ae65ee76fc13c0bc7a240e9fc59&mc=true&r=>

[PART&n=pt23.1.771](#)

Title 50 CFR § 402, Interagency Cooperation – Endangered Species Act of 1973.

<http://www.ecfr.gov/cgi-bin/text-idx?SID=01a705dc1f55bb4fa8236bf90e86822f&mc=true&node=pt50.11.402&rqn=div5>

USFWS, 2004. Endangered Species Glossary.

[https://efotg.sc.egov.usda.gov/references/Public/FL/ESA\\_Glossary.pdf](https://efotg.sc.egov.usda.gov/references/Public/FL/ESA_Glossary.pdf)

USFWS, 2017. Critical Habitat: Frequently Asked Questions.

<https://www.fws.gov/sites/default/files/documents/critical-habitat-fact-sheet.pdf>

USFWS, Habitat Conservation Plans: Section 10 of the Endangered Species Act.

<https://www.fws.gov/service/habitat-conservation-plans>

USFWS and NMFS, 1998. Endangered Species Consultation Handbook. Procedures for Conducting Consultation and Conference Activities Under Section 7 of the Endangered Species Act, March 1998 Final.

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

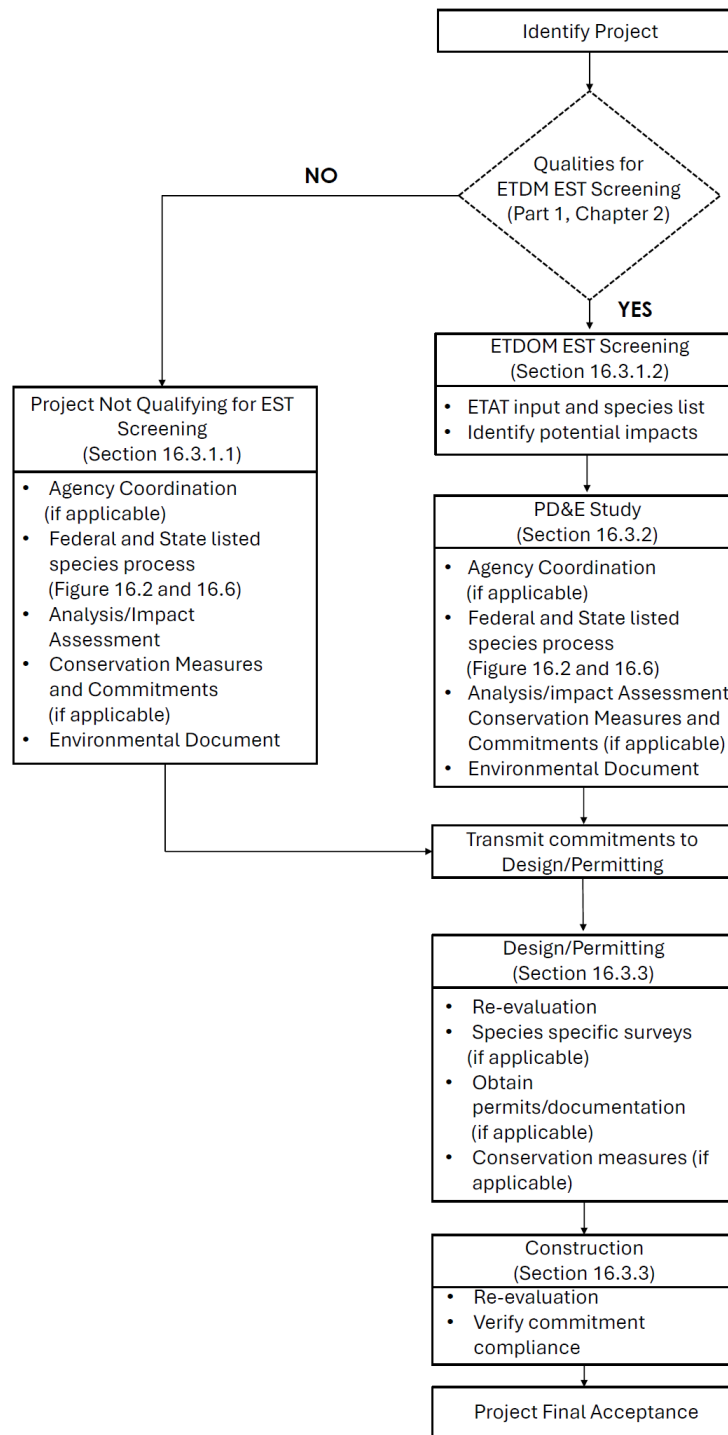
## **16.6 FORMS**

[Technical Report Cover Sheet, Form No. 650-050-38a](#)

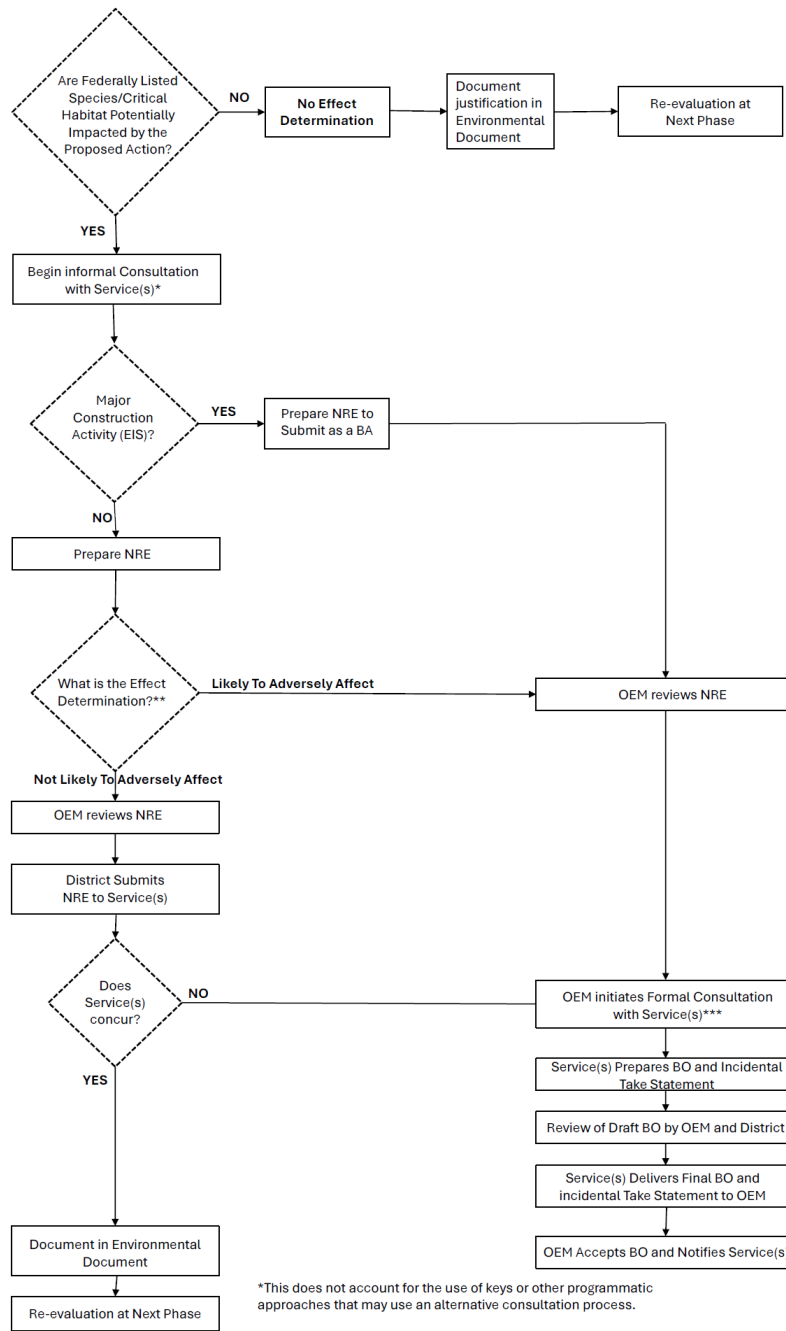
**Table 16-1 Effect Determinations**

STEP	EFFECT DETERMINATIONS		
	No Effect	May Affect, Not Likely to Adversely Affect	May Affect, Likely to Adversely Affect
1.	No consultation with Services required.	District initiates informal consultation.	NRE is completed. At least one listed species receives a “may affect, likely to adversely affect” determination.
2.	Document the “No Effect” determination and justification in the Environmental Document.	District works with Service(s) to evaluate and reduce potential impacts to species and/or critical habitat.	District sends a written request to OEM, requesting initiation of formal consultation. The request includes an “initiation package” that describes the project and potential impacts.
3.	<b>Process complete.</b>	District reaches determination of “May Affect, Not Likely to Adversely Affect.”	OEM initiates formal consultation with the Service(s).
4.		District sends package to Service(s) for review and concurrence, with the reasons supporting determination, and project modifications and/or commitments to reduce potential impacts.	The Service has 30 working days to review the initiation package for completeness. If incomplete, a request for additional information is issued.
5.		If Service sends a concurrence letter, District documents the concurrence and any associated commitments in the Environmental Document. <b>Process complete.</b>	OEM, District, and Service(s) work together to avoid a listed species jeopardy opinion, and/or avoid destruction or adverse modification of critical habitat, while maintaining the project purpose and viability (if feasible).
6.		If Service sends a non-concurrence letter, District must either a) request that OEM initiate formal consultation; or b) modify the project to obtain concurrence.	Formal consultation must be concluded within 90 days of receiving a complete initiation package. The BO must be delivered to the action agency (OEM) within 45 days after conclusion of formal consultation.
			If a non-jeopardy BO is issued (no jeopardy to listed species and/or no destruction or adverse modification of critical habitat exists), the Service issues an Incidental Take Statement in association with the BO. The Incidental Take Statement conditions are non-discretionary and must be included by FDOT in the Commitments documentation. <b>Process complete.</b>
			If BO reaches a jeopardy or adverse modification conclusion, it will include reasonable and prudent alternatives to avoid jeopardy and/or adverse habitat modification. OEM must notify the Service of its final decision for proceeding with the project.

**Note: Please see sections 16.2.2.1.6 and 16.3.2.6.2 if the Service(s) do not have enough information to concur or not concur.**



**Figure 16-1 Protected Species and Habitat Evaluation Process**

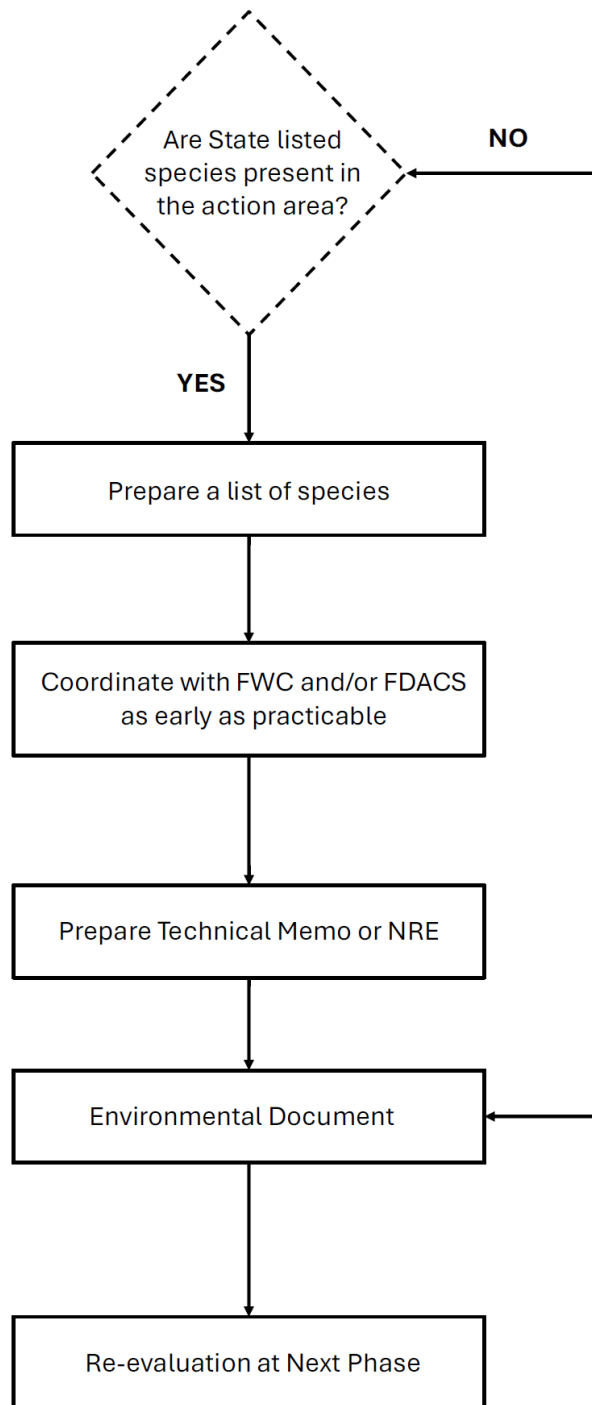


\*This does not account for the use of keys or other programmatic approaches that may use an alternative consultation process.

\*\*The effect determination is performed for each federally listed species and the process is dictated by the "highest" effect determination.

\*\*\*For guidance on jeopardy determinations, see Section 16.2.2.1.5

Figure 16-2 Federally Listed Species Process



**Figure 16-3 State Listed Species Process**