Programmatic Biological Opinion for

U.S. Environmental Protection Agency's Approval of FDEP's Assumption of the Administration of the Dredge and Fill Permitting Program under Section 404 of the Clean Water Act

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ACRONYMS (adopted from EPA BE, p. ix - x)

Assumption	Assumption of Section 404 of CWA by the State of Florida
BA	Biological Assessment
BE	Biological Evaluation
BMP	Best Management Practices
BiOp	Biological Opinion
C&SF	Central and Southern Florida
CERP	Comprehensive Everglades Restoration Plan
CFR	Code of Federal Regulations
CWA	Clean Water Act
EIS	Environmental Impact Statement
ECOS	Environmental Conservation Online System
EPA	United States Environmental Protection Agency
ERP	Environmental Resource Permit
ESA	Endangered Species Act
F.A.C.	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FEMA	Federal Emergency Management Agency
FLCCS	Florida Land Cover Classification System
FNAI	Florida Natural Areas Inventory
F.S.	Florida Statutes
FWC	Florida Fish and Wildlife Conservation Commission
GIS	Geographic Information Systems
HCP	Habitat Conservation Plan
IPaC	Information for Planning and Consultation
ITS	Incidental Take Statement
MOA	Memorandum of Agreement
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration

NWP	Nationwide Permit
PEM	Palustrine Emergent
PFO	Palustrine Forested
PSS	Palustrine Shrub Scrub
RAI	Request for Additional Information
SFWMD	South Florida Water Management District
SLOPES	Standard Local Operating Procedures for Endangered Species
USACE	United States Army Corps of Engineers
USC	United States Code
USFWS	United States Fish and Wildlife Service
Wildlife Plan	Florida's State Wildlife Action Plan (FWC)
WMDs	Water Management Districts
WOTUS	Waters of the United States

GLOSSARY (adopted from EPA BE p. xi – xv)

Action means all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by federal agencies in the United States or upon high seas (50 CFR § 402.02). For the purposes of this document, the proposed action is the EPA's potential approval of the State of Florida's request for the assumption of the administration and permitting of a CWA Section 404 program.

Action Area means 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).

Activity for the purposes of the State 404 program only, means "discharge of dredged material" and/or "discharge of fill material" as those terms are defined in 40 CFR § 232.2 (Rule 62-331.030, F.A.C.).

Administratively complete means an application that contains all the items required under the public noticing requirements of Rule 62-331.060, F.A.C.

Affect/effect as a verb, to "affect" means is to bring about a change. The "effect" (usually a noun) is the result of a change. "Affect" appears in Section 7 of the ESA (16 USC § 1536) and "Effect" appears throughout ESA Section 7 regulations (50 CFR § 402 *et seq*) and guidance documents (ESA Section 7 Consultation Handbook).

Assumed waters (or **State-assumed waters)** State-assumed waters are all waters of the United States that are not retained waters (as identified in Chapter 62-331, F.A.C., and FDEP's State 404 Handbook).

Avoidance means mitigating a resource impact by selecting the least-damaging project type, spatial location and extent compatible with achieving the purpose of the project. Avoidance is achieved through an analysis of appropriate and practicable alternatives and a consideration of impact footprint.

Assumption means a state has requested and the EPA has approved a state dredge and fill permitting program to be administered in lieu of the Section 404 program administered by the USACE for discharges into assumed waters.

Best available data means data to assure the quality of the science used to establish official positions, decisions, and actions taken by the State of Florida during the review of State 404 program permit applications, the quality of the biological, ecological, technical, and other relevant information that is used will only be that which is reliable, credible and represents the best data available. Under Section 7(a)(2) of the ESA, the USFWS is required to use the best available science. In the context of the ESA, the USFWS and NMFS have a policy statement that further describes best available data (see Notice of Interagency Cooperative Policy on Information Standards Under the Endangered Species Act 1994).

Biological opinion (BiOp) means a document which includes 1) the opinion of the US Fish and Wildlife Service or the National Marine Fisheries Service as to whether or not a federal action is likely to jeopardize the continued existence of listed species, or result in the destruction or adverse modification of designated critical habitat; 2) a summary of 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 means plant and animal taxa considered for possible addition to the list of Endangered and Threatened Species. 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 (See 50 CFR § 424.02, ESA Section 7 Consultation Handbook).

Conservation means to use all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which protective measures are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking (ESA 16 U.S.C. § 1532(3)).

Critical habitat for a threatened or endangered species means 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 1533, on which are found those physical or biological features essential to the conservation of the species and 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 1533, upon a determination by the Secretary of the Interior or the Secretary of Commerce that such areas are essential for the conservation of the species (ESA 16 U.S.C. § 1532(5)).

Cumulative effects are those effects of future State or private activities, not involving federal activities that are reasonably certain to occur within the action area of the action subject to coordination. For the purposes of this document, this definition only applies to ESA Section 7 analyses (50 CFR § 402.02).

CWA means the Clean Water Act (also known as the Federal Water Pollution Control Act or FWPCA) Pub. L. 92–500, as amended by Pub. L. 95–217, 33 USC 1251, et seq. (Rule 62-331.030, F.A.C., FDEP's State 404 Handbook section 2.0(b)1).

Destruction or adverse modification of critical habitat means 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).

Effects of the action 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. 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).

Endangered species means any species which is in danger of extinction throughout all or a significant portion of its range other than a species of Class Insecta determined by the Secretary to

constitute a pest whose protection under the provisions of the ESA would present an overwhelming and overriding risk to man (ESA 16 U.S.C. § 1532(6)).

Endangered or threatened species in this document refers to those animal species that are identified as federally endangered or threatened by the USFWS or NMFS, and those animal species that are identified as State-listed by the FWC; it also means plant species identified as endangered or threatened by the USFWS or by the Florida Department of Agriculture and Consumer Services when such plants are located in a wetland or other surface water (Rule 62-330.021, F.A.C.).

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 ESA Section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. The consequences to listed species or designated critical habitat from ongoing agency activities or existing agency facilities that are not within the agency's discretion to modify are part of the environmental baseline (50 CFR § 402.02).

ESA-species of concern refers to species that are either listed, proposed, petitioned, or considered candidates for listing under the Endangered Species Act.

Fish or wildlife means any member of the animal kingdom, including without limitation any mammal, fish, bird (including any migratory, nonmigratory, or endangered bird for which protection is also afforded by treaty or other international agreement), amphibian, reptile, mollusk, crustacean, arthropod or other invertebrate, and includes any part, product, egg, or offspring thereof, or the dead body or parts thereof. (ESA 16 U.S.C. § 1532(8)).

Incidental take refers to takings that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by a federal agency or applicant (50 CFR § 402.02).

Jeopardize the continued existence of means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR § 404.02).

Listed species refers to any species of fish, wildlife or plant which has been determined to be endangered or threatened under Section 4 of the ESA or under Chapter 68A-27, F.A.C.

May affect is the appropriate conclusion made by a federal action agency in the context of the ESA or by the State in the context of the State 404 program when a proposed activity is reasonably certain to affect any ESA-listed species or designated critical habitat.

Minimization means mitigating an aquatic resource impact by managing the severity of a project's impact on resources at the selected site. Minimization is achieved through the incorporation of appropriate and practicable design and risk avoidance measures.

No effect is the appropriate conclusion when the action agency determines its action will not

affect a listed species or designated critical habitat per the ESA.

Other Activities are program and discharge activities that are caused or authorized by the proposed action. If other activities cause consequences to listed species or critical habitat, the consequences of these other activities would be considered as effects of the proposed action, pursuant to 50 CFR 402.02.

Practicable means available and capable of being done after taking into consideration cost, existing technology, and logistics considering overall project purposes (Rule 62-331.030, F.A.C.).

Programmatic consultation (under ESA implementing regulations 50 CFR § 402.02) is a consultation addressing an agency's multiple actions on a program, region, or other basis. Programmatic consultations allow the USFWS to consult on the effects of programmatic actions such as:
(1) Multiple similar, frequently occurring, or routine actions expected to be implemented in particular geographic areas; and
(2) A proposed program, plan, policy, or regulation providing a framework for future proposed actions.

Project area or **Project site** means that a portion of the State-assumed waters where specific dredging or filling activities are permitted and consist of a bottom surface area, any overlying volume of water, and any mixing zones. In the case of wetlands on which surface water is not present, the project area consists of the wetland surface area (Rule 62-331.030, F.A.C.). In the context of the review of State 404 permit applications for endangered and threatened species, also includes those areas outside the immediate area of activity which may affect listed species using those areas.

Protection measures means those avoidance and minimization measures to address adverse impacts to listed species and critical habitat under the State 404 program. Protection measures recommended by the USFWS are incorporated as conditions to the State 404 permit. Examples of protection measures include, but are not limited to, project design changes and operational restrictions for the protection of species (i.e., seasonal restrictions for construction work as used in Chapter 62-331, F.A.C.).

Proposed species means any species of fish, wildlife or plant that is proposed in the Federal Register to be listed under Section 4 of the Endangered Species Act (50 CFR § 402.02).

Reasonable potential to affect for the purposes of this document and for the State of Florida's 404 program, refers to a project that has a reasonable potential for affecting endangered or threatened species (40 CFR § 233.51(b)(2)) where it has been determined during the species coordination process that the project may affect federally listed species or their critical habitat.

Retained Waters means those waters which are presently used, or are susceptible to use in their natural condition or by reasonable improvement as a means to transport interstate or foreign commerce shoreward to their ordinary high water mark, including all waters which are subject to the ebb and flow of the tide shoreward to their mean high water mark, including wetlands adjacent thereto. The USACE will retain responsibility for permitting for the discharge of dredged or fill material in those waters identified in the Retained Waters List (Appendix A of the FDEP's State 404 Handbook), as well as all waters subject to the ebb and flow of the tide shoreward to their mean high

water mark that are not specifically listed in the Retained Waters List, including wetlands adjacent thereto landward to the administrative boundary. The administrative boundary demarcating the adjacent wetlands over which jurisdiction is retained by the USACE is a 300-foot guide line established from the ordinary high water mark or mean high tide line of the retained water. In the case of a project that involves discharges of dredged or fill material both waterward and landward of the 300-foot guide line, the USACE will retain jurisdiction to the landward boundary of the project for the purposes of that project only (Rule 62-331.030, F.A.C.). The USACE will also retain responsibility for permitting for the discharge of dredged or fill material in Indian Country, as defined in 18 U.S.C. § 1151.

Section 7 consultation refers to Section 7(a)(2) of the ESA that requires federal agencies to use their authorities to further the conservation of listed species, including the requirement to consult with the USFWS to ensure that they are not undertaking, funding, permitting or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat.

Section 404 is a section of the federal CWA that establishes a program to regulate the discharge of dredged and fill material into the WOTUS.

Services(s) describes the USFWS and/or the NMFS.

Species coordination is a process to address potential adverse effects to threatened or endangered species, ensuring compliance with Florida Chapter 62-331, F.A.C., and the ESA. This process includes coordination between the FDEP, FWC, and the USFWS during the review of submitted State 404 permit applications. Recommendations for avoiding and minimizing the effects of a project to federally listed species and their critical habitat is provided by technical assistance from the USFWS.

Species coordination lead or State species lead is the designated FDEP or FWC staff person who coordinates with the USFWS and is the point of contact for all ESA species issues during the review of a specific State 404 application. FDEP and FWC staff will decide on a project by project basis which agency will act as the State's species lead on the project when coordinating with the USFWS. Factors that will be considered in this decision include the complexity of the coordination and relative workloads.

State 404 program is the FDEP program (Chapter 62-331, F.A.C.) that fulfills the requirements of Section 404 of the CWA and its implementing regulations, if approved by EPA.

Stream means any river, creek, slough, or natural watercourse in which water usually flows in a defined bed or channel. It is not essential that the flowing be uniform or uninterrupted. The fact that some part of the bed or channel shall have been dredged or improved does not prevent the watercourse from being a stream (§ 373.019(20), F.S.).

Stressors are any physical, chemical, or biological alteration of resources (i.e., increase, decrease, or introduction) that can induce an adverse organism response. Stressors can act directly on an individual, or indirectly through impacts to resources.

Surface water means water upon the surface of the earth, whether contained in bounds created naturally or artificially or diffused. Water from natural springs shall be classified as surface water

when it exits from the spring onto the earth's surface (§ 373.019(21), F.S.).

Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct. (ESA 16 U.S.C. § 1532(19)) **Harass** is further defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include but are not limited to, breeding, feeding, or sheltering. **Harm** is further defined 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 (ESA implementing regulations 50 CFR § 17.3).

Technical assistance refers to a type of coordination process described in the ESA Section 7 Consultation Handbook (1998) that outlines a variety of ways in which the USFWS provides expertise and guidance on an individual project basis. In the context of FDEP's 404 permit application reviews, the USFWS will provide technical assistance to the State of Florida by providing information, reviews, and recommendations on effect determinations and protective measures to ensure compliance with the ESA, CWA, and Chapter 62-331, F.A.C.

Technically complete means a State 404 application where each application item is adequate to allow the FDEP to determine if the proposed project complies with Chapter 62-331, F.A.C. If a project requires both an ERP and a State 404 program authorization, the State 404 program review shall not be considered complete until the ERP review is complete. This is to satisfy the requirement for reasonable assurance that State water quality standards and coastal zone consistency requirements will be met (Rule 62-331.030, F.A.C.).

Threatened species means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range (ESA 16 U.S.C. § 1532(20)).

Uplands means areas that are not wetlands or other surface waters, as delineated pursuant to Rules 62-340.100 through 62-340.550, F.A.C., as ratified by § 373.4211, F.S.

USACE 404 program refers to the administration and permitting responsibilities by the USACE for Section 404 of the CWA, prior to any assumption by the State of Florida.

Waters of the State are as defined in § 403.031(13), F.S.

Waters of the United States (WOTUS) means those waters defined in the regulations under 40 CFR § 120.2.

Wetland means areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (40 CFR § 120.2).

Works means all artificial structures, including, but not limited to, ditches, canals, conduits, channels, culverts, pipes, and other construction that connects to, draws water from, drains water into, or is placed in or across the waters in the State [§ 373.403(5), F.S.] and includes all types of dredging and filling to create, remove, or locate structures in, on, or over wetlands or other surface waters (Rule 62-330.021, F.A.C.).

CONSULTATION HISTORY

This section lists key events and correspondence during the course of this consultation. A complete administrative record of this consultation is on file in the Service's South-Atlantic Gulf and Mississippi Basin Interior Regions, 1875 Century Blvd, Atlanta, GA 30345.

On March 23, 2018, the Governor signed into law Rule 2018-88, Laws of Florida, which created section 373.4146, Florida Statutes (F.S.), granting Florida Department of Environmental Protection (FDEP) with the power and authority to adopt rules to assume and implement the Section 404 dredge and fill program of the Clean Water Act (CWA).

In 2018 FDEP began coordinating with both the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (USACE) to draft separate memorandums of agreement that describe the commitments and responsibilities of each agency, should the Assumption be approved by the EPA. FDEP also began assembly of other required components that would constitute a complete Assumption request package per 40 CFR 233.10-14(b).

In May 2018, FDEP published a Notice of Rule Development to implement the State 404 program and held three rulemaking workshops to collect public comment on the draft rule, Chapter 62-331, Florida Administrative Code (F.A.C.). FDEP developed its rule to include federal requirements that are not currently covered under the Environmental Resource Permitting (ERP) program.

On July 17, 2019, the FDEP sent a request to EPA that sought designation, pursuant to 50 CFR 402.08, to serve as a non-Federal representative for informal ESA section 7 consultation to prepare a biological assessment (BA).

On September 18, 2019, EPA, FDEP, United States Department of Interior (DOI), U.S. Fish and Wildlife Service (USFWS), and USACE members attended a meeting to discuss Florida's proposal to use programmatic consultation for ESA purposes under the Section 404 Assumption.

On November 22, 2019, FDEP sent a request to USFWS and National Marine Fisheries Service (NMFS) to review a preliminary list of affected species for a BA.

On December 12, 2019, the FDEP Secretary received a response from the EPA Region IV Administrator approving the requested non-federal representative designation, allowing FDEP to move forward with the development of a BA. The EPA response indicated that EPA would voluntarily engage in informal consultation with the Services on its action on Florida's request to assume administration of a Section 404 program.

In February 2020, FDEP published a Notice of Proposed Rule to implement the State 404 program and in April, held five rulemaking hearings to collect public comment on the draft rule, Chapter 62-331, F.A.C.

In February 2020, FDEP, FWC and USFWS began work to draft a Memorandum of Understanding (MOU) to describe commitments, roles and responsibilities in the State 404

program's species coordination process to ensure species protection, should the Assumption be approved by the EPA.

On February 25, 2020, FDEP submitted first draft of BA to USFWS for review and comment. On March 24, 2020, USFWS submitted comments on draft BA to FDEP.

In March and April 2020, additional public hearings were held regarding rulemaking for Chapter 62-331, F.A.C.

On April 15, 2020, NMFS responded to FDEP's November 22, 2019 letter with the conclusion that ESA-Listed species under NMFS' jurisdiction do not occur in waters that are assumable by the State.

On April 28, 2020, FDEP submitted a revised draft BA (draft BA 2.0) to USFWS for review and comment.

On May 21, 2020, EPA published a notice in the federal register requesting comment on whether EPA's approval of a Clean Water Act Section 404 program is nondiscretionary for purposes of Endangered Species Act section 7 consultation.

On May 28, 2020, USFWS submitted comments on the second draft of the BA to FDEP.

On June 8, 2020, the Final Notice of Proposed Rule Change for Chapter 62-331, F.A.C. was published.

On June 18, 2020, FDEP submitted its third draft of the BA (draft BA 3.0) to USFWS

On July 1, 2020, USFWS submitted comments on draft BA 3.0 to FDEP.

On July 24, 2020, FDEP sent EPA and USFWS a final draft BA (20200724_FDEP Final BA.docx)

On August 20, 2020, EPA received FDEP's application package requesting EPA's approval of the State's assumption of the administration of the CWA 404 program for assumable waters in Florida.

On August 28, 2020, EPA indicated its approval of a state 404 program was a discretionary action subject to compliance with the ESA. EPA also determined that the FDEP's application package was complete.

On September 2, 2020, EPA submitted its "ESA Biological Evaluation for Clean Water Act Section 404 Assumption by the State of Florida" (BE) to USFWS and initiated formal consultation.

On October 2, 2020, USFWS sent its draft biological opinion (BiOp) addressing EPA's proposed action to the EPA

On October 29, 2020, EPA submitted comments on the draft BiOp.

INTRODUCTION

Section 7(a)(2) of the Endangered Species Act of 1973, as amended, (ESA; 16 United States Code [U.S.C] 1531 *et seq.*) requires every Federal agency, in consultation with and with the assistance of the Secretary, to insure that any action it authorizes, funds, or carries out, in the United States or upon the high seas, is not likely to jeopardize the continued existence of any federally listed species or results in the destruction or adverse modification of designated critical habitat. The ESA's section 7 implementing regulations stipulate, "Section 7 and the requirements of this part apply to all actions in which there is discretionary Federal involvement or control," (50 Code of Federal Regulations [CFR] 402.03) and that under certain conditions reinitiation of section 7 consultation may be required where discretionary Federal involvement or control over the action has been retained or is authorized by law (50 CFR 402.16). The USFWS and NMFS have been delegated the authority to administer the ESA.

Congress enacted the Clean Water Act (CWA; 33 U.S.C. 1251 et seq.) to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters". The CWA (33 U.S.C 1344) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. With respect to discharges of dredged or fill material, Congress assigned certain authorities and responsibilities to the EPA and the U.S. Army Corps of Engineers (USACE), and authorizes the USFWS opportunity to provide comment on requests to assume the program and on certain draft permits or permit applications. In its regulations at 40 CFR 233, EPA has extended this opportunity to comment on certain state-issued permits and on program assumption requests to the NMFS. The roles and responsibilities for implementing the Act differ in scope among the involved Federal agencies, as well as between Federal agencies and states or tribes administering the Section 404 program.

For example, some of the respective roles include:

USACE

- Administers day-to-day 404 program in non-assumed waters, including individual and general permit decisions;
- Conducts or verifies jurisdictional determinations;
- Develops USACE policy and guidance; and
- Enforces USACE Section 404 permit provisions.

EPA

- Develops and interprets policy, guidance, and environmental criteria used in evaluating permit applications;
- Determines scope of geographic jurisdiction and applicability of exemptions;
- Approves and oversees State and Tribal assumption (33 U.S.C. 1344(g)-(l);
- Reviews and has opportunity to comment on non-waived permit applications;
- Has authority to prohibit, deny, or restrict the use of any defined area as a disposal site

(Section 404(c));
- Can elevate specific cases (Section 404(q));
- Enforces Section 404 provisions.

USFWS and NMFS
- Evaluate impacts on fish and wildlife of all new Federal projects and Federally permitted projects, including projects subject to the requirements of CWA's Section 404 (pursuant to the Fish and Wildlife Coordination Act);
- Elevate specific cases or policy issues pursuant to Section 404(q); and
- Address requests to consult under section 7 of the ESA on program assumption requests ; (EPA 2020, https://www.epa.gov/cwa404g/consultation-cwa-section-404-program-requests-endangered-species-act-and-national-historic, accessed August 8, 2020)
- Have opportunity to provide comment on proposed state 404 permits pursuant to procedures laid out in 40 CFR 233.50.

As noted above, EPA administers sections 404(g)-(*l*) (33 U.S.C. 1344(g)-(*l*)) of the CWA in accordance with its implementing regulations (40 CFR 233). Sections 404(g)-(*l*) provide States and Tribes the opportunity to request assumption of the administration of the CWA 404 program for assumable waters in lieu of the U.S. Army Corps of Engineers (USACE) 404 program. It is important to note that some waters of the U.S. are not assumable by a State or Tribe and are retained under the USACE 404 permitting program (referred to hereafter as "retained waters"). The EPA is required to follow procedures specified in 40 CFR 233 when evaluating, approving, reviewing, and withdrawing its approval of a State or Tribal 404 program, and when coordinating Federal review of State or Tribal 404 permit actions.

EPA has determined that its potential approval of any State or Tribe's request to assume the CWA 404 permit program is a discretionary action for purposes of consultation under section 7 of the ESA (Memorandum on Endangered Species Act Section 7(a)(2) Consultation for State and Tribal Clean Water Act Section 404 Program Approvals dated 8/27/2020). If EPA approves the Assumption, upon EPA's publication of its final approval of a State or Tribal assumption, the USACE would suspend its issuance of section 404 permits in assumed waters and the USACE would no longer receive CWA 404 permit applications from the regulated community in assumed waters. Finally, EPA will commence its oversight of the administration of the State or Tribe's 404 program and coordinate Federal review of State or Tribal permit actions, in accordance with 33 U.S.C. 1344(g)-(l) of the Clean Water Act (CWA) and its implementing regulations (40 CFR 233). If EPA determines a state program no longer complies with the requirements of 40 CFR 233, EPA may initiate withdrawal proceedings pursuant to the procedures at 40 CFR 233.53.

On August 20, 2020, EPA received a package from the State of Florida requesting assumption of the administration of the dredge and fill permitting program under Section 404(g)-(l) of the CWA.

On September 2, 2020, EPA requested formal consultation with the USFWS and provided the USFWS with a complete section 7 consultation package that included a biological evaluation

(BE) and other information concerning the potential effects of its potential approval of Florida's assumption on ESA-listed species, pursuant to section 7 of the ESA (50 CFR 402).

The Federal action agency is the EPA and the applicant is the Florida Department of Environmental Protection (FDEP). The Federal action (action) that we are considering is EPA's potential approval of FDEP's request to assume the CWA 404 permit program in waters of the U.S. that will not be retained by the USACE 404 permitting program.

Approval of the action would change the permitting authority under section 404 of the CWA in State-assumed waters in Florida. The EPA's BE considers the effects of the state-issued permits on ESA-species of concern. Consistent with this biological opinion (BiOp) and a Memorandum of Understanding between USFWS, FDEP, and FWC, we will provide technical assistance to FDEP to insure that no State 404 permit action jeopardizes the continued existence of ESA-listed species or adversely modifies or destroys critical habitat, pursuant to 40 CFR 233.20(a).

Other activities (program activities) that would occur if EPA approved the State's 404 assumption request include the State's implementation of its section 404 program, EPA's oversight of the State 404 program, EPA's coordination of Federal review of State permit actions, and the execution of State-permitted activities by permit holders. The consequences of the potential approval of the State's assumption (including those related to any program activities caused by the potential approval) on ESA-listed species and critical habitat are considered as effects of the action, pursuant to 50 CFR 402.

Given the programmatic nature of the action, USFWS conducted a programmatic consultation, which is defined in 50 CFR 402.02 as: "a consultation addressing an agency's multiple actions on a program, region, or other basis. Programmatic consultations allow the Services to consult on the effects of programmatic actions such as:

(1) Multiple similar, frequently occurring, or routine actions expected to be implemented in particular geographic areas; and

(2) A proposed program, plan, policy, or regulation providing a framework for future proposed actions."

In conducting section 7 consultation, the USFWS must follow procedures described in the ESA (U.S.C. 1531 *et seq*) and its implementing regulations (50 CFR 402). Some of these requirements are noted below.

The USFWS must:

- "…use the best scientific and commercial data available," (16 U.S.C. 1536(a)(2).
- "…formulate its biological opinion as to whether the action, taken together with cumulative effects, is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat," (50 CFR 402.14(g)(4).
- "Formulate a statement concerning incidental take, if such take is reasonably certain to occur," (50 CFR 402.14(g)(7).

- Where "resultant incidental take of listed species will not violate section 7(a)(2)…, the Service will provide with the biological opinion a statement concerning incidental take…" (50 CFR 402.14(i)(1).

The USFWS has provided technical assistance to FDEP and EPA throughout the development of FDEP's BA that FDEP submitted to EPA as supplementary information in its assumption application package. EPA utilized FDEP's BA to develop its BE.

In addition, USFWS reviewed and commented on draft portions of Florida's 404 program rule (62-331, Florida Administrative Code [F.A.C.]; Florida's Environmental Resource Permit rule 62-330, F.A.C.; the Rules' associated Applicant Handbooks; and a Memorandum of Understanding (MOU) between FDEP, Florida Fish and Wildlife Conservation Commission (FWC), and USFWS concerning protected species coordination. The MOU provides a structured framework for coordinating review of State 404 permits to assess potential effects on State-listed and ESA-listed species and to insure that no State 404 permit action jeopardizes the continued existence of an ESA-listed species, or adversely modifies or destroys designated critical habitat.

The USFWS reviewed the EPA's section 7 consultation initiation package and found it complete. Information provided by EPA and FDEP is summarized below. This information was carefully considered by USFWS in formulating this BiOp:

- EPA's letter requesting formal consultation, pursuant to 50 CFR 402.14
- EPA's Biological Evaluation (BE): "ESA Biological Evaluation for Clean Water Act Section 404 Assumption by the State of Florida" (dated July 2020, received September 2, 2020)
- EPA CWA 404 Regulations (40 CFR 230 and 233)
- USFWS ESA-listed Species Databases (e.g. ECOS)
- The State 404 Assumption Package submitted to EPA
    - Florida's State Statutes: Chapters: 120 – Florida Administrative Procedures Act; 373 – Water Resources; 403 – Environmental Control; Florida House of Representatives Bill 1091; Florida Senate Bill 712
    - Florida's Administrative Code (FAC) of regulations: 62-4 – Permits, 62-110 – Exceptions to the Uniform Rules of Procedure, 62-330 – Environmental Resource Permitting Rule, 62-331 – State 404 Permitting Rule, and 62-340 - Delineation of the Extent of Wetlands and Surface Waters.
    - Applicant's Handbooks that are incorporated into FAC: State 404 Program Applicant's Handbook, Environmental Resource Permit Applicant's Handbook
    - Florida General Counsel's Statement (dated July 31, 2020)
    - The FDEP-USACE Memorandum of Agreement (MOA)
    - The FDEP-EPA MOA
    - The FDEP-FWC-USFWS MOU for Protected Species Coordination

Pursuant to 50 CFR 402.14(h) (3), this BiOp formally adopts the EPA BE (Appendix I) and the FDEP, FWC, USFWS MOU (Appendix II), as part of this BiOp. For example, significant portions of the EPA BE and MOU will be used to describe the action (which includes program activities), and its potential effects on ESA-considered species and any designated critical

habitat, and proposed critical habitat. Note that ESA-considered species include ESA-listed species, ESA Candidate species, species proposed for listing, and petitioned species.

Although the USFWS has adopted and adapted various portions of the EPA's ESA consultation initiation package and the MOU in the BiOp, the USFWS has conducted its own analysis of the best scientific and commercial data available (which includes all the information noted above) and has given appropriate consideration to any beneficial actions as proposed or taken by the EPA and FDEP, including any actions taken prior to the initiation of consultation. Measures included in the proposed action (action) that are intended to avoid, minimize, or offset the effects of an action are considered like other portions of the action and do not require any additional demonstration of binding plans. (50 CFR 402.14(g)(8)).

This USFWS BiOp will examine whether and to what degree FDEP's program, regulations, processes, and procedures insure that EPA's approval and FDEP's subsequent assumption and implementation of the 404 program is not likely to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of critical habitat.

DESCRIPTION OF THE PROPOSED ACTION

An action, pursuant to 50 CFR 402.02, means all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies in the United States or upon the high seas. Examples include, but are not limited to:

(a) actions intended to conserve listed species or their habitat;
(b) the promulgation of regulations;
(c) the granting of licenses, contracts, leases, easements, rights-of-way, permits, or grants-in-aid; or
(d) actions directly or indirectly causing modifications to the land, water, or air.

With respect to the action's indirect modifications (or effects) to the land, water, or air, such modifications are considered as effects of the action and include consequences caused by other activities that are, themselves, caused by the action (effects of the action are defined in 50 CFR 402.02, 402.17).

The action that this BiOp is analyzing is the EPA's potential approval of the State of Florida's request to assume the administration of section 404 of the CWA for the permitting of discharges of dredged or fill material into those waters under the jurisdiction of the State 404 program ("assumed waters"). The processes and procedures for approving State 404 programs are described in 40 CFR 233 Subpart B. If the assumption is approved by EPA, it will be effective on the date EPA publishes its approval in the Federal Register.

EPA Requirements for a State's Assumption of CWA 404 Program

Pursuant to 40 CFR 233.10, Florida submitted an application package to the EPA Region IV Administrator that included:

1. Letter from the Governor of Florida requesting program approval;
2. Complete program description in accordance with 40 CFR 233.11;
3. Attorney General's statement, in accordance with 40 CFR 233.12;
4. Memorandum of Agreement (MOA) with the EPA Regional Administrator, in accordance with Section 40 CFR 233.13;
5. MOA with the Secretary of the Army, in accordance with 40 CFR 233.14; and
6. Copies of all applicable state statutes and regulations, including those governing applicable state administrative procedures.

Attached to the program description, FDEP sent EPA a copy of the FDEP-FWC-FWS MOU that describes how the State and USFWS would coordinate in evaluating State 404 permit applications. The action (EPA's approval of the State 404 program) would change the regulatory structure for approval of program activities. action These program activities consist of a number of activities related to the processing of State 404 permits, and importantly, as discussed briefly above and in more detail later, include a process by which the USFWS will receive and review all State 404 permit applications and provide technical assistance to the State, as needed, to insure State 404 permit actions are not likely to jeopardize a species or adversely modify or destroy critical habitat.

The following summarizes program activities (Fig. 1) that are reasonably certain to occur only because of the action:

1. CWA's requirement for EPA to coordinate federal review of State permit actions, and in accordance with 40 CFR 233.50 and 233.51
2. CWA's requirement to oversee the operation of the State's 404 program, and in accordance with 40 CFR 233.50 and 233.51.
3. FDEP's requirement to administer the State 404 program in accordance with:
    a. All applicable Federal regulations specified in 40 CFR 233
    b. The FDEP-USACE MOA
    c. The FDEP-EPA MOA
    d. The FDEP-FWC-USFWS MOU for Endangered Species Coordination
    e. Florida's Environmental Resource Permitting Rule (62-330, F.A.C.)
    f. Florida's 404 Permitting Rule (62-331, F.A.C.)
    g. Processes and procedures specified in the State 404 Program Applicant's Handbook and the ERP Program's Applicant's Handbook
4. A State Permittee's requirement to follow the State 404 program requirements when applying for a State 404 permit and to conduct permitted activities in accordance with the conditions in the State 404 permit.

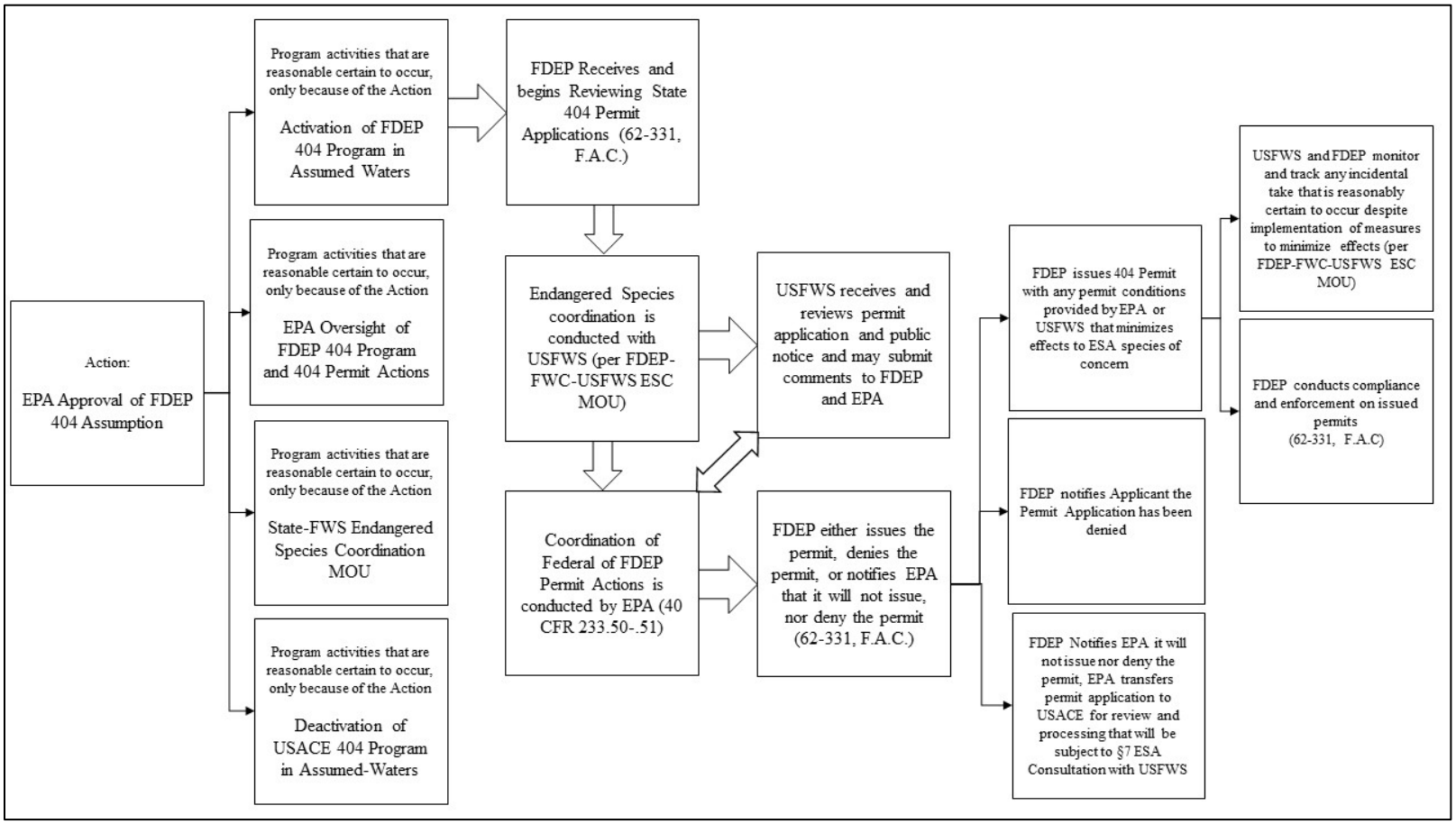


Figure 1. The proposed action (EPA's approval of the State 404 program) and program activities that it will cause. Program activities will be subjected to coordination with USFWS to insure any State 404 permit action is not likely to jeopardize a species or adversely modify or destroy critical habitat.

Program activities that will only occur but for EPA approving the State's Assumption

If the State of Florida's assumption is approved, FDEP would assume regulatory responsibility over all dredging and filling activities in WOTUS within Florida not retained by USACE. The implementation of the State's program in evaluating permit applications, issuing or denying permits, compliance and enforcement of permit conditions, and all the ensuing execution of permitted activities by permittees are considered program activities emanating from the action and have been considered under this programmatic consultation and BiOp. EPA will retain oversight of the State 404 program and coordinate review by USACE, USFWS, and NMFS of State permit actions that are not subject to being waived from EPA review.

The USFWS considers future State permit actions as program activities that are caused by the proposed action. For example, when the EPA approves the State 404 program, a State 404 permit issuance would be the only legal means for dredge and fill actions to occur in assumed waters and for those actions to potentially affect ESA-listed species or their designated critical habitats.

State Processes for administering the State 404 program

If Florida's program is approved by EPA in accordance with 40 CFR 233, the Secretary of FDEP will be the State official charged with administering the State 404 program when the program is approved and has authority to issue permits pursuant to Part IV of section 373 of the Florida Statutes (F.S.). In accordance with section 373.4146, F.S., FDEP has the power and authority to issue permits for regulated activities conducted in assumed waters following procedures stipulated in the State 404 Program Rule (62-331, F.A.C) and State Environmental Resource Permitting Rule (62-330, F.A.C.) and each Rule's respective Applicant's Handbook.

Florida's 404 Program Rule includes requirements of federal law that are not addressed in the existing state regulations for dredge and fill permitting (such as noticing provisions, alternatives analysis, and the federal mitigation hierarchy, etc.). The State 404 Rule, Chapter 62-331, F.A.C., also includes definitions, procedures for review of and agency action on exemption requests, processes for individual permits, public notice requirements, procedures regarding mitigation banking, and procedures and descriptions for general permits created to correspond to the USACE Nationwide Permits and appropriate regional general permits as granted by the USACE.

In describing the State's processes for administering the State 404 Program, this BiOp and information contained in EPA's consultation package focuses on describing activities that affect ESA-listed species, designated and proposed critical habitat, and ESA-considered species, as opposed to other resource issues such as insuring compliance with regulations specific to protection of cultural resources or water quality. Provisions and considerations for those other resource issues are detailed in Federal regulations (40 CFR 233) and State rules (62-330; 62-331, F.A.C.).

It is important to note the BE describes the relationship between FDEP and the State's water management districts (WMDs) and certain local governments whom have been delegated by FDEP to jointly implement Florida's Environmental Resource Permitting (ERP) program. The

agencies' various responsibilities are divided according to the Operating and Delegation Agreement (operating agreements) and the geographic regions of the WMDs.

The current State 404 Rule (62-331, F.A.C.) limits the administration and implementation of the State 404 Program to FDEP, but contains a provision that may allow the State 404 Program to be delegated to the WMDs by FDEP in the future. CWA regulations (40 CFR 233) would require this type of change to the State 404 Program to be approved by EPA prior to implementation.

Another important State agency that will be involved in the State 404 Program is the Florida Fish and Wildlife Conservation Commission (FWC). FWC has historically worked closely with FDEP in its implementation of the State's ERP program, which regulates discharge of fill into waters of the State. FWC has permitting authority over species identified in Chapter 68A-27, F.A.C., which include the species identified within FDEP's ERP program.

FDEP cannot authorize impacts, specifically incidental take, of State-listed species identified in Chapter 68A-27, F.A.C. Therefore, FDEP has historically coordinated protection and conservation of aquatic and terrestrial fish and wildlife species with the FWC. FWC's permit commenting authority was codified upon the agency's creation of Section 20.331(10), Fla. Stat. The FWC provides a list of potentially affected federally and State-listed species to FDEP during ERP application review. It also evaluates potential impacts to State-listed fish and wildlife for ERP Program project applications that are expected to affect species and habitat, and provides recommendations for permit conditions to the FDEP to minimize such effects. As described in the BE (Appendix A), FWC will continue to comment on ERP permits and will be commenting on State 404 permits should EPA approve FDEP's assumption of the 404 program, per the State 404 Program Rule (62-331, F.A.C.), the State ERP Rule (62-330, F.A.C), and the FDEP-FWC-USFWS MOU.

Consideration of ESA-listed Species when processing State 404 permit applications

The following is a summary description of how potential effects to ESA-listed species will be assessed and minimized when the State processes State 404 permit applications.

FDEP will review all submitted applications for administrative and technical completeness and forward submitted applications to FWC and USFWS. If FDEP, FWC, or USFWS require additional information, FDEP will request that the applicant supply any additional required information prior to publishing a public notice pursuant to Rule 62-331.060, F.A.C. (administrative completeness), and to determining if the proposed activity meets the conditions for issuance in Rules 62-330.301, 62-330.302, and 62-331.053, F.A.C. (technical completeness).

The provisions described in the Applicant's Handbook (Volume I, sections 5.5.3.5 through 5.5.3.7, which govern an applicant's timeframes to respond to requests for additional information) apply to applications for State 404 permits. Once FDEP has determined that an application is administratively complete, FDEP will provide public notice as described in Subsection 62-331.060(2), F.A.C.

Permit applications will not be considered technically complete until the ERP review, if required, is complete. This is to satisfy the requirement for reasonable assurance that State water quality standards and coastal zone consistency requirements will be met. (See Rule 62-331.070, F.A.C.,

and section 5 of the State 404 Handbook). FDEP may request additional information as necessary during its review of any information it receives during the public comment period, at a public meeting, or during Federal review. Importantly, Federal regulations (40 CFR 233.20) prohibit the issuance of a State 404 permit that is not in compliance with 40 CFR 230, or a permit that EPA has objected to under 40 CFR 233.50, or if discharges would occur in an area otherwise protected by 404(C), or in which anchorage or navigation in navigable waters would be substantially impaired.

State 404 permit application timelines

Pursuant to Rule 62-331.052, F.A.C., FDEP will review the application within 30 days of receipt of an application for a permit, or receipt of any additional information provided by the applicant in response to FDEP's request for additional information, for: 1) administrative and technical completeness; 2) request any additional information required to publish the public notice; and 3) determine if the proposed activity meets the requirements for issuance. The applicant may voluntarily submit a written waiver of the above 30-day deadline to allow more time for FDEP to determine if additional information is required.

Within 10 days of FDEP determining that an application is administratively complete pursuant to subsection 62-331.060(1), F.A.C., FDEP will provide public notice as described in subsection 62-331.060(2), F.A.C. In addition, FDEP will send a copy of the public notice to EPA for those projects that EPA reviews, in accordance with section 5.2.5 of the State 404 Applicants' Handbook, the FDEP-EPA MOA, and Federal regulations (40 CFR 233.50 - .51). EPA review timelines and potential public meetings are discussed in section 7.4.2 of the BE.

FDEP issues public notices concerning the following FDEP actions: 1) a determination that an application for an individual permit or major modification is administratively complete; 2) notification to a permittee of revocation or suspension of a permit; and 3) issuance of an emergency field authorization.

From date of publication, interested parties may express their views concerning the permit application, modification, revocation, or suspension for a period of 30 days, or 15 days for the projects listed in 62-331.060(b)(3)(b).

The USFWS will receive all permit applications and public notices directly from FDEP in accordance with the FDEP-FWC-FWS MOU and 62-331, F.A.C. USFWS will also receive species effect assessments from FWC or FDEP. USFWS will review all permit applications and effects assessments received from FDEP and FWC. USFWS will submit questions, information and comments or measures necessary to minimize effects to ESA-listed species as needed. FDEP, in coordination with FWC, will receive, review, and incorporate any impact minimization measures received from USFWS into its permit actions pursuant to the FDEP, FWC, USFWS MOU and FDEP's State 404 program rule (62-331, F.A.C.).

In accordance with the FDEP-EPA MOA and governing federal regulations (40 CFR 233), EPA will retain federal oversight authority on the issuance of State 404 permits, with the ability to review applications, comment on, object to or make recommendations with respect to the permit including avoidance, minimization and compensation measures..

In some scenarios and situations, EPA can waive Federal review of State 404 permit applications pursuant to 40 CFR 233.51(b)(2). Applications for discharges with reasonable potential for affecting ESA-listed or ESA-proposed species or critical habitat, however, are not waived. For the discharges subject to EPA review, FDEP will send a copy of the public notice to EPA, in accordance with section 5.2.5 of the State 404 Handbook (also 40 CFR 233.50(a)(1)). Under the State 404 program, projects with reasonable potential for affecting ESA-listed or ESA-proposed species or critical habitat are defined as projects that have been determined by FDEP and FWC, in coordination with USFWS, to affect listed species and their critical habitats, whether effects are beneficial or adverse. Details regarding the types and magnitude of effects to species and their critical habitats, as well as proposed protection measures are to be included in the public notice.

As detailed in 40 CFR 233.50(b), if review is not waived, EPA will provide a copy of each public notice, each draft general permit, and other information needed for review of the application to the USACE, USFWS, and NMFS, within 10 days of receipt. These agencies will notify the EPA within 15 days of their receipt if they wish to comment on the public notice or draft general permit. Such agencies shall submit any comments to EPA within 50 days of such receipt. The final decision to comment, object, or to require permit conditions will be made by EPA

Within 30 days of receipt of notice, EPA will notify FDEP whether it intends to comment upon, object to, or make recommendations with respect to 1) a permit application, or 2) a draft general permit. Within this time period, EPA may also request additional information from FDEP if the previously provided information is inadequate for determining whether the permit application or draft permit meets the requirements of the CWA, 40 CFR 233.50, and the 404(b)(1) Guidelines. EPA may notify FDEP of its intention to not comment but that it reserves the right to object within 90 days of receipt, based on any new information brought out by the public during the comment period or at a hearing.

If EPA has given notice to FDEP of the intent to comment, those comments shall be submitted within 90 days of the receipt of the public notice, draft general permit, or FDEP's failure to accept the recommendations of an affected State. . Within 90 days, the EPA will provide a written statement with comments, objections, or recommendations; and the actions that must be taken by FDEP in order to eliminate any objections (see 40 CFR 233.50(e) for more details). FDEP shall not issue a permit until steps required by EPA to eliminate an objection or incorporate a requirement for a permit condition to a permit application or draft general permit. Within 90 days of FDEP receipt of EPA's comments, FDEP or an interested party may request EPA may hold a public hearing on the objection or requirement (see 40 CFR 233.50(g) and (h) for more details).

If no public hearing is held, FDEP shall either issue the permit revised to satisfy EPA's objections, notify EPA of its intent to deny the permit, or notify EPA that it will not resolve the objection or deny the permit. In the event FDEP neither satisfies EPA's objections, requirement for a permit condition, nor denies the permit, EPA shall transfer the permit application to the USACE for processing.

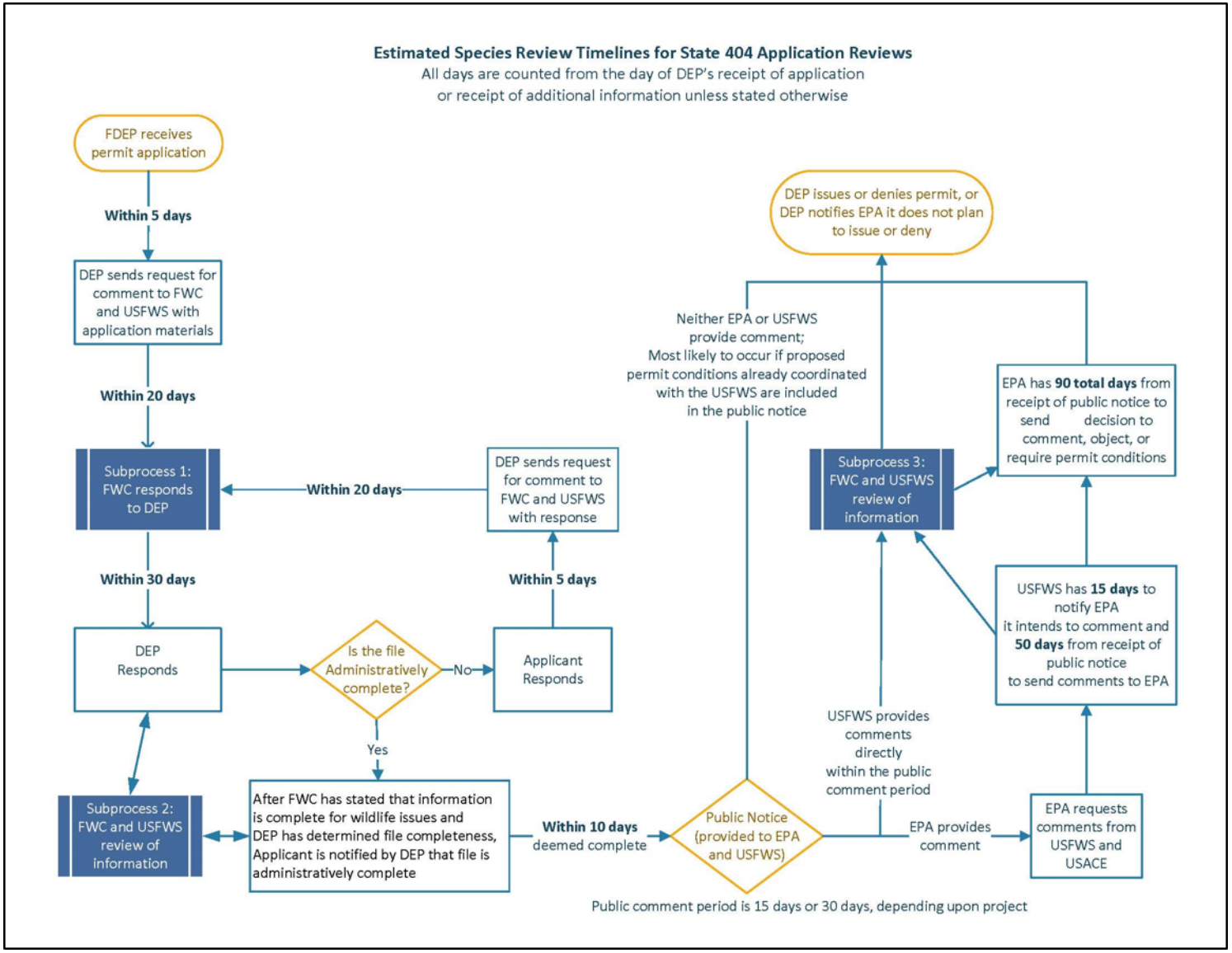
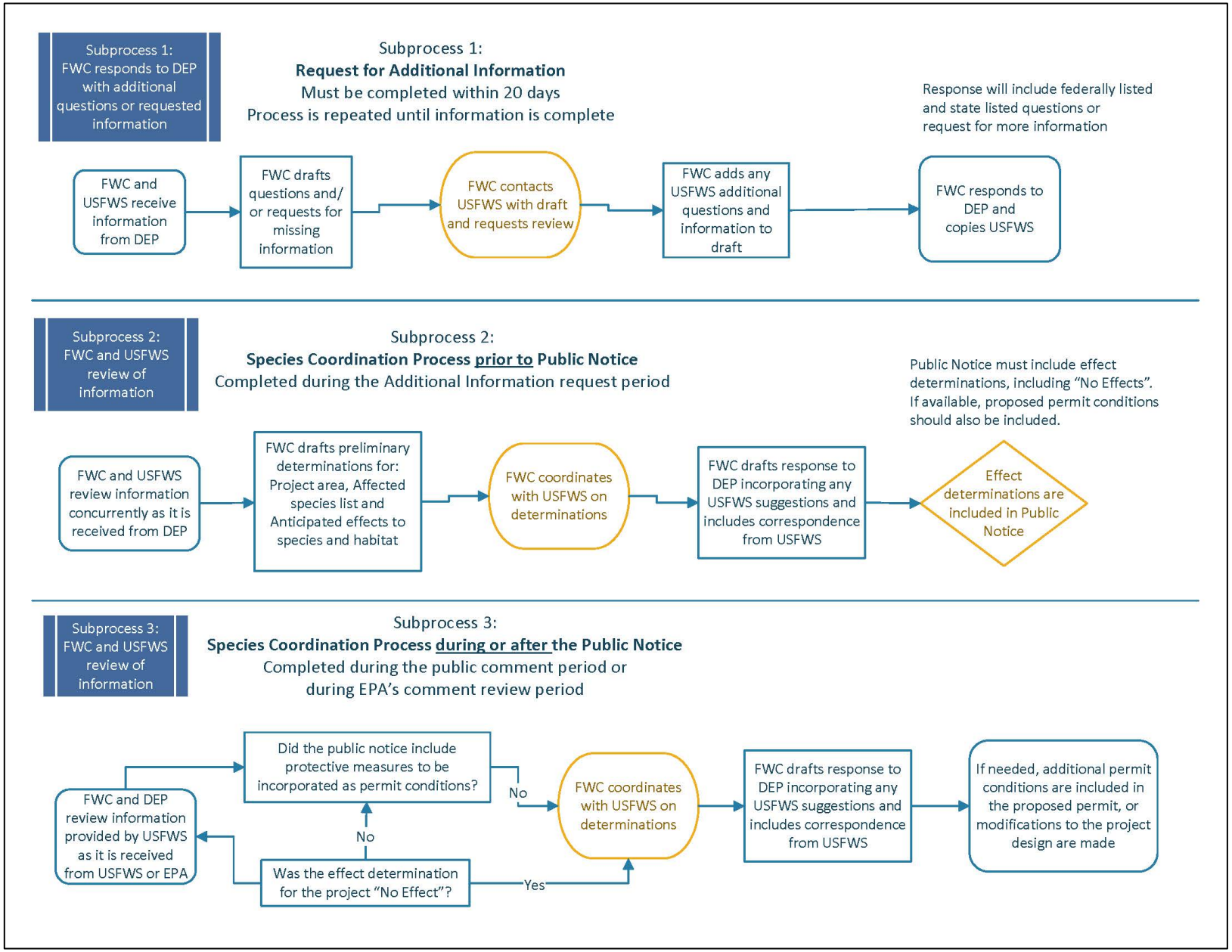


Figure 2. Processes and timelines for processing State 404 permit applications. Subprocess 1-3 described on following page.


Subprocess 1:
FWC responds to DEP with additional questions or requested information
Subprocess 1:
Request for Additional Information
Must be completed within 20 days
Process is repeated until information is complete
Response will include federally listed and state listed questions or request for more information
FWC and USFWS receive information from DEP
FWC drafts questions and/ or requests for missing information
FWC contacts USFWS with draft and requests review
FWC adds any USFWS additional questions and information to draft
FWC responds to DEP and copies USFWS
Subprocess 2:
FWC and USFWS review of information
Subprocess 2:
Species Coordination Process prior to Public Notice
Completed during the Additional Information request period
Public Notice must include effect determinations, including "No Effects". If available, proposed permit conditions should also be included.
FWC and USFWS review information concurrently as it is received from DEP
FWC drafts preliminary determinations for: Project area, Affected species list and Anticipated effects to species and habitat
FWC coordinates with USFWS on determinations
FWC drafts response to DEP incorporating any USFWS suggestions and includes correspondence from USFWS
Effect determinations are included in Public Notice
Subprocess 3:
FWC and USFWS review of information
Subprocess 3:
Species Coordination Process during or after the Public Notice
Completed during the public comment period or during EPA's comment review period
Did the public notice include protective measures to be incorporated as permit conditions?
No
FWC coordinates with USFWS on determinations
FWC drafts response to DEP incorporating any USFWS suggestions and includes correspondence from USFWS
If needed, additional permit conditions are included in the proposed permit, or modifications to the project design are made
FWC and DEP review information provided by USFWS as it is received from USFWS or EPA
No
Was the effect determination for the project "No Effect"?
Yes

Required information and agency review of State 404 permits

Applicants submitting a State 404 permit application will be required to submit information that allows the State of Florida (FDEP and FWC) to sufficiently assess potential adverse impacts of the proposed project on listed species and their designated critical habitats and allow the USFWS to review and provide technical assistance as needed (62-331.051, F.A.C.). To that end, the following information will be required as part of the State 404 application:

- Description of the proposed activity (including all activities reasonably related to the same project, timing and duration of project and related information as required in application)
- Description of the specific areas affected by the activity (e.g., site map)
- Description of listed species/critical habitat that are present in the area affected by the activity
- Description on the manner in which species may be affected by the activity
- Analysis of any cumulative effects, which are the effects of future State or private activities that are reasonably certain to occur within the project area
- Relevant information (e.g., species surveys, etc.)
- When needed, proposed project designs and proposed conservation measures that would avoid and minimize the expected impacts to listed species and their habitats.

If incomplete, additional information will be requested during the information gathering and review processes and forwarded by FDEP to the FWC and USFWS in accordance with the FDEP-FWC-USFWS MOU.

As part of the State-listed and ESA-listed species coordination process, FDEP will provide copies of all State 404 permit applications to the FWC and USFWS. At the time each application is submitted to USFWS (or within a short period after submittal), FDEP or FWC will submit a preliminary determination to the USFWS as to whether ESA-listed species or their critical habitats are expected to be present and whether they are likely to be affected adversely or beneficially by the proposed State permit action. In some cases, FDEP or FWC may provide the USFWS with a list of preliminary protective measures to minimize impacts to ESA-listed species and critical habitats. The USFWS will review and may suggest modifications or recommend additional protective measures, as needed.

The State's lead for species coordination may be FWC staff, or the permit processor with FDEP, depending on the complexity of the request and the workload. Regardless of the designated staff to be the point person for coordinating with the USFWS, both State agencies will work together as a team for all projects with listed species issues. For each State 404 permit application review, staff with FWC and FDEP will determine who will take the lead to coordinate with the USFWS and will copy the other reviewer on all correspondence. The State species lead will provide, and/or validate the applicant's submittal of a preliminary list of species anticipated to be affected, identification of project areas, preliminary impact/effect determinations, and preliminary proposed impact avoidance and minimization measures (protection measures) for federally listed and State-listed endangered or threatened species (and species proposed to be listed) and their critical habitats. Upon coordination with the USFWS on appropriate protection measures for federally listed species and their critical habitats, FDEP will incorporate the USFWS-recommended measures as permit conditions, or will issue a Notice of Intent to Deny the permit.

Review of estimated species coordination timeframes

As presented in the flow chart (Fig. 2) and the BE (pp. 76-77), State regulations dictate the process and general timeframes, however, there are transitional periods between these timeframes, and these are summarized in the steps below (see *Application Timelines* under 7.4 of the BE).

1) FDEP receives a permit application.
2) Within approximately 3-5 days, FDEP will send a copy to USFWS and FWC. Within approximately 1 or 2 days of receiving the permit application, FWC will send a preliminary affected species list and type of effects determination to USFWS.
3) Within approximately 15 days of receipt, USFWS may send to FDEP any comments or questions it has about missing information, or potential affects to listed species or critical habitat, or protective measures to avoid or minimize effects.
4) Within 30 days from receipt, FDEP must either request additional information (RAI) from applicant or deem the application complete.
5) After FDEP receives additional info, FDEP has 30 days to review the response and:
    a) Request clarification of answers to the questions; or
    b) Notify applicant their application is complete.
6) Preferably before the application is deemed complete or before a public notice is issued, FWC and USFWS may determine whether there is reasonable potential to affect listed species, or critical habitats, and if so, the types of effects, and any appropriate potential protective measures. These determinations are forwarded to FDEP.
7) After the application is deemed complete, FDEP has 10 days to issue a public notice for applications for individual permits.
8) If the EPA has waived review, then after the public comment period closes, FDEP has either 60 or 90 days to issue or deny the permit.
9) If EPA reviews the public notice, then Federal regulations (40 CFR 233.50) will govern the process of State 404 permit review by EPA.
    a) EPA has 10 days to send a copy of the public notice to USFWS.
    b) USFWS has 15 days to notify EPA it intends to comment
    c) USFWS has 50 days from receipt of public notice from EPA to send comments to EPA
    d) EPA has 90 days to send comments or objection to FDEP. The final decision to comment, object, or to require permit conditions will be made by EPA.

After considering the timeframes identified in the State regulations and the transitional periods described in the BE, we estimate the total time that USFWS will have to review and comment on a permit application that had all the necessary information at the start and where review has been waived by EPA, would be approximately 55-70 days, depending on whether the public comment period was 15 days or 30 days. However, if additional information was required before FDEP considered the application to be

complete, the maximum amount of time USFWS would have to review and comment would be increased accordingly.

Identifying applications that may pose adverse impacts

The FDEP/FWC species coordination and technical assistance with the USFWS will begin before the application's public notice is posted. The USFWS will receive the application prior to FDEP posting a public notice and USFWS may submit information and questions to FDEP prior to FDEP posting a public notice. The public notice will also go to the USFWS, and provides details regarding the type of effects/impacts to species and their critical habitat and any proposed protection measures recommended by USFWS. The technical assistance process between the USFWS, FDEP, and FWC will not be considered complete until any modifications are incorporated as a result of the public notice. If needed, technical assistance with the USFWS may continue during and after the public notice period.

Upon receiving an application, FDEP and FWC will review the submittal by the applicant and preliminarily identify the affected species, affected project area, and critical habitats. The species lead is responsible for making a preliminary determination for affected species, affected project area and critical habitats, and assess whether, and what type of, adverse impacts to endangered or threatened species and their critical habitats is expected. FDEP will forward the application to FWC and the USFWS within three-five days of receipt. The species lead will contact the USFWS and send their preliminary assessments to the USFWS as soon as possible. USFWS may submit questions regarding missing information FDEP, but must do so within 20 days of receiving the permit application.

For example, if FDEP received an application on June 1st and forwarded it to USFWS on June 5th, any questions USFWS wishes to convey to the applicant must be relayed through the species coordinator by June 25th. If USFWS has no questions, technical assistance simply continues. All comment deadlines for USFWS's response will be included in FDEP/FWC initial submission of the permit application to USFWS.

- If FDEP/FWC does not get a response from the USFWS by the deadline for questions or comments, the lack of a response will be considered a "no comment" and no further information from the USFWS is needed. USFWS has internal processes in place to ensure that all applications are received and reviewed. As a fail-safe, USFWS may submit its questions during the public notice period for the State 404 application should USFWS not respond during the early phase of FDEP-USFWS coordination. If the State species coordinator believes that effects may be significant and the lack of response may be in error, they will contact the USFWS to confirm. In addition, the USFWS will receive a copy of all public notices and may provide comments to EPA and/or FDEP at that time, as needed.
- For the determination of potential affected species, project area or impact/effect on the species, if FDEP/FWC receives a response from USFWS with additional information to consider, the information will be re-evaluated and resubmitted to USFWS, if needed.
- Once it has been determined by FDEP/FWC that an application will have no adverse impacts or adverse effects to federally listed endangered or threatened species (or species proposed to be listed) or their critical habitats, and the USFWS has not submitted information or questions that would lead the State to reconsider its determination, the species review concludes for that application. If the applicant modifies the project activities or increases the project area as the application is continued to be reviewed, FDEP/FWC/USFWS may re-evaluate the application

with this information, if warranted (e.g., if the new project area would include additional listed species or critical habitats not considered in the previous review).

- Once it has been determined by FDEP/FWC that an application may cause an adverse impact or adverse effect to federally listed endangered or threatened species (or species proposed to be listed) or their critical habitats, technical assistance with USFWS continues in order to determine if, and how, the impacts and effects can be addressed with protection measures.

Coordination of protective measures with the USFWS

- For applications determined to have an adverse impact to federally listed species or species proposed to be listed or their critical habitats, the species coordination lead will forward all available information to the USFWS with a request for additional technical assistance.
- The FDEP/FWC species coordination lead will compile additional information or questions needed to complete the review, including information or questions from the USFWS, to forward to FDEP. These questions and requested information will be incorporated into the FDEP's RAI to the applicant.
- The species coordination lead will coordinate with the USFWS regarding potential protection measures that may avoid or minimize the anticipated adverse impacts. In some cases, depending upon the project, the USFWS may submit recommendations to FDEP/FWC. In other cases, the species coordination lead will compile a package that presents the proposed protection measures and transmit the package to USFWS for their review and comment.
- After USFWS provides/agrees with recommended protection measures appropriate to avoid or minimize the expected adverse impacts associated with the proposed project, the protection measures are incorporated into the public notice as proposed permit conditions.
    - If modifications are made during the public comment period that may change the original determination or anticipated effects to species or their critical habitats, FDEP reviewers will forward this information to FWC and USFWS for further review and comment.
    - If no modifications are made, or if the modifications during the public notice process can be addressed by FDEP/FWC/USFWS, protective measures are incorporated into the permit as special conditions and the species review concludes for that application.
- If the review by FDEP, FWC, and USFWS concludes that adverse impacts are likely to jeopardize the continued existence of a species, or will destroy, or adversely modify critical habitat, either of the following alternatives may occur, depending upon the project:
    - Additional protection measures that will satisfy the requirements of the ESA and avoid jeopardy or adverse modification are developed in coordination with or as recommended by USFWS, and FDEP incorporates those measures as permit conditions and processes the permit; or
    - The FDEP issues an "Intent to Deny" the application for a permit.

Summary of USFWS commitments triggered by approval of the action

If EPA approves FDEP's assumption of the 404 program, the State 404 program rule (62-331, F.A.C.), State ERP rule (62-330, F.A.C.), Federal oversight and coordination regulations (40 CFR 233), and the FDEP-FWC-FWS MOU will be activated and implemented. As a result of their activation and implementation, the USFWS will:

1. Receive all the 404 permit applications sent by FDEP.
2. Review all the 404 permit applications sent by FDEP.
3. Determine whether the permit application has the required information needed to assess:
    a. Whether or not issuing the permit is likely to jeopardize an ESA-listed or proposed species of fish, wildlife, or plant species or cause adverse modification to proposed or designated critical habitat of such species; and
    b. whether or not take, as defined by the ESA and it implementing regulations (50 CFR 402.02; 50 CFR 17.3) is reasonably certain to occur as a result of issuing the permit after taking into account all the protection measures that the FDEP and/or the applicant propose to implement.
4. If there is missing information necessary to complete the USFWS review, the USFWS will promptly notify FDEP.
5. If all the necessary information is provided to complete step 3, USFWS may provide FDEP with technical information regarding species biology, types and likelihoods of potential effects of the proposed permit on the species, and recommended measures that would avoid or minimize effects, as appropriate with the understanding that final FWS conclusions regarding effects to species are determinative. The USFWS evaluation of the likelihood that a permit action may jeopardize a species or adversely modify critical habitat will take into account the effects of any unrelated non-federal actions occurring in the project area, similar to the way a cumulative effects analysis is conducted under section 7 of the ESA.
6. If USFWS has information that would disconfirm the State's effect determination, the USFWS will provide that information. Otherwise, the USFWS response may indicate the application had been received and reviewed by USFWS and USFWS has no comments.
7. Monitor and track the amount of anticipated take on a project by project basis in order to inform future species status assessments and future effects assessments.
8. Document all the above as events under the State 404 programmatic BiOp official file.

USFWS will be conducting the actions described above through the technical assistance process, and not through section 7 or section 10 of the ESA. To clarify that USFWS coordination through a technical assistance process, USFWS will not “concur” with any effect determinations made by the State of Florida, but rather may provide comments and conditions that must be implemented in order for the permit to be issued. This process of USFWS coordination and technical assistance operates similarly to a section 7 consultation because it has a similar objectives of 1) ensuring a State 404 permit action is not likely to jeopardize a species or adversely modify or destroy critical habitat, and 2) minimizing and tracking the amount of incidental take if take is reasonably certain to occur.

Assessing potential effects of a State permit application

The following description adopted from the BE presents the structure of the species coordination process and how potential impacts of regulated activities will be evaluated to insure compliance with Federal regulations (40 CFR 233; 50 CFR 402) and State rules (62-330; 62-331, F.A.C.).

Identifying the Project Area and Affected Species

The BE states the first step in assessing potential adverse impacts to listed species or those proposed to be listed as endangered or threatened, as well as their critical habitats, is to define the project area (similar to the “action area” during a federal section 7 consultation). The project area can be larger than the immediate area of activity, since it is an identification of all areas that may affect listed species and their critical habitats directly or indirectly by the project’s activities.

For species within the USFWS's jurisdiction, the USFWS's Information for Planning and Consultation (IPaC) website (https://ecos.fws.gov/ipac/) allows for the user to draw a polygon to represent the project area. The project area must include the proposed project's potential impacts to the affected species and their habitats, and critical habitats, even those traditionally considered as offsite, if the impacts would occur as a result of approval of the project. By creating a polygon that is geographically referenced, the system will produce a preliminary list of resources for the area chosen. This list of species and critical habitats will be considered preliminary, because all potential adverse effects need to be determined (and some species may need to be confirmed by on-site surveys) and verified during the State and Federal species reviews. The result of this online search will also include critical habitats that overlap with the project area. While critical habitat is a special designation under the ESA, during project reviews all occupied habitat within the species range that may be adversely affected will be considered if the project's activity may affect listed species, even that which is not designated as critical habitat under the ESA.

Available Federal decision tools

Once there is a proposed affected species list, the State's species coordination lead determines (preliminarily or concurrently with the USFWS) whether adverse effects/impacts are likely to occur. The types of impacts that may occur could be beneficial to species and their critical habitat or could adversely impact or adversely affect them. Adverse impacts to species include the potential for harm to members of the species, such as injury, death, or those that occur by loss of feeding, breeding, or sheltering resources due to a project's activities affecting habitat where members of the species exist. Adverse impacts also include the potential for jeopardizing the continued existence of a species, or adversely modifying critical habitat. Adverse effects/impacts to one or more individuals, can result directly from dredging and filling activities involved with construction or demolition proposed by the project, as well as secondary impacts caused by the ongoing operations of the project once constructed. Assessment of adverse cumulative impacts must be considered during the review of State 404 permit applications; the assessment of expected impacts to species that may be caused from a particular project must be considered along with the impacts that may have been caused from past authorized projects, as well as those future projects that are reasonably certain to occur. Adverse impacts to habitats, particularly critical habitats, include alteration or destruction of the physical and biological characteristics of that habitat. These characteristics are important to the listed species using the area, and harm to species may occur temporarily during construction or permanently during operation or by alteration of the habitat.

For some species, the IPaC system provides Federal species guidelines. These guidelines include General Project Design Guidelines, Habitat Assessment Guidelines, Species Survey Guidelines, Effects Determination (consultation and/or dichotomous) Keys, conservation measures, guidance for determining whether a species 'may be present', proactive management suggestions, Species Assessment Guides (SAGs) or Standard Local Operating Procedures for Endangered Species (SLOPES).

Programmatic consultations, when available, are anticipated to be used to help identify where impacts/effects will occur and whether technical assistance with the USFWS is needed. Some programmatic consultations do not exempt take; rather, they attempt to avoid take through setting project-specific criteria that either determines a project is "not likely to adversely affect" a listed species or critical habitat, or sets avoidance and minimization measures that allow a "not likely to adversely affect" determination to be made. Because these consultation keys and programmatic biological opinions cover many of the species which are most often the subject of ESA section 7 consultations in

Florida, they include many useful measures to identify, avoid, or minimize adverse effects to ESA-listed species.

The objectives of developing and using effect determination decision assistance tools, particularly SLOPES, are to:

- Increase the effect determinations' accuracy and consistency;
- Improve completeness and efficiency in the documentation of the administrative record;
- Decrease the amount of staff and time needed to complete certain types of consultation or species coordination; and
- Improve ESA-listed species conservation and the regulated community's compliance with the ESA.

For example, effect determinations for wide-ranging species such as the Wood Stork determination key has been used extensively and has had some success. As stated in chapter 4.2.2. of the BE, the Eastern Indigo Snake and Wood Stork accounted for 56.6% of all species-level consultations in Florida between 2014 and 2018 (BE, p. 47). Species guidelines, or decision guidance tools, are also available independently from the IPaC system on the USFWS website.

These types of tools are available to project proponents and permit reviewers and provide consistent criteria to reach impact/effect determinations. The State's species coordination lead to facilitate the USFWS's review. The review process for species with these types of decision tools will likely be slightly different and simplified compared to those species that do not have these tools. In the early stages of reviewing a State 404 permit application, the State's species lead will use these decision tools to arrive at impact/effect determinations and potential protection measures. This preliminary review will be submitted to the USFWS with a request for technical assistance, allowing the USFWS to ask questions or provide additional information that may change the conclusions. After the species review outcome is finalized, technical assistance from the USFWS ends for those species and the protection measures are incorporated as conditions to any State 404 permit that is issued.

Project-by-project assessments when tools are not available

The BE states for those species or activities that do not have federal species guidelines or decision tools, a case by case assessment must be performed. A preliminary assessment will be performed by the applicant and verified or expanded upon by the FDEP/FWC species coordination lead. Applicants will need to provide all of the information necessary to perform an assessment of potential impacts to listed species and their habitats, as well as submitting proposed protection measures to avoid and minimize the anticipated impacts.

The BE states the following factors will be considered when evaluating the impacts/effects of the activity:

- Proximity of the activity to the species and/or designated critical habitat;
- Location and extent of the area of disturbance;
- Timing (with regards to sensitive periods of a species lifecycle);
- Duration of the activity or impact;

- Disturbance frequency, and
- Nature of the effect (elements of a lifecycle, population size, variability, or distribution, physical and biological features of habitat, etc.).

Federal species guidelines, information on IPaC, USFWS specific species webpages, the results of species surveys, (see Table 7.2 of the BE for guidance), relevant scientific literature, species accounts in Appendix B of the BE, stressors and effects in Appendix C of the BE with discussion in Chapter 5 of the BE, and other available sources of information are reviewed to develop preliminary conclusions of impact/effect as well as develop any potential protection measures.

Physical or biological features essential to the conservation of the species as identified in the final rules designating critical habitat for specific listed species should be considered to determine whether there may be adverse modification of critical habitat.

The BE states the species coordination lead will use the information from the applicant and assess all the data available to them to determine if there will be impacts to any listed species and the severity of adverse impacts to each species and habitats present in the project area. For projects with large amounts of acreage or that are intensive in the amount of activities proposed, or with multiple species and critical habitats, a written assessment determining preliminary anticipated adverse impacts and protection measures to avoid and minimize those impacts would be developed. This preliminary review will be submitted to the USFWS with a request for technical assistance or would be developed in coordination with the USFWS. The USFWS may comment, provide recommended protection measures, or provide additional information that may change the conclusions and protective measures. Once the species coordination review and technical assistance with the USFWS is completed, the species coordination process with the USFWS ends for those species and the protection measures are incorporated as conditions to any State 404 permit that is issued. At any time during the review of State 404 permit applications, if modifications to the project are proposed after the species coordination process, the species review will be revisited with the USFWS. If modification occurs after the application is granted, and the modification causes effects not previously considered by USFWS, the applicant may not be in compliance with this BiOp and may any incidental take that occurs may not be exempt from being considered as prohibited undersection 9 of the ESA.

Impact/effect determinations and protective measures

The BE states the word “impact” used in Chapters 62-330 and 62-331, F.A.C. describes effects similar to “may affect” and “adverse effects” under ESA. Throughout this document, these terms are used interchangeably. The State 404 program has two standards of review regarding the protection of listed species: the species protections required under CWA and ESA, and the species protections required under State Chapters 62-330, and 62-331, F.A.C. Under State rules, the requirements of CWA and ESA are incorporated into the species review process for adverse impacts to listed species and their habitats. The State rules are broad; the ERP rule and State 404 program rule protect not only federally listed and State-listed species, but all fish and wildlife in Florida.

While the State 404 program has been developed to meet the requirements of CWA and ESA, it also relies on the requirements of the existing State ERP program. The ERP program requires the applicant to provide reasonable assurances that the proposed activities will not damage or harm the water resources of the State nor reduce the value of wetland functions including functions provided to fish, wildlife and listed species. A state or federally listed species’ ability to nest or den cannot be interrupted by negative

impacts to the uplands or wetlands a listed species uses. Subsection 62-330.301(1)(d), F.A.C. requires an applicant provide reasonable assurance that the construction, alteration, operation, maintenance, removal, or abandonment "will not adversely impact the value of functions provided to fish and wildlife and listed species by wetlands and other surface waters" to obtain approval for a permit. This review also includes consideration for secondary and cumulative impacts.

The BE states the protection measures are defined as those avoidance and minimization measures to address adverse impacts to listed species and critical habitat. Protection measures, in the form of avoidance and minimization measures recommended by the USFWS, are incorporated as conditions to the State 404 permit. Examples of protection measures include but are not limited to project design changes and operational restrictions for the protection of species (i.e., seasonal restrictions for construction work).

Determining impacts and effects to ESA-listed species when decision assistance tools are not available

The BE states when decision tools are not available, the determination of whether a project's activities will affect endangered or threatened species is preliminarily made by FDEP and FWC, and coordinated with USFWS during the technical assistance process. Information about a species should be cross-referenced with knowledge of the project's activities and the project area to help predict whether and how the species at any life stage will respond when exposed to the effects of the activities. Based on best available data, if any of the following occurs it will be determined that the project will adversely impact/effect the species and technical assistance with the USFWS to determine possible protective measures is required. The following is to be used as guidance for making a "may adversely impact" determination:

- Data indicate the species may be exposed to the elements of the activity and respond deleteriously upon exposure to elements of the activity or to stressors produced by the activity; or
- Data indicate the proposed activity will cause changes to the physical and biological features of critical habitat and produces exposure or stressor to species.

As the species coordination process progresses during the review of a State 404 permit application, proposed activities will be assessed for potential effects to species. The USFWS will review and may provide additional information on whether adverse impacts are anticipated to occur, and how significantly the impacts are expected to affect the species or critical habitats. These determinations can be categorized as follows:

- No Effect/No Impact
- Not Likely to Adversely Affect/Impact
- Likely to Adversely Affect/Impact
- Jeopardizes the Continued Existence of the Species, and/or Destroys or Adversely Modifies Critical Habitat

No Effect/No Impact

If physical or biological features essential to the conservation of the species are not present or are present but will not be affected in the project area, then no further review of effects/impacts to critical habitats is required. In addition, a determination of "No Effect/No Impact" would be made if listed or proposed species or critical habitats do not occur and do not have the potential to occur on a site. If neither the species nor the critical habitat will respond in any manner, no further review of adverse impacts to species is required and technical assistance with the USFWS is concluded.

Not Likely to Adversely Affect/Impact

This determination is reached when there is reasonable certainty that a proposed activity may affect a species or designated critical habitat, but the effect is not anticipated to cause harm to a member of the species, nor cause adverse impacts to critical habitat that would result in harm to a listed species dependent on that habitat. The impact expected may not require protective measures (if discountable, or insignificant) or it may be deemed as not likely to adversely affect via required protective measures to avoid and minimize the effects.

Likely to Adversely Affect/Impact

This determination is reached when there is reasonable certainty that a proposed activity may adversely affect a species or designated critical habitat, and the effect is anticipated to cause harm to a member of the species and/or cause adverse impacts to critical habitat that would result in harm to a listed species dependent on that habitat. Harm to an individual(s) means injury or death. The level of harm, however, may not result in jeopardizing the continued existence of the species or destroying or adversely modifying critical habitat. The adverse impact expected is likely to require protective measures to avoid and minimize the effects.

Jeopardizes the Continued Existing of the Species and/or Destroys or Adversely Modifies Critical Habitat

The State 404 program rule includes stipulations (Rules 62-331.053(3)(a)4, 62-331.201(3)(k), and 62-331-248(3)(k) F.A.C.) that prohibit issuance of a permit that will likely jeopardize the continued existence of endangered or threatened species, or result in the likely destruction or adverse modification of habitat designated as critical for these species as determined by USFWS. The USFWS evaluation of the likelihood that a permit action may jeopardize a species or adversely modify critical habitat will take into account the effects of any unrelated non-federal actions occurring in the project area, similar to the way a cumulative effects analysis is conducted under section 7 of the ESA.

Through technical assistance with the USFWS, the FDEP and FWC will be informed of when a proposed project and its activities is anticipated to jeopardize the continued existence of the species, or if critical habitat is destroyed, or adversely modified. Under these circumstances, the FDEP, FWC, USFWS and the applicant will discuss to determine what, if any, protective measures may be appropriate.

The BE lists anticipated stressors in Table C.1. of Appendix C and notes anticipated effect determinations in Table C.1.b of Appendix C. During future reviews of State 404 permit applications, however, all potential impacts and effects to species and their habitat will be assessed and addressed during project by project permit application reviews.

State 404 process for developing and ensuring implementation of protective measures

The BE states after the determination of "may adversely affect/impact" and the level of adverse impact, the species coordination process continues between the State species coordination lead and the USFWS during the review of a State 404 permit application. In order to move towards authorization of an activity, the project's adverse effects/impacts to species and habitat that have been identified must be avoided and minimized by implementing protective measures. Those protective measures may likely either modify the project design, modify the project operation, or follow species-specific protective measures. Early in the review process, the species lead will draft and compile the applicant's information as well as their own assessment and forward to the USFWS for review. The assessment may also be done in coordination with the USFWS, depending upon the project. The USFWS may or may not comment on the proposed preliminary impact review and proposed protection measures, and the finalized assessment and recommendations may be provided to the applicant in the form of comments and draft permit conditions. The USFWS may also recommend additional avoidance and minimization measures, provide recommendations for appropriate permit conditions if none were proposed in the informational package sent to them, or state that the proposed measures are not adequate to avoid or minimize effects to species and their critical habitats.

Some of the Federal species guidelines discussed in the previous subsection of this chapter provide minimization measures that are considered standard conditions for adverse effects associated with common, minor activities. For other species, there are typical minimization measures for common activities that are frequently incorporated into permits as standard conditions that may not be associated with programmatic guidance but can be found in biological opinions. Some projects, particularly those with a greater level of adverse impacts or multiple activities and/or multiple species that may be affected, have a need for a more comprehensive assessment and intensive coordination with USFWS.

In addition to species-specific protective measures, thorough assessments of adverse impacts to habitat must be performed in order to ensure alterations to habitat do not adversely affect listed species. There are various methods for avoiding and minimizing effects of dredge and fill activities within wetlands. Some impacts can be avoided or minimized through BMPs (e.g., silt fences, turbidity curtains, containing dredge materials during dewatering, transfer and storage), while others require administrative restrictions or permit conditions (e.g., contractor education, not refueling equipment within 100 feet of wetlands) to protect wetlands, waters, or "at-risk" species. A major administrative control that compensates for wetland destruction is wetland mitigation. Wetland mitigation includes the enhancement, restoration, establishment, and/or preservation of wetlands that serve to offset unavoidable impacts on wetlands (FDEP 2019b). Governments and agencies have used this policy across North America with notable levels of success (NAWCCC 2000). The species coordination process will avoid and minimize adverse impacts to habitat when practicable.

In addition, FDEP intends to incorporate adaptive management into the State 404 process as needed, particularly as it pertains to wetland compensatory mitigation projects. Per the FDEP's State 404 Applicants' Handbook, wetland compensatory mitigation projects that cannot be constructed in accordance with the approved mitigation plans will require FDEP approval prior to any significant modifications. Wetland compensatory mitigation projects not progressing toward meeting their performance standards will be evaluated for measures to address deficiencies and a determination as to whether these modifications will result in the project meeting its original ecological objectives.

These modifications/measures may include but are not limited to site modifications, design changes, revisions to maintenance requirements, and revised monitoring requirements. The measures shall be designed to ensure that the modified compensatory mitigation project provides aquatic resource functions comparable to those described in the mitigation plan objectives. Performance standards will be revised to address deficiencies in wetland compensatory mitigation projects and to reflect changes in management strategies and objectives if the new standards provide for ecological benefits that are comparable or superior to the approved compensatory mitigation project. No other revisions to performance standards shall be allowed except in the case of natural disasters.

Best management practices for wetland protection

BMPs, including schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of WOTUS from discharges of dredged or fill material, will be implemented for all projects under the State 404 program. BMPs include methods, measures, practices, or design and performance standards which facilitate compliance with the Section 404(b)(1) Guidelines (40 CFR 230), effluent limitations or prohibitions under Section 307(a), and applicable water quality standards.

Wetland mitigation measures included in a Section 404 application may also offset effects or result in longer-term beneficial effects to ESA-listed species; however, they are part of the wetland protection process of the State 404 and ERP processes and not a requirement of the ESA coordination.

Protective measures for plants and animals

In Florida, fifty-four (54) plant species are on the Federal list of endangered species and 14 are on the Federal list of threatened species. The ESA (16 USC section 1531) provides protection to both endangered and threatened plants and animals. The ESA, however, does not prohibit the destruction, damage or transplantation of protected plants unless such activities involve an endangered species on Federal land or if the activities occur in violation of state laws. If a person wishes to develop private land, with no Federal jurisdiction involved, and if the proposal is in accordance with state law, then the potential destruction, damage, or movement of endangered or threatened plants does not violate ESA. Further, a section 10 ESA incidental take permit is only needed in situations where a non-federal project is likely to result in “take” of a listed species of fish or wildlife; there is no such process for plants.

But while incidental take does not apply to plants, an assessment of jeopardy and adverse modification to critical habitat under section 7(a)(2) applies to plants. For the State 404 program, 40 CFR 233.51(2), and 40 CFR 233.20(a) would prohibit issuance of a State 404 permit that will jeopardize a plant species or adversely modify its critical habitat. FDEP will incorporate any reasonable and prudent measures and terms and conditions provided by the USFWS into permit conditions for a State 404 permit for such a project.

Endangered, threatened and commercially exploited plant species in Florida are regulated by the Florida Department of Agriculture and Consumer Services, by their Division of Plant Industry. Florida’s State ERP program under Chapter 62-330, F.A.C. and the State 404 program under Chapter 62-331, F.A.C. include plants in the definition of endangered and threatened species, which requires consideration of adverse impacts resulting from activities authorized under these programs. During the permit review process for each type of permit, FDEP will evaluate potential impacts and effects to State and ESA-listed plant species. Similar to animal species, USFWS will provide recommendations as needed to avoid and reduce anticipated impacts. For those types of projects where jeopardy is not expected to

occur and no adverse modification to critical habitat is expected, some projects may still need protective measures incorporated as permit conditions in order to adequately conserve endangered and threatened plant species.

The State 404 program, the State ERP program, and the ESA provide protection to both endangered and threatened plants and animals. As with animals, there could be a situation in which a federally listed plant is located in the upland portion of the project area that is adjacent to assumable waters and would be affected by the permit. The State 404 program is required to consider adverse impacts in uplands that would not occur except for the authorization of the proposed activity. In addition, while the State 404 program does not have jurisdiction in isolated wetlands, the ERP program does have jurisdiction and can address adverse impacts to animal and plant species dependent on these wetlands.

Ensuring protection for ESA-listed species in Florida

The State of Florida is required to incorporate all USFWS recommendations for protection measures as State 404 program permit conditions (Subsection 62-331.054(1), F.A.C.). The existing working relationship and coordination during the review of projects would continue between the FDEP and the USACE. The FDEP will add fields in their permitting tracking database that will continue the collection of data done by the USACE for past Section 404 permits. This data will continue the monitoring of adverse effects on listed species and critical habitat, facilitating the State's ability to conduct its compliance obligations.

In the current ERP program, FWC provides recommendations to FDEP and the WMDs for State-listed species and some federally listed species that are also protected by Florida Statutes, such as manatees and sea turtles. FWC has committed to assist FDEP in the State 404 program review for impacts to ESA- listed species, and the current collaboration between FDEP and FWC will be enhanced by the State's Assumption of the 404 program if EPA approves it. FWC and the USFWS have a long-standing partnership and a current ESA section 6 Cooperative Agreement for conserving Florida's federally endangered and threatened wildlife. The BE anticipates the relationship between FWC and USFWS will bring an existing high level of cooperation, knowledge, and expertise to the State 404 program. In addition, FDEP, FWC and USFWS have entered into a Memorandum of Understanding to identify commitments, roles and responsibilities regarding species coordination for the State 404 program as well as the ERP program (Appendix II).

The BE and MOU indicate the State 404 program species coordination process involves the applicant, FDEP, FWC and USFWS, and encourages compliance by the applicant to avoid and minimize adverse effects, reducing the expected impacts to listed species and their critical habitats. The interactions between agencies and the applicant will inform applicants of the importance of this process in order to be eligible for authorization of their proposed activities and in order to ensure compliance with the ESA.

Finally, if the applicant for a State 404 permit is the holder of a pre-existing valid and active biological opinion with an incidental take statement, or a Habitat Conservation Plan with an Incidental Take Permit (HCP/ITP) that was issued by the USFWS and the species and activities described in the State 404 permit application are covered by that particular biological opinion, or HCP/ITP, then FDEP may stipulate as a permit condition that the applicant must comply with that biological opinion or ITP. FDEP will confirm the validity and applicability of the applicant's pre-existing biological opinion or HCP/ITP with the USFWS before taking any final action on the State 404 permit application.

State 404 process regarding statements of adverse impact in public notices

The BE states while many adverse effects can be avoided and minimized during the species coordination review process, impacts that are likely to adversely affect a species (e.g. likely to cause incidental take or jeopardy) or critical habitat (e.g. destroy or adversely modify critical habitat) must be recorded, monitored, provided to the USFWS for tracking and species conservation purposes. These types of projects will receive the most stringent review and be documented in the Public Notice as well as the FDEP database and project file.

The public notice, required by Rule 62-331.060, F.A.C., will include an effect determination statement and include the proposed protection measures, if known at the time of publication. The effect determinations statements for species and critical habitats would include one of the following: "No Effect/Impact", "May Affect, Not Likely to Adversely Affect/Impact", or "May Affect, Likely to Adversely Affect/Impact".

The USFWS will receive copies of all applications when submitted, including those FDEP/FWC has preliminarily determined as "No Effect/No Impact". If the USFWS elected to not respond to these types of applications upon first submittal, they will still receive public notices for these applications and may elect to comment at that time. Receiving public notices for all applications also provides an opportunity for the USFWS to re-review all of the effect determinations made by the State and provide oversight of the species coordination process. Along with the public notice, the USFWS will receive copies of all applications and supplemental information submitted for applications required to be publicly noticed, with all stated effect or no effect determinations.

With the public notice, EPA will receive copies of all applications with a determination other than "No Effect/Impact". This provides an opportunity for the EPA to monitor the effectiveness of the species coordination process and to provide oversight of State permit actions and State 404 program operations, including ESA compliance.

Description of dispute resolution between FDEP and USFWS; and USFWS-EPA coordination

As stated in the BE, State 404 permits (as with USACE 404 permits) must comply with Section 404(b)(1) guidelines which include a stipulation that prohibits the discharge of dredged or fill material if it jeopardizes the continued existence of listed species or results in the likelihood of the destruction or adverse modification of designated critical habitat. 40 CFR 230.10(b)(3). Similarly, State 404 Chapter 62-331.053(3)(a)(4), 331.201(3)(k) and the State 404 Applicants' Handbook (sections 1.3.3, 5.2.3) include provisions that prohibit issuance of State 404 permits that are likely to jeopardize ESA-listed species and recognize USFWS conclusions regarding potential impacts and necessary measures to address impacts are determinative.

For permits that would result in injury or harm to individuals of a listed species but whose impacts would not jeopardize the continued existence of the species or cause adverse modifications to critical habitat, FDEP shall incorporate USFWS-recommended protection measures as permit conditions to fulfill compliance with the anticipated Program assumption BiOp and for any subsequent anticipated incidental take to be exempted from prohibition under section 9 of the ESA.

The BE and the FDEP-FWC-FWS MOU regarding species coordination states the following steps would guide the resolution process in the event FDEP questions or disagrees with a local USFWS office about the necessity of project-specific, species-specific USFWS-recommended protection measures as being added as permit conditions for the purpose of either 1) avoiding jeopardy to a ESA-listed or

proposed species or adverse modification of critical habitat; or 2) minimizing incidental take to fish and wildlife..

Interagency Elevation Process **(excerpt from the FDEP, FWC, USFWS MOU, Appendix II, pp. 9-10)**

"FDEP, FWC and USFWS intend to work cooperatively to achieve their mutually shared objectives of protecting the quality of waters of the United States and the species that depend on those waters. Collaboration among Technical Team members, agency district, regional, and field staff when resolving any potential conflicts or disagreements should be performed through a structured, time-sensitive process at the lowest possible level. During the review of State 404 permit applications and these elevation procedures, the following regulations will be followed: 40 CFR § 233.20; 40 CFR § 233.50; the 404(b)(1) Guidelines in 40 CFR § 230; and 40 CFR § 230.10(b)(3). The agencies will follow the procedures below to elevate any conflict or disagreement.

Any contentious issues, disagreements or conflicts between agencies, or between agencies and applicants, will be discussed with an attempt to resolve them at the lowest levels within the agencies without elevation (reviewers and their supervisors). If issues cannot be resolved at this level, reviewers and their supervisors will reach out to the Technical Team for assistance (Level 1). If there is no consensus resolution at that level, or if it is deemed prudent, the issues will be elevated to Level 2, which would include the USFWS State Supervisor, FDEP State 404 program Supervisor, FWC Conservation Planning Services Director, and EPA Florida State 404 program Supervisor. While anticipated to be very rare, issues can be elevated to Level 3 if needed, which would include the USFWS Regional Director, Atlanta; EPA Regional Administrator, Atlanta; FWC Executive Director and FDEP Secretary. The supervisory level staff may differ for each agency and may differ depending upon the issue in dispute or conflict that needs resolution. All agencies will be included in resolution discussions, even if the issue only involves two of the three partner agencies.

While decisions at all levels, including decisions to elevate, will be made by consensus to the greatest extent practicable, any one agency can initiate the elevation process or elevate to the next supervisor level. Agencies will jointly prepare a summary document that will contain a statement of facts and succinctly state each agency's position and recommendations for resolution. This summary document will be developed and shared when elevated to Level 2 or Level 3. If needed, the summary documents may be updated when elevated to Level 3. The overall goal is to jointly develop implementable actions to avoid and/or minimize adverse impacts to listed species to ensure the impacts of any given project are not likely to result in take, or likely to jeopardize the continued existence of any species or adversely modify its critical habitat. With regard to conclusions about the potential effects of a project on ESA-listed species, their critical habitats, or the effectiveness of proposed protection measures, the final USFWS position is determinative. With regard to conclusions about the potential effects of a project on State listed species or the effectiveness of proposed protection measures, the final FWC position is determinative.

Elevation should be initiated so that all applicable deadlines will be met, considering subsequent levels of review. If FDEP is aware of a dispute, they will resolve the dispute prior to taking final action. This is to ensure consistency with applicable legal deadlines, and to allow the issue to be resolved through the elevation process. When determined to be appropriate (e.g., where the results of the elevation would provide useful guidance to agency staff or transparency to the public), the decision on the elevation should be memorialized in writing, placed in the application's official file, and circulated among Agency staff to serve as guidance for future decisions."

Dredge or fill material discharge activities regulated by the State 404 program

After FDEP completes its permit evaluation process and issues a State 404 permit to a permittee, the permittee will be authorized to discharge dredge or fill material into assumed waters. The BE (Appendix A) describes the different types of actions that cause the discharge of dredge or fill material in assumed waters. The list of anticipated actions was derived from the USACE project information database. All the activities in the BE's Appendix E list, however, may not be applicable to the State 404 program.

Dredging and filling actions include but are not limited to:

- Discharge of fill material
- Dredging
- Ecological restoration
- Discharge of dredged material
- Excavation associated with the discharge of dredged or fill material
- Other (Aquaculture, Work, Aerial o Submarine cable crossings)
- Conversion of waters type (forested wetland to emergent wetland, strean to lake)
- Commercial developments
- Residential developments
- Single-family residence
- Agriculture
- Utilities
- Roadways
- Airports
- Marinas
- Docks
- Piers
- Boat Ramps
- Dams
- Levees
- Mining activities
- Mitigation
- Restoration

Proposed dredge material discharge or fill activities authorized or exempt under the State 404 Program

The BE (Appendix A) describes the types of actions the State 404 program will regulate include all dredge and fill activities within the assumed waters. The proposed activities and exemptions below are excerpts from 40 CFR 232 and select definitions from 40 CFR 232.2, also summarized in Appendix B of the State 404 Handbook:

Discharge of dredged material.

(1) Except as provided below in paragraph (2), the term "discharge of dredged material" means any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the waters of the United States. The term includes, but is not limited to, the following:
  (i) The addition of dredged material to a specified discharge site located in waters of the United States;
  (ii) The runoff or overflow, associated with a dredging operation, from a contained land or water disposal area; and

(iii) Any addition, including redeposit other than incidental fallback, of dredged material, including excavated material, into waters of the United States which is incidental to any activity, including mechanized land clearing, ditching, channelization, or other excavation.

(2) The term discharge of dredged material does not include the following:

(i) Discharges of pollutants into waters of the United States resulting from the onshore subsequent processing of dredged material that is extracted for any commercial use (other than fill). These discharges are subject to Section 402 of the Clean Water Act even though the extraction and deposit of such material may require a permit from the Corps or applicable state.

(ii) Activities that involve only the cutting or removing of vegetation above the ground (e.g., mowing, rotary cutting, and chain sawing) where the activity neither substantially disturbs the root system nor involves mechanized pushing, dragging, or other similar activities that redeposit excavated soil material.

(iii) Incidental fallback.

(3) Section 404 authorization is not required for the following:

(i) Any incidental addition, including redeposit, of dredged material associated with any activity that does not have or would not have the effect of destroying or degrading an area of waters of the U.S. as defined in paragraphs (4) and (5) of this definition; however, this exception does not apply to any person preparing to undertake mechanized land clearing, ditching, channelization and other excavation activity in a water of the United States, which would result in a redeposit of dredged material, unless the person demonstrates to the satisfaction of the Corps, or EPA as appropriate, prior to commencing the activity involving the discharge, that the activity would not have the effect of destroying or degrading any area of waters of the United States, as defined in paragraphs (4) and (5) of this definition. The person proposing to undertake mechanized land clearing, ditching, channelization or other excavation activity bears the burden of demonstrating that such activity would not destroy or degrade any area of waters of the United States.

(ii) Incidental movement of dredged material occurring during normal dredging operations, defined as dredging for navigation in navigable waters of the United States, as that term is defined in 33 CFR part 329, with proper authorization from the Congress or the Corps pursuant to 33 CFR part 322; however, this exception is not applicable to dredging activities in wetlands, as that term is defined at section232.2(r) of this chapter.

(iii) Certain discharges, such as those associated with normal farming, silviculture, and ranching activities, are not prohibited by or otherwise subject to regulation under Section 404. See 40 CFR 232.3 for discharges that do not require permits.

(4) For purposes of this section, an activity associated with a discharge of dredged material destroys an area of waters of the United States if it alters the area in such a way that it would no longer be a water of the United States.

Note: Unauthorized discharges into waters of the United States do not eliminate Clean Water Act jurisdiction, even where such unauthorized discharges have the effect of destroying waters of the United States.

(5) For purposes of this section, an activity associated with a discharge of dredged material degrades an area of waters of the United States if it has more than a de minimis (i.e., inconsequential) effect on the area by causing an identifiable individual or cumulative adverse effect on any aquatic function.

Discharge of fill material.

(1) The term "discharge of fill material" means the addition of fill material into waters of the United States. The term generally includes, without limitation, the following activities: Placement of fill that is necessary for the construction of any structure or infrastructure in a water of the United States; the building of any structure, infrastructure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, or other uses; causeways or road fills; dams and dikes; artificial islands; property protection and/or reclamation devices such as riprap, groins, seawalls, breakwaters, and revetments; beach nourishment; levees; fill for structures such as sewage treatment facilities, intake and outfall pipes associated with power plants and subaqueous utility lines; placement of fill material for construction or maintenance of any liner, berm, or other infrastructure associated with solid waste landfills; placement of overburden, slurry, or tailings or similar mining-related materials;" after the words "utility lines; and artificial reefs.

(2) In addition, placement of pilings in waters of the United States constitutes a discharge of fill material and requires a Section 404 permit when such placement has or would have the effect of a discharge of fill material. Examples of such activities that have the effect of a discharge of fill material include, but are not limited to, the following: Projects where the pilings are so closely spaced that sedimentation rates would be increased; projects in which the pilings themselves effectively would replace the bottom of a waterbody; projects involving the placement of pilings that would reduce the reach or impair the flow or circulation of waters of the United States; and projects involving the placement of pilings which would result in the adverse alteration or elimination of aquatic functions.

(i) Placement of pilings in waters of the United States that does not have or would not have the effect of a discharge of fill material shall not require a Section 404 permit. Placement of pilings for linear projects, such as bridges, elevated walkways, and powerline structures, generally does not have the effect of a discharge of fill material. Furthermore, placement of pilings in waters of the United States for piers, wharves, and an individual house on stilts generally does not have the effect of a discharge of fill material. All pilings, however, placed in the navigable waters of the United States, as that term is defined in 33 CFR part 329, require authorization under section 10 of the Rivers and Harbors Act of 1899 (see 33 CFR part 322).

40 CFR 232.3 Activities not requiring permits.

Except as specified in paragraphs (a) and (b) of this section, any discharge of dredged or fill material that may result from any of the activities described in paragraph (c) of this section is not prohibited by or otherwise subject to regulation under this part.

(a) If any discharge of dredged or fill material resulting from the activities listed in paragraph (c) of this section contains any toxic pollutant listed under section 307 of the Act, such discharge shall be

subject to any applicable toxic effluent standard or prohibition and shall require a Section 404 permit.

(b) Any discharge of dredged or fill material into waters of the United States incidental to any of the activities identified in paragraph (c) of this section must have a permit if it is part of an activity whose purpose is to convert an area of the waters of the United States into a use to which it was not previously subject, where the flow or circulation of waters of the United States may be impaired or the reach of such waters reduced. Where the proposed discharge will result in significant discernable alterations to flow or circulation, the presumption is that flow or circulation may be impaired by such alteration.

Note: For example, a permit will be required for the conversion of a cypress swamp to some other use or the conversion of a wetland from silvicultural to agricultural use when there is a discharge of dredged or fill material into waters of the United States in conjunction with construction of dikes, drainage ditches or other works or structures used to affect such conversion. A conversion of Section 404 wetland to a non-wetland is a change in use of an area of waters of the U.S. A discharge which elevates the bottom of waters of the United States without converting it to dry land does not thereby reduce the reach of, but may alter the flow or circulation of, waters of the United States.

(c) The following activities are exempt from Section 404 permit requirements, except as specified in paragraphs (a) and (b) of this section:

(1)(i) Normal farming, silviculture and ranching activities such as plowing, seeding, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices, as defined in paragraph (d) of this section.

(ii) (A) To fall under this exemption, the activities specified in paragraph (c)(1) of this section must be part of an established (i.e., ongoing) farming, silviculture, or ranching operation, and must be in accordance with definitions in paragraph (d) of this section. Activities on areas lying fallow as part of a conventional rotational cycle are part of an established operation.

(B) Activities which bring an area into farming, silviculture or ranching use are not part of an established operation. An operation ceases to be established when the area in which it was conducted has been converted to another use or has lain idle so long that modifications to the hydrological regime are necessary to resume operation. If an activity takes place outside the waters of the United States, or if it does not involve a discharge, it does not need a Section 404 permit whether or not it was part of an established farming, silviculture or ranching operation.

(2) Maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, bridge abutments or approaches, and transportation structures. Maintenance does not include any modification that changes the character, scope, or size of the original fill design. Emergency reconstruction must occur within a reasonable period of time after damage occurs in order to qualify for this exemption.

(3) Construction or maintenance of farm or stock ponds or irrigation ditches or the maintenance (but not construction) of drainage ditches. Discharge associated with siphons, pumps, headgates, wingwalls, weirs, diversion structures, and such other facilities as are appurtenant and functionally related to irrigation ditches are included in this exemption.

(4) Construction of temporary sedimentation basins on a construction site which does not include placement of fill material into waters of the United States. The term "construction site" refers to any site involving the erection of buildings, roads, and other discrete structures and the installation of support facilities necessary for construction and utilization of such structures. The term also includes any other land areas which involve land-disturbing excavation activities, including quarrying or other mining activities, where an increase in the runoff of sediment is controlled through the use of temporary sedimentation basins.

(5) Any activity with respect to which a State has an approved program under section 208(b)(4) of the Act which meets the requirements of section 208(b)(4)(B) and (C).

(6) Construction or maintenance of farm roads, forest roads, or temporary roads for moving mining equipment, where such roads are constructed and maintained in accordance with best management practices (BMPs) to assure that flow and circulation patterns and chemical and biological characteristics of waters of the United States are not impaired, that the reach of the waters of the United States is not reduced, and that any adverse effect on the aquatic environment will be otherwise minimized. The BMPs which must be applied to satisfy this provision include the following baseline provisions:

(i) Permanent roads (for farming or forestry activities), temporary access roads (for mining, forestry, or farm purposes) and skid trails (for logging) in waters of the United States shall be held to the minimum feasible number, width, and total length consistent with the purpose of specific farming, silvicultural or mining operations, and local topographic and climatic conditions;
(ii) All roads, temporary or permanent, shall be located sufficiently far from streams or other water bodies (except for portions of such roads which must cross water bodies) to minimize discharges of dredged or fill material into waters of the United States;
(iii) The road fill shall be bridged, culverted, or otherwise designed to prevent the restriction of expected flood flows;
(iv) The fill shall be properly stabilized and maintained to prevent erosion during and following construction;
(v) Discharges of dredged or fill material into waters of the United States to construct a road fill shall be made in a manner that minimizes the encroachment of trucks, tractors, bulldozers, or other heavy equipment within the waters of the United States (including adjacent wetlands) that lie outside the lateral boundaries of the fill itself;
(vi) In designing, constructing, and maintaining roads, vegetative disturbance in the waters of the United States shall be kept to a minimum;
(vii) The design, construction and maintenance of the road crossing shall not disrupt the migration or other movement of those species of aquatic life inhabiting the water body;
(viii) Borrow material shall be taken from upland sources whenever feasible;

(ix) The discharge shall not take, or jeopardize the continued existence of, a threatened or endangered species as defined under the Endangered Species Act, or adversely modify or destroy the critical habitat of such species;
(x) Discharges into breeding and nesting areas for migratory waterfowl, spawning areas, and wetlands shall be avoided if practical alternatives exist;
(xi) The discharge shall not be located in the proximity of a public water supply intake;
(xii) The discharge shall not occur in areas of concentrated shellfish production;
(xiii) The discharge shall not occur in a component of the National Wild and Scenic Rivers System;
(xiv) The discharge of material shall consist of suitable material free from toxic pollutants in toxic amounts; and
(xv) All temporary fills shall be removed in their entirety and the area restored to its original elevation.

(d) For purpose of paragraph (c)(1) of this section, cultivating, harvesting, minor drainage, plowing, and seeding are defined as follows:

(1) Cultivating means physical methods of soil treatment employed within established farming, ranching
and silviculture lands on farm, ranch, or forest crops to aid and improve their growth, quality, or yield.
(2) Harvesting means physical measures employed directly upon farm, forest, or ranch crops within established agricultural and silvicultural lands to bring about their removal from farm, forest, or ranch land, but does not include the construction of farm, forest, or ranch roads.
(3)(i) Minor drainage means:
(A) The discharge of dredged or fill material incidental to connecting upland drainage facilities to waters of the United States, adequate to effect the removal of excess soil moisture from upland croplands. Construction and maintenance of upland (dryland) facilities, such as ditching and tiling, incidental to the planting, cultivating, protecting, or harvesting of crops, involve no discharge of dredged or fill material into waters of the United States, and as such never require a Section 404 permit;
(B) The discharge of dredged or fill material for the purpose of installing ditching or other water control facilities incidental to planting, cultivating, protecting, or harvesting of rice, cranberries or other wetland crop species, where these activities and the discharge occur in waters of the United States which are in established use for such agricultural and silvicultural wetland crop production;
(C) The discharge of dredged or fill material for the purpose of manipulating the water levels of, or regulating the flow or distribution of water within, existing impoundments which have been constructed in accordance with applicable requirements of the Act, and which are in established use for the production or rice, cranberries, or other wetland crop species.
Note: The provisions of paragraphs (d)(3)(i) (B) and (C) of this section apply to areas that are in established use exclusively for wetland crop production as well as areas in established use for conventional wetland/non-wetland crop rotation (e.g., the rotations of rice and soybeans) where such rotation results in the cyclical or intermittent temporary dewatering of such areas.
(D) The discharge of dredged or fill material incidental to the emergency removal of sandbars, gravel bars, or other similar blockages which are formed during flood flows or other events, where

such blockages close or constrict previously existing drainageways and, if not promptly removed, would result in damage to or loss of existing crops or would impair or prevent the plowing, seeding, harvesting or cultivating of crops on land in established use for crop production. Such removal does not include enlarging or extending the dimensions of, or changing the bottom elevations of, the affected drainageway as it existed prior to the formation of the blockage. Removal must be accomplished within one year after such blockages are discovered in order to be eligible for exemption.

(ii) Minor drainage in waters of the United States is limited to drainage within areas that are part of an established farming or silviculture operation. It does not include drainage associated with the immediate or gradual conversion of a wetland to a non-wetland (e.g., wetland species to upland species not typically adequate to life in saturated soil conditions), or conversion from one wetland use to another (for example, silviculture to farming).

In addition, minor drainage does not include the construction of any canal, ditch, dike or other waterway or structure which drains or otherwise significantly modifies a stream, lake, swamp, bog or any other wetland or aquatic area constituting waters of the United States. Any discharge of dredged or fill material into the waters of the United States incidental to the construction of any such structure or waterway requires a permit.

(4) Plowing means all forms of primary tillage, including moldboard, chisel, or wide-blade plowing, disking, harrowing, and similar physical means used on farm, forest or ranch land for the breaking up, cutting, turning over, or stirring of soil to prepare it for the planting of crops. Plowing does not include the redistribution of soil, rock, sand, or other surficial materials in a manner which changes any area of the waters of the United States to dryland. For example, the redistribution of surface materials by blading, grading, or other means to fill in wetland areas is not plowing. Rock crushing activities which result in the loss of natural drainage characteristics, the reduction of water storage and recharge capabilities, or the overburden of natural water filtration capacities do not constitute plowing. Plowing, as described above, will never involve a discharge of dredged or fill material.

(5) Seeding means the sowing of seed and placement of seedlings to produce farm, ranch, or forest crops and includes the placement of soil beds for seeds or seedlings on established farm and forest lands.

(e) Federal projects which qualify under the criteria contained in Section 404(r) of the Act are exempt from Section 404 permit requirements but may be subject to other State or Federal requirements.

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 CFR402.02). Delineating the action area is necessary for the Federal action agency to obtain a list of species and critical habitats that may occur in that area, which necessarily precedes any subsequent analyses of the effects of the action to particular species or critical habitats.

The action area determines any overlap with critical habitat and the physical or biological features therein that we defined as essential to the species' conservation in the final rule designating its critical habitat. For species, the action area establishes the bounds for an analysis of individuals' exposure to action-caused changes, but the subsequent consequences of such exposure to those individuals are not necessarily limited to the action area.

For the review of this action, the action area encompasses the geographic extent of the FDEP Assumption of Section 404 permitting within the entire State of Florida. The action area consists of, and is limited to, the State-assumed waters (assumed waters) and areas affected directly or indirectly by the action, including affected upland, terrestrial areas.

The State 404 Handbook section 1.1 states, "The CWA does not define State-assumed waters; rather, it describes waters that a state cannot assume and for which jurisdiction remains with the Corps (retained waters). State-assumed waters then are all waters of the United States that are not retained waters. Retained waters are defined in section 2.0 of this Handbook and listed in Appendix A. Activities within retained waters will generally still require a state ERP authorization and a separate federal authorization from the Corps. To provide certainty, streamlining, and efficiency, the State will consider that any wetlands or other surface waters delineated in accordance with Chapter 62-340, F.A.C. that are regulated under Part IV of Chapter 373, F.S. could be considered Waters of the United States, and will treat them as if they are, unless the applicant clearly demonstrates otherwise."

The BE indicates Florida's request to assume the administration of the CWA Section 404 permitting includes those Waters of the United States (WOTUS) not retained by the USACE; referred to as assumed waters. The USACE will retain permitting responsibility for the discharge of dredged or fill material in those waters defined as "retained waters". This definition can be found in the State 404 Handbook in Chapter 2.0 and the process to determine whether a project is located in retained, or assumed waters, is described in Chapter 4.1 of the State 404 Applicants' Handbook. In addition, Appendix A of the 404 Handbook includes the Retained Waters List maintained by the USACE. The administrative boundary demarcating the adjacent wetlands over which jurisdiction is retained by the USACE is a 300-foot guide line established from the ordinary high water mark or mean high tide line of the retained water. In the case of a project that involves discharges of dredged or fill material both waterward and landward of the 300-foot guide line, the USACE will retain jurisdiction to the landward boundary of the project for the purposes of that project only.

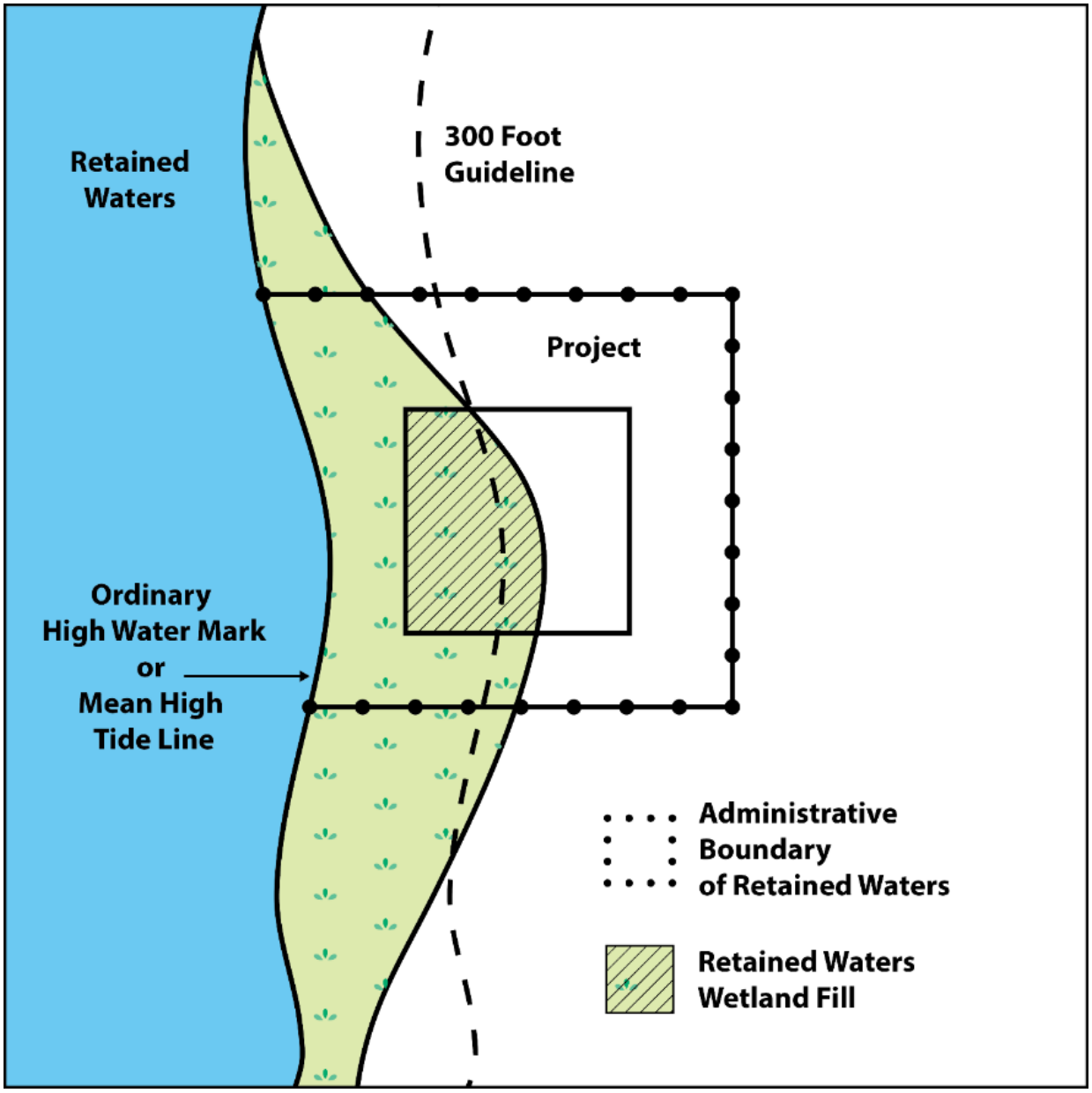
The USACE also retains permitting authority for projects within "Indian country" as that term is defined at 18 USC section 1151 (provided below):

> "Except as otherwise provided in Sections 1154 and 1156 of this title, the term "Indian country," as used in this chapter, means
>
> a) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation,
>
> b) all dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a state, and
>
> c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

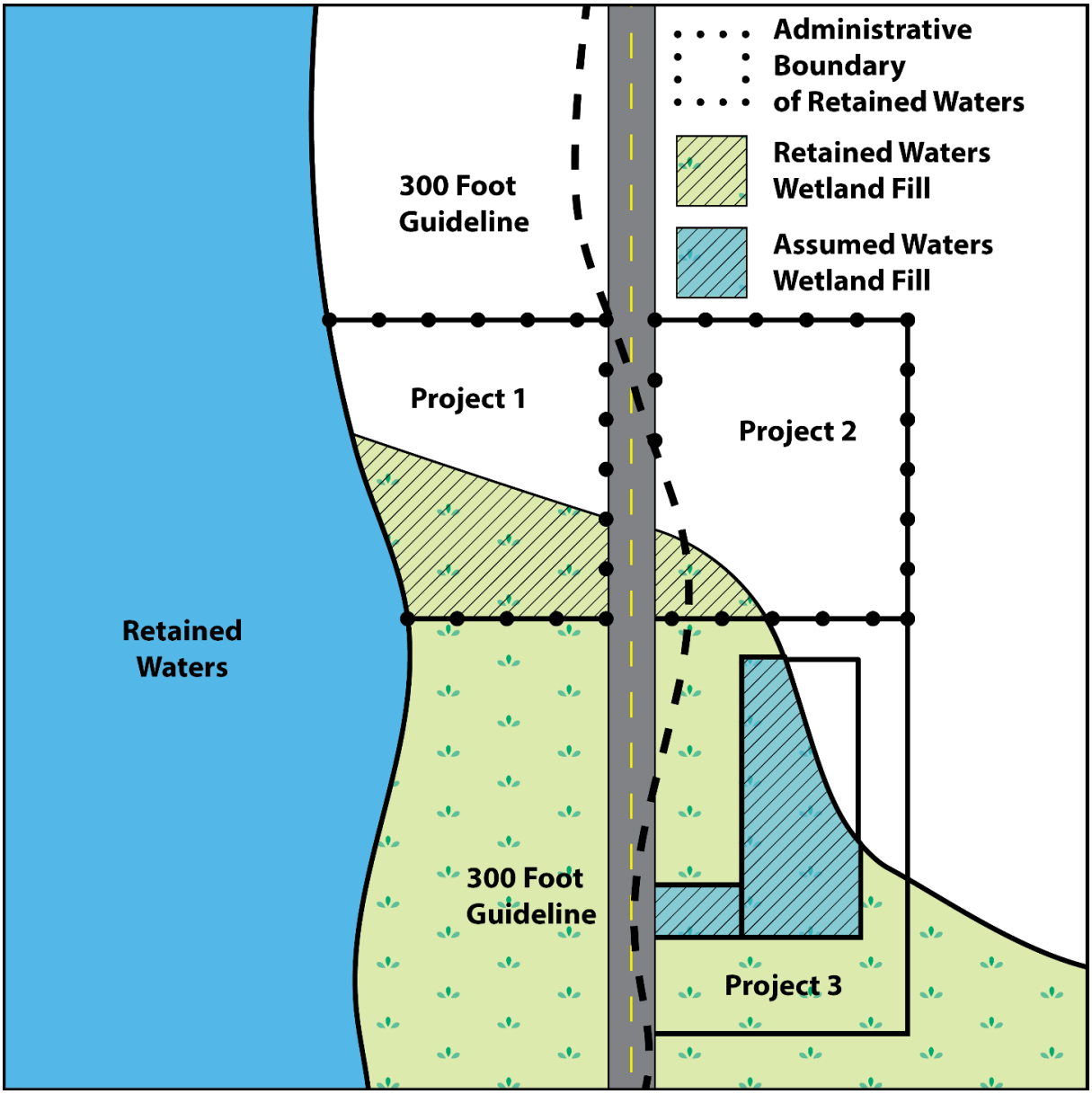
A list of "Indian country" can be found online in the USACE Jacksonville District Regulatory Division Sourcebook.

The boundary of a mitigation bank, excluding the service area, shall be considered the project boundary, even if only a portion of the bank requires a dredge and fill permit under Section 404 of the CWA."

The BE also notes Federal and state-approved dredge and fill activities may occur in isolation or adjacent to one another. In the case of a project that involves discharges of dredged or fill material both waterward and landward of the 300-foot guide line, the USACE will retain jurisdiction to the landward boundary of the project for the purposes of that project only (BE's Figure 2-1 noted below). Projects that fall entirely outside of the 300-foot buffer of the retained waters will be permitted by the State 404 program (Project 3 in Figure 2-2 of the BE). Linear projects that have some portion of dredge and fill activities in retained waters will be entirely authorized and permitted by the USACE, even if dredge and fill activities occur in wetlands landward of the 300-foot buffer (Figure 2-3 of the BE).

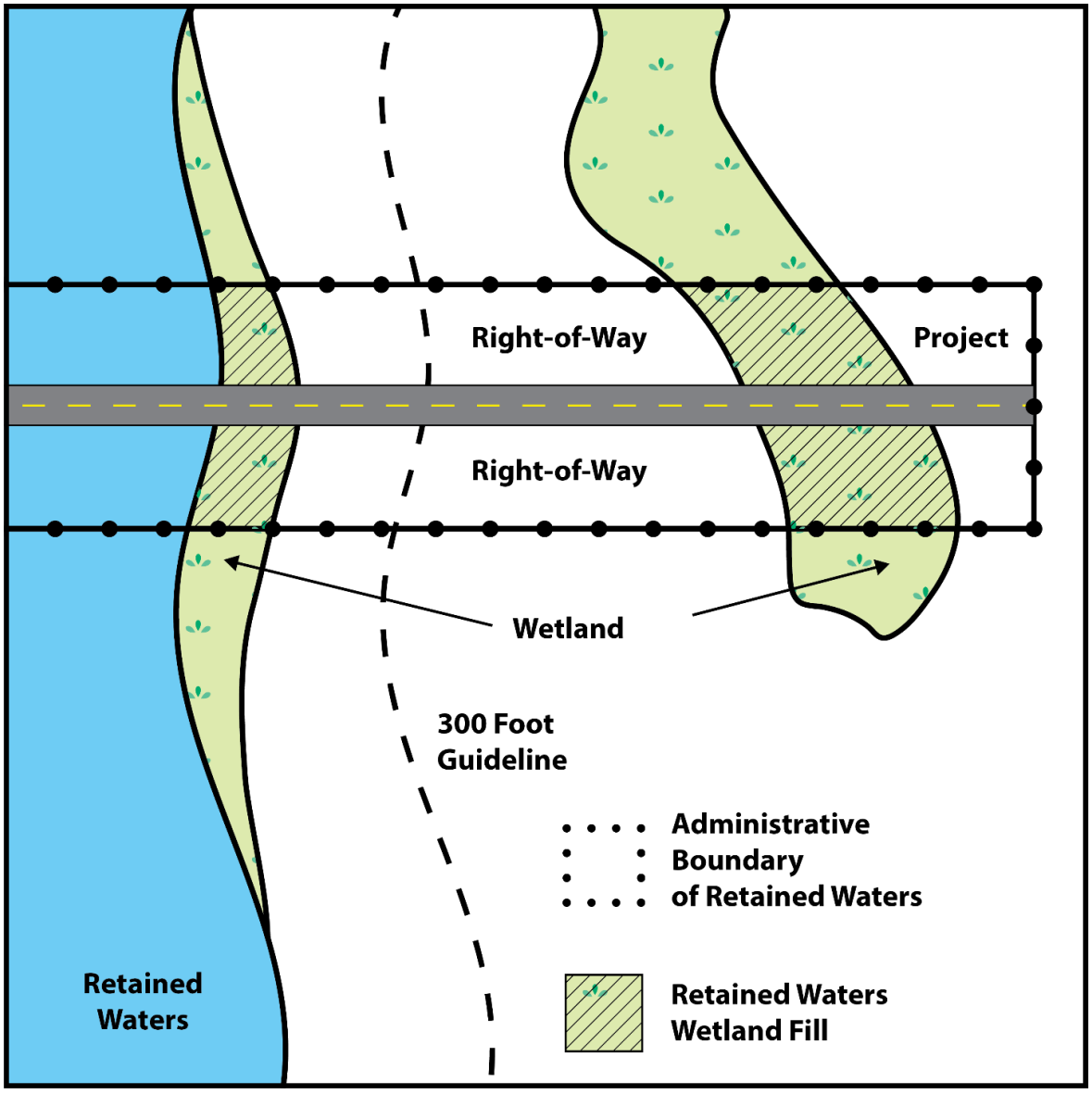


Excerpt from BE's Figure 0-1. Example of activities authorized by the USACE 404 program



Excerpt from BE's Figure 0-2. Example of activities authorized by USACE and FDEP

Projects 1, 2, and 3 show the difference between retained and assumed waters responsibilities. Project 3 would be authorized by FDEP.



Excerpt from BE's Figure 0-3. Example of a linear project

Linear projects may sometimes be miles long, but if there are dredge or fill activities waterward of the 300-foot guideline within the project boundary, the project is considered within retained waters and will be processed by the USACE.

Section 2.4 of the BE (Appendix A) describes in detail the physical attributes of action area. A summary of this description is provided below.

Florida's freshwater ecosystem includes 7,800 freshwater lakes, 700 springs, 11 million acres of wetlands, more than 1,700 rivers and streams, and numerous underground aquifers (Fernald and Purdum 1998 as cited in the BE). It is through these systems that freshwater eventually makes its way to the nearly 2,000 miles of Florida coastline and marine ecosystem.

Although terrestrial habitats are not regulated under the CWA, many ESA-listed species that occupy assumed waters also require or utilize adjacent uplands. Upland portions of permitted activities are also subject to ESA consultation as part of permit review.

As summarized in BE, "Florida's terrestrial ecosystem includes approximately 3.7 million acres of natural habitats that are essential breeding, foraging, and refuge areas for many species. Florida has very little topographic relief, with the highest point at 328 feet above sea level. Slight changes in elevation result in habitat changes, with some upland communities at an only slightly greater elevation than adjacent wetlands. Diverse terrestrial ecosystems provide important habitat for a large variety of wildlife, including the Florida Panther, Gopher Tortoise, salamanders and frogs breeding in inclusions of ephemeral wetlands, and bats and crayfish living in caves (FWC 2019). Though uphill terrestrial habitats help to filter rainwater to lower elevations connected to freshwater habitats, only select ecosystems from the Wildlife Plan are discussed herein due to their relation to the action area."

APPROACH TO THE ASSESSMENT

Section 7(a)(2) of the ESA requires every Federal agency, in consultation with and with the assistance of the Services (U.S. Fish and Wildlife Service and National Marine Fisheries Service), to insure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any ESA-listed species or result in the destruction or adverse modification of designated critical habitat. "'Jeopardize the continued existence of'" means 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 C.F.R. § 402.02) "'Destruction or adverse modification'" means a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species." (50 C.F.R. § 402.02).

Because we are consulting on EPA's approval of FDEP's request to assume the CWA 404 program in Florida's assumable waters, in which FDEP would regulate a broad array of activities conducted over several geographic areas and long periods of time, there is substantial uncertainty about the number, location, timing, frequency, and intensity of regulated activities. Therefore, we developed a programmatic consultation approach to determine whether and to what degree FDEP has structured their regulatory program and EPA has structured its oversight program to ensure approval and implementation of the State 404 program is not likely to jeopardize the continued existence of proposed or listed species or result in the destruction or adverse modification of proposed or designated critical habitat by assessing whether the following criteria are fulfilled: (1) understand the scope of its action; (2) reliably estimate the physical, chemical, or biotic stressors that are likely to be produced as a direct or indirect result of their action; (3) minimize adverse effects of such activities on ESA-listed species and designated critical habitat; (4) identify, inform, encourage, and screen applicants for potential eligibility under or participation in the permitted activity; (5) continuously monitor and evaluate likely adverse effects on listed species and critical habitat; (6) monitor and enforce permit compliance; and (7) modify its action if new information (including inadequate protection for species or low levels of compliance) becomes available.

This approach also recognizes that site- and species-specific considerations would be addressed with the USFWS in subsequent technical assistance efforts with the State of Florida through the FDEP, FWC, USFWS MOU, the State 404 rule (62-331, F.C.A), and EPA's oversight regulations (40 CFR 233).

Jeopardy Determination

The jeopardy analysis in this BiOp relies on four components: (1) the Status of the Species, which describes the range-wide condition of the species, the factors responsible for that condition, and its survival and recovery needs; (2) the Environmental Baseline, which analyzes the condition of the listed species in the action area, without the consequences to the listed species caused by the proposed action; (3) the Effects of the Action, which includes all consequences to listed species that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action; and (4) the Cumulative Effects, which evaluates the effects of future, non-Federal activities in the action area on the species.

For purposes of making the jeopardy determination, the Service: (1) reviews all the relevant information, (2) evaluates the current status of the species and environmental baseline, (3) evaluates the effects of the Action and cumulative effects, (4) add the effects of the action and cumulative effects to the environmental baseline, and, in light of the status of the species, determines if the action is likely to jeopardize listed species.

We evaluated the effects of the action on guilds of ESA-proposed and -listed species and designated and proposed critical habitat. Assigning species to guilds based on life-history similarities allows for a thorough review of expected responses of similar species to stressors without redundantly discussing key impacts for each individual species. Analysis of effects using a guild approach is more appropriate at the programmatic level. Species-specific and site-specific analyses will occur during the technical assistance process conducted between the USFWS and FDEP, and whenever EPA coordinates with USFWS on State permit actions.

Adverse Modification Determination

The destruction or adverse modification analysis in this BiOp relies on four components: (1) the status of critical habitat, which describes the range-wide condition of the critical habitat in terms of the key components (i.e., essential habitat features, physical and biological features, or primary constituent elements) that provide for the conservation of the listed species, the factors responsible for that condition, and the intended value of the critical habitat overall for the conservation/recovery of the listed species; (2) the environmental baseline, which analyzes the condition of the designated critical habitat in the action area, without the consequences to the designated critical habitat caused by the proposed action; (3) the effects of the action, which includes all consequences to the critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action; and (4) cumulative effects, which evaluate the effects of future non-Federal activities that are reasonably certain to occur in the action area on the key components of critical habitat that provide for the conservation of the listed species and how those impacts are likely to influence the conservation value of the affected critical habitat.

For purposes of making the destruction or adverse modification determination, the USFWS: (1) reviews all relevant information, (2) evaluates the current status of the critical habitat and environmental baseline, (3) evaluates the effects of the proposed action and cumulative effects, (4) add the effects of the action and cumulative effects to the environmental baseline, and, in light of the status of the critical habitat, determines if the proposed action is likely to result in the destruction or adverse modification of critical habitat.

Past designations of critical habitat have used the terms “primary constituent elements” (PCEs), “physical or biological features” (PBFs) or "essential features" to characterize the key components of

critical habitat that provide for the conservation of the listed species. Recent critical habitat regulations (50 C.F.R. § 402.02) discontinue use of the terms PCEs or essential features, and rely exclusively on use of the term PBFs for that purpose because that term is contained in the statute. However, the shift in terminology does not change the approach used in conducting a ''destruction or adverse modification'' analysis, which is the same regardless of whether the original designation identified PCEs, PBFs or essential features. For those reasons, in this USFWS, we use the term PBFs to characterize the key components of critical habitat that provide for the conservation of the listed species.

STATUS OF SPECIES

In the BE, EPA identified 235 species that occur in the action area and may be affected by the action and program activities that occur because of the proposed action (Table 3-1 of BE, p. 22). Of the 235, 139 are listed as threatened or endangered under the ESA and the remainder are species which have been proposed for listing, petitioned for listing, are candidates for listing, and/or have reasonable potential to be considered for ESA listing in the future. This BiOp concurs with and adopts the BE's list of ESA-listed and ESA-considered species that occur in the action area and respective effect determinations regarding the effects of the action.

For more information regarding the ESA-listed individual species and critical habitats and the factors affecting their conservation status, please refer to proposed and final listing determinations, critical habitat designations, recovery plans, and five-year reviews available at: http://ecos.fws.gov/ecos/indexPublic.do.

In regard to future listing actions that result in new species being added to the ESA list, the proposed State 404 program's species coordination framework requires that when a State 404 application is received a current list of ESA-listed species must be used at the time a State 404 application is received in determining potential effects to ESA-listed species. Therefore, the State 404 review process is capable of maintaining compliance with the ESA by adapting to future changes to the list of species classified as threatened or endangered under the ESA.

ENVIRONMENTAL BASELINE

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 action (which includes consequences caused by program activities). 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 consequences to listed species or designated critical habitat from ongoing agency activities or existing agency facilities that are not within the agency's discretion to modify are part of the environmental baseline (50 CFR 402.02).

All of the endangered and threatened species and designated critical habitat considered in this BiOp depend on the health of aquatic and terrestrial ecosystems for their survival. These species were listed as endangered or threatened, at least in part, because of the consequences of human activities on the aquatic and terrestrial ecosystems to include estuaries, rivers, lakes, streams, and associated wetlands, floodplains, riparian, and terrestrial ecosystems of Florida. The status and trends of those aquatic and

terrestrial ecosystems determines the status and trends of these species and the critical habitat that has been designated for them.

The BE (Appendix A: section 4, pp. 36-54) includes a description of the baseline for 404 permitting in Florida and its past and ongoing effects on ESA-listed and considered species. This BiOp adopts the BE's detailed description of the environmental baseline, which addresses the baseline of 1) the listed species and 2) their habitats, and 3) the baseline procedures and processes related to the issuance of permits that allow for activities that affect waters of the U.S., adjacent uplands, and the ESA-listed and considered species that reside therein.

The programmatic nature of the action would trigger a change in the framework and processes that affect the implementation of permitted actions that affect the physical environment and potentially affect ESA-listed species and their critical habitats. The BE considers the USACE 404 program and State ERP program as part of the procedural processing (regulatory) baseline.

For example, when EPA publishes its approval of FDEP's assumption of the 404 program in the Federal Register, the USACE will cease to directly administer 404 permits in assumed waters and FDEP would immediately assume administration of 404 permits in assumed waters and modifications to the administration of its ERP program to align it with the State 404 program will be effective.

Procedural Baseline: past and current regulation of discharge of dredged and fill material in Florida

Federal Regulations

The BE states that Section 404 of the CWA (33 USC section 1344) establishes a program to regulate the discharge of dredged or fill material into WOTUS, inclusive of wetlands. The Administrator of the EPA, in conjunction with the Secretary of the Army, acting through the Chief of Engineers, established guidelines for regulating such discharges under Section 404(b)(1) of the CWA (40 CFR 230). The EPA and the USACE jointly implement the regulation and permitting of such proposed activities. In Florida, the USACE Jacksonville District acts as the regulatory agency that issues Section 404 dredge and fill permits.

Individual Permits

To receive a dredge and fill permit authorization from the USACE, an applicant must demonstrate the following under 40 CFR 230.10:

- No practicable alternative to the proposed activity exists that would have less adverse impact on the aquatic ecosystem;
- The proposed activity will not:
    - violate State water quality standards,
    - violate any applicable toxic effluent standard or prohibition,
    - jeopardize the continued existence of Endangered and Threatened species, or result in the likelihood of destruction or adverse modification of critical habitat
    - violate any requirement imposed to protect a marine sanctuary;

- The proposed activity will not cause or contribute to significant degradation of WOTUS; and
- The applicant has taken appropriate and practicable steps that will minimize potential adverse impacts of the discharge on the aquatic ecosystem.

The USACE will request any additional information required to deem an application complete, typically within 15 days of receipt of the application. Once the agency deems the application to be complete, the USACE publishes a public notice within 15 days to receive comments from interested and/or affected parties on the proposed action.

Following receipt of an application and evaluation as to the completeness of the application, the USACE is charged with evaluating the effects of the proposed action on ESA-listed species or designated critical habitat. Where a proposed action may affect a listed species or critical habitat, USACE coordinates and/or consults with the Services prior to issuing any permit. If the USACE determines the proposed activity may affect any endangered or threatened species or their critical habitat, beneficially or adversely, the USACE District Engineer will initiate consultation with the Services. If the USACE District Engineer makes a determination from the submitted application that the proposed activity would not affect ESA-listed species or their critical habitat, the public notice will contain a statement attesting to such and consultation with the Services is not required.

The comment period is typically 30 days; upon receipt of comments, the USACE evaluates the comments received, provides them to the applicant, and determines whether a public hearing is required. Following the comment period (and a public hearing if conducted), the USACE makes a determination as to whether the Section 404 permit should be issued. This determination is based on applicable regulations governing the activity as well as comments received as part of the record. The USACE District Engineer will either prepare a Statement of Findings or – where an Environmental Impact Statement (EIS) has been prepared – a Record of Decision on all permit decisions. The final action of the USACE is either the signature of the issuing official on the authorizing document (a USACE Permit) or a signature on a letter notifying the application of the denial of the permit. An issued permit will contain conditions to follow in execution of the work; a denial will contain written documentation of the reason(s) for the denial.

General Permits

A general permit is issued for structures, work, or discharges that will result in only minimal adverse effects. General permits are issued on a nationwide, regional, or state basis for particular categories of activities. There are three types of general permits – Nationwide Permits, Regional General Permits, and Programmatic General Permits. General permits (which are reviewed by the Services) are usually valid for five years and may be re-authorized by the USACE (the Services will review the proposed reauthorizations).

Nationwide Permits

On a five-year basis, the USACE issues Nationwide Permits (NWPs) pursuant to Section 404(e) of the CWA (33 USC section 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 USC section 401 et seq.). As of January 6, 2017, there were a total of 52 NWPs. The NWPs streamline the requirements of the CWA and are informed by extensive feedback from the public and other key stakeholders. NWPs provide expedited review of projects that have minimal impact on the aquatic environment. Categories of activities that may be covered under the NWPs include linear transportation

projects, bank stabilization activities, aquatic habitat restoration, residential development, commercial and industrial developments, aids to navigation, and certain maintenance activities.

In 2017, the USACE added two new NWPs in addition to the 50 that were in place in 2012. One addition provides a mechanism for an efficient authorization process for the removal of low-head dams to restore streams and enhance public safety; the second addition covers the construction and maintenance of living shorelines to control erosion in coastal areas (adapted from USACE news release dated January 6, 2017) (https://www.usace.army.mil/Media/News-Releases/News-Release-Article-View/Article/1043614/army-corps-of-engineers-revises-and-renews-nationwide-permits/; accessed January 30, 2020).

Regional General Permits

As of February 2020, the USACE Jacksonville District has issued 18 general permits. Each regional general permit has specific terms and conditions, all of which must be met for project-specific actions to be verified as compliant with and covered by the respective general permit.

Programmatic General Permits

Programmatic General Permits are based on an existing state, local, or other federal program and designed to avoid duplication of that program. The USACE Jacksonville District lists 12 programmatic general permits - one of which is only applicable to Puerto Rico (https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Obtain-a-Permit/; accessed January 30, 2020).

Florida regulations

Part IV of section 373, F.S. regulates dredging and filling in wetlands and other surface waters, such as: the construction, alteration, operation, maintenance, abandonment, and removal of stormwater management systems, dams, impoundments, reservoirs, works (including, but not limited to, ditches, canals, conduits, channels, culverts, pipes, and other artificial structures), and appurtenant works (artificial improvements to a dam).

This statute authorizes FDEP and the five water management districts (WMDs) in the state to jointly implement Florida's ERP program. The responsibilities of the agencies are divided according to Operating Agreements between FDEP and the particular WMD. Provisions in the statute allow for FDEP to approve local government programs to implement the ERP program on behalf of the FDEP and the WMDs. As of January 2020, full delegation has been given to Broward County and minor works delegated to the Environmental Protection Commission for Hillsborough County.

The ERP program operates in addition to the USACE Section 404 program that regulates activities in WOTUS. All state, local, and regional governments in Florida delineate wetlands in accordance with state methodology (Chapter 62-340, F.A.C.) instead of the federal wetland delineation method (Section 404 of the CWA and the Federal Manual for Identifying and Delineating Jurisdictional Wetlands). While the ERP application is issued, withdrawn, or denied in accordance with state statutory and rule criteria (briefly summarized below), agency action on the ERP application also constitutes any needed water quality certification (waiver thereto) under Section 401 of the CWA, and coastal zone consistency concurrence statements with Florida's federally-approved Coastal Zone Management program under section 307 (Coastal Zone Management Act). These State ERP reviews and approvals by FDEP, WMD, or delegated local governments are not connected to, dependent upon, nor do they influence the USACE

permit review processes under Section 404 of the CWA. Therefore, the USACE must take separate action to issue or deny any needed federal permit under Section 404 of the CWA and/or section 10 of the Rivers and Harbors Act of 1899, and the USACE decision to issue a permit may or may not be consistent with the State's decision to issue an ERP permit.

To receive an ERP, an applicant must demonstrate that the proposed activity will not be harmful to the water resources of the state and will not be inconsistent with the overall objectives of Florida rules and statutes. The applicant must provide reasonable assurance that the activity will not violate the applicable state water quality standards and that the activity is not contrary to the public interest for all waters that are not designated as Aquatic Preservers or Outstanding Florida Waters. For activities in those designated waters, the applicant must provide reasonable assurance that the proposed activity will be clearly in the public interest. Surface water quality standards are published in Chapter 62-302, F.A.C. In addition, FDEP provides policy guidance on anti-degradation in Rule 62-4.242, F.A.C., and in Rule 62-302.300, F.A.C, which allows for the protection of water quality above the minimum required for classification. Further, FDEP administers the Impaired Waters Rule (Chapter 62-303, F.A.C.), and has established Total Maximum Daily Load criteria (Chapter 62-304, F.A.C.) (FDEP 2020b). It is the intent of FDEP and the WMDs that these criteria are implemented in a manner that achieves a programmatic goal and a project-permitting goal of no net loss in wetlands or other surface water functions.

To determine whether an activity is not contrary to the public interest or is clearly in the public interest, the FDEP must consider and balance the following criteria:

- Whether the activity will adversely affect the public health, safety, or welfare or the property of others;
- Whether the activity will adversely affect the conservation of fish and wildlife, including endangered or threatened species, or their habitats;
- Whether the activity will adversely affect navigation or the flow of water or cause harmful erosion or shoaling;
- Whether the activity will adversely affect the fishing or recreational values or marine productivity in the vicinity of the activity;
- Whether the activity will be of a temporary or permanent nature;
- Whether the activity will adversely affect or will enhance significant historical and archaeological resources; and
- The current condition and relative value of functions being performed by areas affected by the proposed activity.

FDEP provides a copy of all notices of ERP applications for individual permits that propose regulated activities in, on, or over wetlands or other surface waters to the FWC for review and comment. The FDEP and FWC frequently work together on non-regulatory issues as well as regulatory. Examples of the many collaboration efforts include habitat restoration projects, management of State Parks and management of species on other State-owned easements and property.

In accordance with the provisions of section 373.4141, F.S., the FDEP shall review the ERP application to determine if it is complete. If the application is incomplete, FDEP must request additional information (RAI) within 30 days. The applicant must respond to such requests within 90 days. Within 30 days after receipt of such additional information, FDEP must review the submitted material for completeness. The

WMD processing procedures for ERP vary somewhat to accommodate the requirements of their specific Governing Boards.

In accordance with section 120, F.S., FDEP must decide whether it should issue or deny an ERP within 60 days after receipt of the original application, the last item of timely requested additional material, or the applicant's written request to begin processing the permit application. Application completeness is determined by whether the applicant has submitted all materials required for review as specified by rule and statute. The WMDs also are subject to this requirement, but their ERP processing procedures vary by each district to accommodate the requirements of their different Governing Boards. Pursuant to section 120.60(1), F.S., any application that FDEP or the WMD does not approve or deny within 60 days is considered approved by default.

Once issued, ERP permits are valid for the life of the system (which includes all structures and works authorized for construction or land alteration). The ERP permit does not automatically expire after the construction phase (typically five years) of a project but continues to cover operation (use) of the system in perpetuity.

Under current regulations for permit issuance, an applicant proposing any activity that is expected to result in impacts to both federal and state jurisdictional wetlands or other surface waters must obtain both a Section 404 permit from the USACE and an ERP permit from FDEP or the WMDs. There is the potential for duplication of effort to obtain what, in some cases, results in nearly identical permits for anticipated impacts to the same extent of wetlands and other surface waters. The timelines for review and issuance of a federal Section 404 Permit and a State ERP permit can vary substantially. The State of Florida has an interest in assuming the federal permitting responsibility for Section 404 and will preserve the environmental protections afforded by federal law; the result should increase efficiency and consistency in the application review and issuance process while ensuring a framework that will maintain protections for listed species and their critical habitats.

Ecological Baseline

Wetlands

In 1845, the State of Florida contained an estimated 20.3 million acres of wetlands (Dahl 2005). By 1996, the BE notes only about half of the original wetlands remained (USFWS 1996). From the mid-1950s through the mid-1970s, prior to the CWA, the rate of wetland loss has been estimated at 72,000 acres per year (Hefner 1986). In the following decade, wetland loss decreased to an estimated 23,700 acres per year (Hefner et al. 1994).

As of 1996, an estimated 11.4 million acres of wetlands covered about 29 percent of the surface area of Florida, more than any other state in America at that time. Of these wetlands, 90 percent or about 10.2 million acres were freshwater wetlands. The average annual net loss of wetlands from 1985 through 1996 was 4,740 acres, and freshwater forested wetlands exhibited a net gain. During the 1985-1996 interval, 72 percent of wetland loss was attributed to development and 28 percent to agriculture (Dahl 2005).

Central and Southern Florida Project

The Central and Southern Florida (CS&F) Project for flood control and other purposes was authorized by the Flood Control Act of 1948 as an improvement plan for flood control, drainage, and other purposes over an 18,000-square-mile area of central and south Florida. This project authorized the

diversion of water to the Atlantic Ocean and the Gulf of Mexico through canals and the diversion of water southwest through the Everglades. The project provided benefits for human populations that were able to build, grow, and develop these new lands. The Everglades Agricultural Area was developed for the production of food, and areas further east became densely populated cities, including Miami, Ft. Lauderdale, and West Palm Beach. Unfortunately, the project also resulted in the modification and loss of 2,400 square miles of freshwater wetlands, including the Everglades (USACE 2019a). See Figure 4-1 of the BE for a comparison of historic freshwater flows compared to water flows today.

Everglades Restoration

Florida's everglades are twice the size of New Jersey, comprised of a mixture of dense forests and open prairies, sunny croplands and shady swamps, rural areas and cities. The South Florida Ecosystem Restoration Program, a partnership between the federal government and the State of Florida, consists of a suite of projects that focus on the C&SF system. In 2000, congressional authorization created the Comprehensive Everglades Restoration Plan (CERP), which is the single largest of the program's efforts. CERP is a 50/50 partnership between the federal government and the State of Florida. It is a program to restore, protect, and preserve water resources in central and southern Florida, including the Everglades. The USACE is the lead federal agency, and the South Florida Water Management District (SFWMD) is the lead State agency in this effort.

For 20 years, the CERP program has been designing, planning, and constructing multiple components of the South Florida Ecosystem Restoration Program. The goal of these efforts is to eventually improve 2.4 million acres of south Florida's wetlands ecosystems (including Everglades National Park), by reducing high volume discharges from Lake Okeechobee to the estuaries and improve water delivery to the Florida and Biscayne Bays, as well as enhance the freshwater supply (USACE 2019b). See Figure 4-2 of the BE for a depiction of the Everglades restoration project and the associated improvements to future ecosystem conditions.

Historical Federal Permitting: Habitat

WOTUS, as defined under currently applicable regulations and guidance, are regulated by the USACE under Section 404 of the CWA, and by FDEP and the WMDs. The following discussion is based on data provided by the USACE and characterizes Section 404 permits issued from 2014 through 2018. The habitat types are from Wildlife Plan and Guide to the Natural Communities of Florida (FNAI 2010), and each includes multiple subtypes. The BE cross walked with Cowardin types used for USACE reporting; while similar, definitions may not match entirely.

A single 404 permit may authorize activities that affect multiple wetlands or surface waters areas within the project area. So, the total number of areas will be larger than the total number of permits issued.

Please note that this data contained in the BE was used to analyze and depict general data trends for this BiOp to use, and not serve as a source for definitive quantitative data. The data summarized from the BE likely overestimate the number of projects that will be in assumed waters but is considered by USFWS to be the best available information.

The BE assessed the impact of the various types of wetlands. These impacts are summarized below.

Freshwater Non-forested Wetlands

Freshwater non-forested wetlands (assumed to be roughly equivalent to combined PEM and PSS Cowardin Types) are associated with a considerable number of the permitted activities in Florida from FY 2014 through 2018; the number of WOTUS areas authorized ranged from 263 to 542, and the acreage ranged from 320 to 2,069 annually. Although freshwater non-forested wetlands are among the most extensive in Florida (about 5.4 million acres) (FWC 2019), Table 4-1 of the BE suggests that Section 404 permitted fill activities disproportionately affected this habitat type.

Freshwater Forested Wetlands

Freshwater forested wetlands (to be roughly equivalent to Palustrine Forested (PFO) Cowardin Types) accounted for an even greater number of permitted fill activities from FY 2014 through 2018; the number of WOTUS areas authorized ranged from 354 to 622, and the acreage ranged from 727 to 1,980.

Freshwater forested wetlands include about 4.2 million acres or about 10 percent of Florida's land area. Table 4-1 of the BE suggests that Section 404 permitted fill activities disproportionately affected this habitat type.

Lakes

Lakes (assumed to be roughly equivalent to lacustrine Cowardin Types) accounted for a relatively small proportion of permitted activities: 24 to 32 WOTUS areas authorized from FY 2014 through 2018, and nine to 48 acres. Lakes cover almost 1.3 million acres in Florida, with much of the surface area in public ownership.

Rivers and Streams

Rivers and streams (assumed to be roughly equivalent to riverine Cowardin Types) accounted for 124 to 238 WOTUS areas authorized from FY 2014 through 2018, and 79 to 432 acres with considerable year to year variation. Estuarine Cowardin Type wetlands may also fall in this category, with a small area included in assumed waters; 22 to 112 WOTUS areas associated with permits were issued for estuarine wetlands, including three to 17 acres of impacts.

Marine

Relatively small areas of marine habitat (assumed to be equivalent to marine Cowardin Types) are within assumed waters; WOTUS areas authorized ranged from two to 15 per year, including less than one to about 10 acres of impacts per year.

Uplands

While uplands are not regulated under state wetland regulations, under the CWA and ESA, if uplands include listed species which can be adversely affected as a result of the action, those impacts/effects must be addressed. ESA-listed species could be affected by actions on uplands that are associated with wetlands permits such as construction of access roads or staging areas, and many species utilize both wetland and upland habitat. Thus, such features are often included as part of the species coordination process for a State 404 permit application review.

Inventories and Surveys for Habitat Types and Quantities

The most current information on Florida habitat types is summarized in the Wildlife Plan and is also available as GIS layers from the FNAI. While this information is in some cases based on site-specific inventories or surveys, it is presented at the statewide level. A statewide approach is believed to be

appropriate for the statewide Programmatic BE. Available GIS layers can be used to map specific wetlands, at a scale that can be presented in a statewide view or mapped on a finer scale when needed.

Historical ESA Consultations Triggered by Federal Wetland Permitting

The BE used the USACE permit database provided by the Regulatory Division of the USACE Jacksonville District, to examine consultations from fiscal years 2014 through 2018. This database includes all temporary and permanent permitted wetland impacts by Cowardin code, permit authorization type, dredge or fill acreage approved, and a project site coordinate. The database also includes all ESA consultations by type, agency, closure method, ESA-listed species potentially affected, and a corresponding object identification number that links the ESA consultations with the permitted wetland impacts.

The BE estimates that out of those past Section 404 permit applications reviewed, 7% of reviews were reasonably certain to result in incidental take (n=~368 permit reviews out of 5,195). This percentage was calculated using the USACE Jacksonville District permitting database's "Formal" choice in the "Consultation Type" field, since most of the formal consultations can be assumed to be associated with activities that may cause incidental take. Approximately 14% resulted in "Informal" type consultations. Approximately 79% of consultations from 2014-2018 were covered by existing programmatic consultations or effect decision tools.

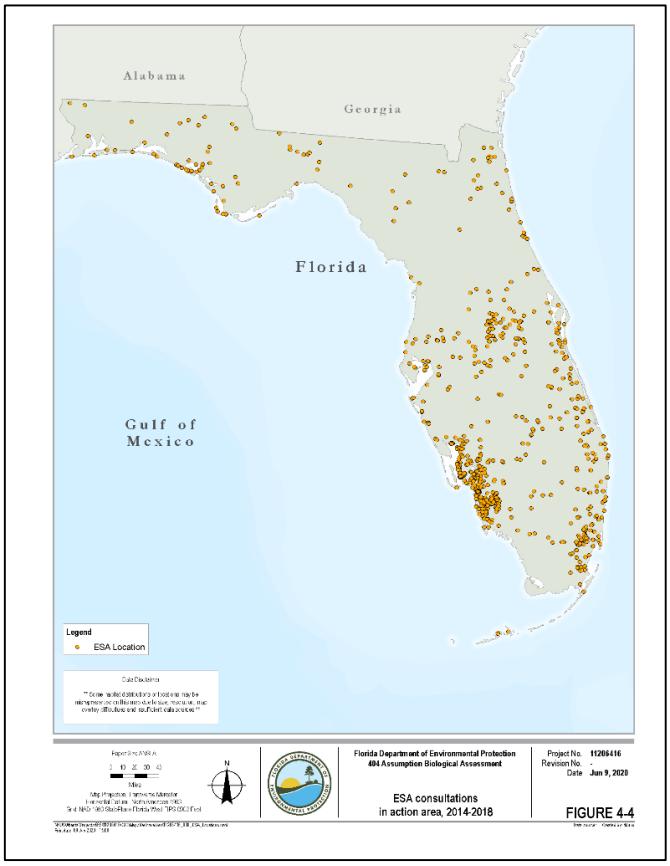
For the USACE permit data collected during the years 2014-2018, a small proportion of the total number of ESA-listed species accounted for the majority of consultations. During this time, many of the species subject to frequent consultation had existing decisions tools such as consultation keys or programmatic biological opinions. For those species, such decision tools can help guide future consultations and assist FDEP when assessing potential effects of proposed actions.

Of the 139 listed and two (2) proposed species in the action area, 84 have been the subject of ESA consultations in the past five years. Two species (Eastern Indigo Snake and Wood Stork) accounted for 56.6% of species-level consultations, and just 15 species accounted for 93.3 percent of all species-level consultations. Recent consultations are not distributed evenly within the action area and can be especially dense in areas of rapid growth and development.

Excerpt from the BE (Table 0-1a). Consultation Types for Federal actions Totals, FY 2014 – 2018

ESA Determination	Total # (2014-2018)	% of Total
Formal	368	7.08
Informal	710	13.67
Programmatic	4117	79.25
Total	5195	100

Source: USACE Jacksonville District



Excerpt from BE (Figure 0-1). Locations of ESA Consultations in actionarea, 2014 – 2018

EFFECTS OF THE ACTION

Effects of the action 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. 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. (See 50 C.F.R. § 402.17).

Programmatic Approach

As noted above, the scope of EPA's approval of FDEP's request to administer the CWA 404 program in assumable waters is essentially statewide, covering an array of operations that may affect a wide variety of ESA-proposed and -listed species and proposed and designated critical habitat. Because this is a consultation on a programmatic action, it is not feasible, nor is it required, to conduct a meaningful site-specific and species-specific effects analysis in this BiOp. Therefore, the USFWS determined that a programmatic consultation is appropriate in determining whether FDEP's 404 program and EPA's oversight of FDEP's 404 program is structured to insure that no permit will be issued that is likely to jeopardize threatened and endangered species and destroy or adversely modify critical habitat. For future permits issued under the State 404 program, site-specific and species-specific information will be

available and assessed through the technical assistance process with the State and/or through coordination with the EPA, when EPA has not waived its review of the State permit action.

Key Assumptions for the Effects Analysis

In developing this analysis, we made a number of key assumptions due to the lack of information and uncertainties surrounding the location, timing, frequency, and intensity of State 404 permit actions. If these assumptions prove incorrect or warrant changes during implementation of the State 404 Program, it could affect the validity of this analysis and trigger re-initiation of ESA section 7 consultation if it results in effects that were not considered herein pursuant to 50 CFR 402.16.

As stated in the BE and the MOU, FDEP will provide USFWS with copies of all permit applications for review and comment, and to include in the record for the draft permit any species protection measures that the FWS recommends.

USFWS views this exchange of information and any resulting coordination as falling within the broad scope of "technical assistance" as described in the USFWS section 7 Consultation Handbook.

Key Assumptions of this BiOp in determining whether the proposed Federal action complies with section 7(a)(2) of the ESA.

1. USFWS will receive all State 404 permit applications upon receipt by the FDEP and all public notices issued by FDEP in accordance with timelines established by State and Federal regulations.
2. Where necessary, FDEP will incorporate the species protection measures, monitoring, and reporting recommendations provided by the USFWS through technical assistance facilitated by the exchange of information between the State (FDEP and FWC) and the USFWS
3. The species protection measures, monitoring, and reporting developed by FDEP, FWC, and/or recommended by USFWS and implemented by FDEP and the permittee will minimize the adverse effects to levels that will avoid jeopardy to species and/or destruction and adverse modification of critical habitat
4. For any existing 404 permit applications that are transferred from the Corps to FDEP upon assumption, FDEP may adopt any conditions that USFWS previously provided to the Corps in order to fulfill compliance with this PBO or may coordinate with USFWS to modify or amend the earlier conditions recommended by USFWS. The USFWS assumes this process will resolve any concerns regarding adverse effects to ESA-listed species and designated critical habitat that weren't previously considered on the original section 7 with the Corps.
5. FDEP and EPA will use their respective authorities to minimize adverse effects of State permit actions and ensure compliance with all permit conditions and/or conservation measures that are included as part of the State 404 permit action.

Evaluation of the Programmatic Consultation Criteria

We use a programmatic approach to determine whether and to what degree the FDEP 404 program and the EPA oversight of the FDEP 404 program have the structures needed to insure the issuance of State 404 permits is not likely to jeopardize the continued existence of proposed or listed species or result in the destruction or adverse modification of proposed or designated critical habitat. In this evaluation, we

assess whether the State 404 program, as implemented by FDEP and overseen by EPA, fulfills the following criteria: (1) understand the scope of its action; (2) reliably estimate the physical, chemical, or biotic stressors that are likely to be produced as a direct or indirect result of their action; (3) minimize adverse effects of such activities on ESA-listed species and designated critical habitat; (4) identify, inform, encourage, and screen applicants for potential eligibility under or participation in the permitting activity; (5) continuously monitor and evaluate likely adverse effects on listed species and critical habitat; (6) monitor and enforce permit compliance; and (7) modify its action if new information (including inadequate protection for species or low levels of compliance) becomes available. While we recognize that site-specific activities would be addressed on a permit-specific basis during the technical assistance process with the State and coordination with EPA (when EPA has not waived review of the state permit action), this 7- question approach allows us to consider how the overall implementation of EPA's proposed action (which would include these site-specific processes) avoids jeopardy and adverse modification. We discuss each criterion and its applicability to the proposed action in the following paragraphs.

Description of effects of the action

The BE states the action studied in the BE is EPA's approval of the State's Assumption of the dredge and fill permitting program under Section 404 of the CWA for waters assumable by the State. Inherent with the action is that the USACE would no longer accept 404 permit applications from the regulated community in assumed waters. The 404 program activities caused by the EPA approving the States 404 Program are: 1) FDEP would begin processing 404 permits in assumed waters, 2) FDEP would be required to coordinate with USFWS in reviewing permit applications in order to avoid or minimize effects to ESA-listed species and insure FDEP permit actions are not likely to jeopardize a species or adversely modify its critical habitat, and 3) the consequence of FDEP issuing 404 permits would be the placement of dredged or fill material into waters of the United States, which in turn would alter the environment where ESA-considered species may exist or designated critical habitat may exist.

The USFWS has determined that the endangered species coordination processes required in the State's operation of the State 404 program (as detailed in this BiOp's Description of the action and in the BE) are as protective as the section 7 interagency consultation processes that occur in the operation of the USACE 404 Program (as detailed in this BiOp's description of the environmental baseline).

The EPA action is not expected to increase or decrease the future number of CWA section 404 regulated activities. It is reasonable to expect that the permitting history presented in the BE for the years 2014-2018 approximates the number and types of permitting activities that could occur over the next five years. See Chapter 4.2.1 of the BE regarding the limitations of the data used in the analyses of the BE, regarding the interpretations of the USACE database and shapefile.

Because the precise number and locations of future State section 404 permit applications are unknown, the exact effects to ESA-species cannot be accurately determined. However, this BiOp and the BE examined the history of section 7 consultations related to CWA 404 applications and the data indicates 404 permits tend to cluster in rapidly developing regions of Florida.

Using the best available information on recent (2014 - 2018) permitting activities as a baseline (see Chapter 4 of the BE), and the information included in the species accounts in Appendix B of the BE, a qualitative assessment of the potential effects of the action on listed and proposed species and designated and proposed critical habitat was presented in the BE. The BE did not distinguish direct and

indirect effects based on 2019 revisions to the ESA's section 7 implementing regulations (50 CFR 402); however, both immediate impacts and impacts that are reasonably certain to occur later in time were considered.

Table C.1 in Appendix C of the BE summarizes the potential impacts of dredge and fill activities on ESA-listed and proposed to be listed species. This stressor table is intended to identify potential effects and facilitate analysis of which effects are reasonably certain to occur if EPA approves Florida's assumption of the CWA section 404 Program in assumed waters. A detailed analysis of potential effects in the future is not possible, because, as stated above, the exact locations, amounts, and types of impacts are not yet known. The BE briefly summarizes major categories of impacts and those are presented below, followed by a discussion of potential effects on major taxa.

Types of Effects

The following discussion is presented in the BE. This description of effects is not exhaustive but includes some of the more common influencing factors and consequences to species that may result from activities associated with the placement of dredge and fill material in waters of the U.S. There is a spectrum of effects to consider, including beneficial effects. For example, there is a level of disturbance without a detectable sign of effect (e.g. a wood stork flushed off a nest but returns before the eggs are harmed). There is also disturbance with a detectable sign of effect (e.g. a wood stork is flushed off a nest and the eggs overheat and die). Heightened levels of effect include injury that is observable or detectable, such as a failure to reproduce because of physiological or ecological effects of the action, or the death of one or more individuals.

There is also a theoretical spectrum of likelihoods regarding the probability that a given event or consequence might occur. These levels of likelihood that a consequence will occur include potential, unlikely, possible, likely, more than likely, and reasonably certain. With respect to a potential consequence meeting the definition of an Effect of the action, the consequence must be reasonably certain to occur which requires clear and substantial information to support that conclusion (50 CFR 402.02, 402.17). Potential stressors or effects to the species and to the essential physical and biological features of any critical habitat are discussed below and summarized in Appendix C, and we note that these same factors are evaluated during the review of State 404 permit applications and actions.

Biotic Stressors

Biotic stress is stress that occurs as a result of damage done to an organism by other living organisms, such as bacteria, viruses, fungi, parasites, beneficial and harmful insects, weeds, and cultivated or native plants. Dredge and fill activities can alter competitive balances, change predator/prey relationships, or encourage the establishment of invasive plants or animals, which can alter habitat structure. Loss or decrease, or colonization or increase, of a species can cascade through multiple trophic levels and, in some cases, even contribute to habitat alteration (monotypic stands of invasive plants).

Physical Stressors

Physical stressors should be assessed individually and cumulatively, when assessing potential biological impacts. An example of a physical stressor could be the physical diversion of a stream to another location, which may adversely impact the habitat for the flora and fauna using the original location of the stream. Other examples include the construction of new, improvements to, and even the removal of dams, weirs, and culverts, the removal of wetlands and surface waters by filling with materials, and the

creation of surface waters by dredging and excavation. Physical stressors include direct mortality (burying or trapping of individual animals by fill or equipment placing fill), especially for smaller, less mobile species; it can also result in loss of habitat and displacement of more mobile species able to escape the immediate effect. Fill of part of a wetland can contribute to loss of function even if most of the wetland remains intact.

Dredging can result in temporary to permanent loss of aquatic bottom communities, and sedimentation can reduce visibility, clog gills of aquatic species, and bury immobile organisms. Recovery from dredge effects may require hours to years, depending on the habitat, substrate type, and the extent of the disturbance.

Fragmentation can affect species that migrate seasonally between habitat types (pond breeding salamanders which spend the summer in uplands up to hundreds of feet away) or which have large home ranges and frequently move among resource types (Eastern Indigo Snake or Florida Panther). It can also disrupt metapopulations, especially for short-lived invertebrates dependent on stochastic environments, reducing the frequency of recolonization of otherwise suitable habitat.

Changes to hydrologic regime may include lowering of groundwater levels, increased runoff, or altered hydroperiod. Changes that result in early drying of ponds or wetlands may result in mortality to pond breeding amphibian larvae or small fish, while conversion of a seasonal wetland to a permanent pond may allow colonization by large predators, including stocking of game fish.

Some construction activities (e.g., pile driving or dredging) can result in air or underwater noise and vibration effects. Analysis of and attempting to reduce these effects has become more common in recent years. Construction activities such as noise, vibration, as well as visual disturbance, may alter the behavior of ESA-listed species.

Even measures intended to reduce effects can sometimes have unintended consequences. Some projects have relocated ESA-listed species, but little follow-up monitoring has been done to document success or failure of the translocations.

Physicochemical Water Quality Stressors

Physicochemical stress results from environmental factors such as food/nutrition, toxins, metabolic disorders, infections, and inflammation. Water Quality changes are commonly associated with dredge and fill activities, although these are not always easy to describe. Effects can include changes in water temperature, gas or oil dripping from construction equipment or generators to fill of a wetland, eliminating or reducing natural filtration of sediment and pollutants and resulting in degradation of downstream habitat. Dredging may also re-suspend environmental contaminants in sediment (common in industrial areas). Changes to nutrient cycling or exchange are even less obvious and may result from new activities occurring on or adjacent to the filled areas.

Potential Effects

The following discussion is grouped by major taxa and discusses potential effects of the action by future activities that may be authorized, should the State 404 program be approved, within guilds of species with similar habitat needs or life-history traits. These effects are similar to the effects of the current USACE Section 404 process for granting or denying permits, only will be performed by the State 404 program process as a consequence of the action, if approved. It is assumed that overall, the future number and/or any rate of increase for State 404 applications and the general types of activities and

overall dredge or fill quantities will be similar to those permitted in similar jurisdictional waters as past requests for permits by the USACE, and would not change due to an approval of the State's request for Assumption.

Mammals

Twenty-four mammalian species/subspecies are included in Appendix C, Table C.1. Two of these mammals are extirpated from the state and are therefore excluded from further consideration in this BE. General habitat preferences in Florida can group the remaining twenty mammals into the following broad categories: wetland/marsh (six mammals), forests/grasslands/swamps (two mammals), tropical hardwood hammock/mangrove (three mammals), caves (four mammals), pine rockland (one mammal), beach/scrub dune (five mammals), and aquatic (one mammal). These groups are intentionally broad for this macro analysis. Impact analysis on the species level (that takes into consideration species'/subspecies' microhabitat preferences) is presented in Table C.1.

In general, all mammalian species under consideration in this BE that occupy or frequent WOTUS or adjacent habitats during any stage of their life histories and behaviors may be disturbed by activities during periods when authorized activity-related noise and vibration exceed baseline levels. Such activities may also disturb the natural behavior of ESA-considered species due to visual disturbance during construction activities.

ESA-considered mammals that occupy wetlands and marshes in Florida include voles, rabbits, and rats. These species/subspecies may occupy or use wetland/marsh habitat during all or a portion of their life history (e.g., for breeding, foraging, or shelter). Marsh and wetland species are likely to be directly affected by impacts to their habitat from future authorized dredge and fill activities, which may also result in habitat fragmentation. Changes in existing hydrological regimes and water quality associated with future authorized activities could also degrade the quality of wetland/marsh habitat and vegetation (e.g., allow for invasion of non-native vegetation). Dredge and fill activities are also frequently associated with coastal development. Development of marshes/wetlands may create suitable conditions for non-native predators (e.g., cats and dogs) and competitors (e.g., *Rattus rattus*), which would also impact these ESA-considered species via increased ecological pressures.

Carnivores with large home ranges (e.g., Florida Panther and Red Wolf) occupy a diverse range of habitats, such as forests, grasslands, and swamps in Florida (as well as pine rocklands). Due to the restricted range of the Red Wolf on protected land in Florida (limited to St. Vincent Island, a USFWS National Wildlife Refuge), future activities authorized by the State 404 program are not likely to adversely affect the species. However, future permitted activities may impact the Florida Panther through direct impacts to habitat (dredge and fill), habitat fragmentation, and changes to existing hydrological regimes/water quality. Habitat fragmentation is one of the primary threats to this subspecies and a limit to its recovery.

Tropical hardwood hammock/mangrove ESA-considered mammal species (bats, rats, and mice) are likely to be impacted by future permitted activities via habitat fragmentation from fill or impacts to hydrology/water quality. Several species require fresh sources of drinking water, and their prey items are also dependent on these landscape features. In addition, impacts to habitat, including fragmentation, may create opportunities for non-native predators (e.g., cats) to colonize/thrive. The extent of tropical hardwood hammock and mangrove, particularly in south Florida, has declined significantly over the last several decades as a result of development, and further fragmentation could have significant impacts on ESA-considered species (USFWS 1999).

Several ESA-considered bat species/subspecies occur in limestone karst cave regions of the Florida Panhandle. Most of these bats are rare/unlikely to occur in the state, and future permitted activities are unlikely to adversely affect them. However, the Tricolored Bat is a permanent resident throughout Florida and occupies caves as well as woodland habitat and urban landscapes. Water features are also important to the species as foraging habitat. Direct impacts on the species' habitat (fill) as well as an increase in habitat fragmentation or impacts to hydrological regimes/water quality, may adversely affect the species.

The Key Deer (as well as the Florida Panther) inhabits pine rocklands. Pine rockland (as well as hammock) contains a substantial portion of the deer's forage plants, freshwater, and cover, which is especially important for fawning. Ongoing threats to the species include urbanization. Through direct impacts to habitat via fill, as well as habitat fragmentation and impacts to water quality, future permitted activities could have an impact on the subspecies.

Several ESA-considered beach mice occupy dune systems vegetated by sea oats and adjacent scrub (dominated by oaks and sand pine or palmetto) in coastal Florida. The predominant factors of decline for these mice are habitat loss due to alteration or conversion of dunes (from human development and use) as well as predation by non-native predators. Direct impacts to habitat via fill, dredging, and habitat fragmentation (which may make habitat for hospitable for non-native predators) could affect these species.

The West Indian Manatee is the only ESA-listed aquatic marine mammal considered in this BE. Florida manatees occur in freshwater, brackish, and marine environments, including coastal river estuaries, sloughs, canals, creeks, and lagoons. The species requires a source of freshwater for drinking. Threats to the species include human-caused mortality (watercraft collisions), interactions with commercial fishing gear, pollution, exposure to cold/loss of warm-water refugia, red tides, and impacts to habitat. Future activities authorized by the State 404 program could affect this species from dredge and fill activities, increases in vessel storage and operation, and impacts on habitat, including changes in hydrologic regimes, water quality, water control structures, and habitat fragmentation.

Birds

Nineteen avian species/subspecies are included in Appendix C, Table C.1. Five of these birds are extirpated from the state and are therefore excluded from further impact analysis in this BE. The remaining 14 birds can be grouped by general habitat preferences in Florida into the following broad categories: marsh/wetland birds (five birds), upland scrub birds (one bird), coastal tidal/marine birds (four birds), grassland birds (two birds), pine savanna birds (one bird), and forest/forested wetlands birds (one bird). These groups are intentionally broad for this macro analysis. Impact analysis on the species level (that takes into consideration species'/subspecies' microhabitat preferences) is also presented in Appendix C, Table C.1.

In general, all avian species under consideration in this BE that occupy or frequent WOTUS or adjacent habitats during any stage of their life histories may be disturbed by future permitted activities during periods project noise and vibration exceed baseline levels. In addition, these activities may also alter the natural behavior of ESA-considered via visual disturbance during construction activities.

Marsh/wetland avian species may be affected by any direct impacts to their habitat (nesting, foraging, roosting, overwintering, or stop-over site habitat). Physical impacts to their habitat associated with future State 404 permits may include fill, dredging, and habitat fragmentation. In addition, fill of

marsh/wetland habitat may result in a change to existing hydrologic regimes that could impact prey availability, via providing better conditions for invasive/competing prey species or reducing habitat for prey). Changes in hydrology also have the potential to flood habitat and nesting areas (resulting in nest failure), allow aquatic or terrestrial predators easier access to nests (during flooding vs. receding water conditions), and change the existing nutrient cycle. Changes in hydrology may result in high nitrogen levels in marshes/wetlands. The habitat then may become choked by an overabundance of emergent vegetation. Future permitted activities may also result in changes to water quality that could impact existing marsh/wetland vegetation and prey items (reducing habitat suitability for the species).

The only upland scrub avian species under evaluation is the Florida Scrub-jay. Florida Scrub-jays occupy early successional xeric scrub and scrub flatwood habitat in relict sand dunes in north and central Florida. This xeric habitat is well-drained but may be interspersed with swale marshes. Direct impacts associated with permitted activities that could affect the species include placement of fill, alteration of hydrologic regimes, and habitat fragmentation (a major issue that hampers the recovery of this species).

Direct impacts of future permitted activities on coastal tidal/marine avian species may include fill, dredging, and habitat fragmentation of nesting and foraging habitat (beaches, mudflats, intertidal areas, and inlets). Shoreline stabilization efforts, in particular, threaten several coastal avian species (i.e., fortification by riprap and other hardscape reduces available habitat). Permitted activities may also result in changes to hydrologic regimes and water quality in coastal areas.

Grassland (or dry prairie) avian species may be impacted if authorized dredge or fill activities result in diminished habitat quality via habitat fragmentation or changes to existing hydrologic regimes. Throughout Florida, grassland habitat is declining and highly fragmented. This habitat may also be mismanaged by suppression of natural fire regimes (USFWS 1999). Additional habitat loss and fragmentation may impact grassland species. Many grassland species also nest on or close to the ground and are highly susceptible to nest flooding (could occur with altered hydrological conditions in the grassland).

The only pine savanna avian species under evaluation is the Red-cockaded Woodpecker. Pine savanna ecosystems (or “high pine”) are characterized by widely spaced pine trees and extensive ground cover. Wetlands may be interspersed in low-lying areas. This habitat is almost extinct and highly fragmented in Florida. Also, the quality of existing high pine forests may be hampered by fire suppression (USFWS 1999). Pine savanna avian species may be impacted if authorized dredge or fill activities result in diminished habitat quality via habitat fragmentation or changes to existing hydrologic regimes.

Forest/forested wetlands avian species may be impacted if future authorized dredge or fill activities result in diminished habitat quality via habitat fragmentation or changes to existing hydrologic regimes and water quality. Many of the forest/forested wetland obligate species under evaluation are extirpated from the State of Florida. Habitat fragmentation may expose the remaining forest/forested wetland avian species to increased predation risk and nest failure (Stephens et al. 2004). Altered hydrology and water quality may impact prey availability as well.

Reptiles

Nineteen reptiles are included in Appendix C, Table C.1 of the BE. These reptiles can be grouped by general habitat preferences in Florida into the following broad categories: wetland/marsh/freshwater (seven reptiles), swamp/saltwater (one reptile), pine flatwoods (two reptiles), pine rocklands (two reptiles), and sandhill/scrub flatwood (seven reptiles). These groups are intentionally broad for this

macro analysis. Impact analysis on the species level (that takes into consideration species'/subspecies' microhabitat preferences) is presented in Appendix C, Table C.1.

Wetland/marsh/freshwater reptile species in Florida may be affected by any direct impacts to their habitat (foraging, breeding, loafing, etc.). Dredge and fill activities in wetlands, marshes, and freshwater (ponds, rivers, streams), including ditching, diking, and impoundments, may result in habitat fragmentation and potentially impact both prey and predator populations (both native and invasive species). In addition, species that spend a large portion of their lives in water are likely to be impacted by changes in hydrological regimes, water quality, and vegetation composition (e.g., increased levels of sedimentation, impacts to burrowing mud substrate, and changes in emergent/submergent vegetation). Impacts are anticipated to be similar for species that inhabit swamps/forested wetlands and saltwater mangroves.

Pine flatwoods serve as a mesic successional stage between hardwood hammock and wet flatwoods (USFWS 1999). This habitat is threatened by conversion or loss and degradation from fire suppression. Species restricted to pine flatwoods are unlikely to be adversely affected by future State 404 permits. However, species that range between pine flatwoods and other habitat types such as wet flatwoods may be affected by direct impacts to habitat and habitat fragmentation.

In Florida, large areas of pine rockland habitats are protected on federal lands. However, particularly around Miami and the Keys, this habitat is on private land and under threat from development, conversion to agriculture, fire suppression, and invasive species (USFWS 1999). Pine rocklands are interspersed with areas of freshwater wetlands. Species associated with these wetland features may be affected by direct impacts to habitat as well as habitat fragmentation.

Sandhill/scrub flatwoods are xeric, well-drained areas of prairie, hammock, and scrub. These habitats are threatened by conversion, degradation, and fragmentation. The species that are found in sandhill/scrub flatwoods are not typically associated with wetlands/WOTUS during their life histories. The future permits under the State 404 program are not likely to adversely affect species that occupy these habitats.

Amphibians

Five amphibians are included in Appendix C, Table C.1 of the BE. These include species that utilize seasonal wetlands to breed and then disperse into surrounding upland habitat (three amphibians); species restricted to aquatic caves (one amphibian); and subspecies that primarily utilize perennial wetlands but which always had a restricted distribution and may now be extirpated (one amphibian).

Pond breeding species are easily affected by direct fill of wetlands and by hydrology alteration, especially shortening of pond hydroperiod, which may strand aquatic larvae prior to metamorphosis. As these species move between upland and wetland habitat, fragmentation is a concern. In other parts of the United States, the USFWS sometimes explicitly considers fragmentation in making effects determinations and making conservation recommendations for pond-breeding ESA-listed amphibians (R. Henry pers. comm.). Fire suppression is believed to be a concern for some species in some habitat types. Pond breeding amphibians are also at risk because they utilize seasonal isolated wetlands, which often are not subject to CWA jurisdiction. For cave-dwelling amphibians, water quality degradation, and both chemical and from sedimentation, could have adverse effects. Hydrology alteration is also a concern.

Most ESA-considered amphibians in Florida have relatively small distributions. Fully implemented safeguards, such as careful review to identify occurrences associated with future permitting and with adequate avoidance and minimization measures including minimization of fragmentation near utilized wetlands, would ensure that effects would remain at or below baseline conditions.

Fish

Six species/subspecies of fish are included in Appendix C, Table C.1 including three types of sturgeon associated with larger rivers and estuaries, two other coastal species, and one species associated with smaller streams. The stream species (Okaloosa Darter) is especially at risk of fragmentation or direct habitat loss because of a restricted range and very limited mobility; however, most populations are currently managed, and the species is considered to be stable at present. The estuarine and coastal species are less likely to be affected by small amounts of dredge or fill because they tend to occur in larger and more contiguous habitats, although sedimentation, water quality degradation, and to a lesser extent direct habitat loss are potential effects. As fish are, by definition, fully aquatic, they are frequently affected by CWA activities. Should these species be found in State-assumed waters, coordination with the Services and important safeguards may need to be identified during permit review, such as implementation of Best Management Practices (BMPs), and avoidance and minimization measures.

Insects

Twenty-five species/subspecies of insects are included in Appendix C, Table C.1 including 11 butterflies, five caddisflies, five dragonflies, two bees, and two beetles. Two of these insects, the American Burying Beetle and the Three-toothed Long-horned Caddisfly, are extirpated from the state and therefore excluded from further consideration in this BE. The majority of these ESA-considered insects are threatened by the use of pesticides for agricultural purposes (e.g., Monarch Butterfly's loss of milkweed host plant) and biocides/insecticides for mosquito control.

All of the caddisfly and dragonfly species face similar threats associated with spring, stream, river, and lake modifications. They may be directly affected by impacts to their habitat from future authorized dredge and fill activities, which may also result in habitat fragmentation. Given that both groups spend the larval stage of their life cycles in an aquatic habitat, they are especially vulnerable to changes in water quality conditions (e.g., siltation, pollution, and eutrophication) and changes to existing hydrological regimes. Thus, changes in existing hydrological regimes and water quality could also degrade the quality of aquatic habitat and vegetation (e.g., allow for invasion of non-native vegetation).

ESA-considered insects that occupy wetlands, marshes, and swamps in Florida include the Palatka Skipper and Duke's Skipper butterflies and the Calvert's Emerald Dragonfly. These species are likely to be directly affected by impacts to their habitat from future authorized dredge and fill activities, which may also result in habitat fragmentation. Changes in existing hydrological regimes and water quality could also degrade the quality of wetland/marsh habitat and vegetation (e.g., allow for invasion of non-native vegetation). Dredge and fill activities are also frequently associated with coastal development and, in turn, habitat fragmentation.

Species that occupy forests, woodlands, pine barrens, pine rocklands, and/or grasslands in Florida (e.g., Monarch Butterfly, Florida Leafwing, Frosted Elfin Butterfly, Ceraunus Blue Butterfly, Cassius Blue Butterfly, Bartram's Scrub-hairstreak, and Miami Tiger Beetle) do not use wetlands or WOTUS during any stage of their life history. Future permits under the State 404 program are not likely to adversely affect species that occupy these habitats.

Coastal or tropical hardwood hammocks, dunes, sand pine, and/or scrub obligate insect species (e.g., Gulf Coast Solitary Bee, Nickerbean Blue Butterfly, Miami Blue Butterfly, and Blue Calamintha Bee) may be impacted by habitat fragmentation from fill. These impacts may occur where waters/wetland habitat is interspersed with or border these habitat types. As insects are declining on a global scale, impacts to habitat and other resources that factor into species' life history could affect ESA-considered species recovery.

Crustaceans

Nineteen crustacean species/subspecies are included in Appendix C, Table C.1. These species can be grouped by general habitat preferences in Florida into the following broad categories: pond/river/stream species (four crustaceans) and cave/well/sinkhole species (15 crustaceans). These groups are intentionally broad for this macro analysis. Impact analysis on the species level (that takes into consideration species'/subspecies' microhabitat preferences) is presented in Appendix C, Table C.1.

Future authorizations under the State 404 program may impact pond/river/stream crustaceans (crayfish) via direct mortality or physical alteration of habitat through dredge and fill activities. Dredge and fill activities may also fragment habitat, change existing hydrological regimes, and affect water quality. All of the crayfish species under consideration in the action area are highly sensitive to and already threatened by impacts to both surface and groundwater quality (e.g., changes in temperature, flow, and siltation levels, etc.). Changes in water quality (e.g., an increase in nitrogen levels) may also create favorable conditions for invasive aquatic vegetation or change existing levels and/or species composition of native vegetation. This could decrease the quality of the existing crayfish habitat.

Crustaceans (crayfish and amphipods) that inhabit caves, wells, sinkholes, and other subterranean water features may also experience indirect mortality and/or impacts to habitat as a result of dredge and fill activities in or adjacent to occupied areas. Many cave/well obligates are extremely restricted in range (some species are only known from one or two localities). Any changes in habitat conditions could potentially result in species extirpation. Cave/subterranean crustaceans are also highly threatened by changes in hydrology. Any future activities that would deplete groundwater/aquifers results in changes in flow and, in turn, impacts availability of detrital food items or burrowing habitat. Water quality impacts (increase in nitrogen or sediment levels) may also affect the species. In addition, many cave-dwelling species are dependent on cave-roosting bats, specifically their guano, as a food source. Impacts on cave-roosting bat populations may also affect these crustaceans by reducing food availability.

Mollusks

As freshwater mussels are, by definition, fully aquatic, they are likely to be impacted by dredge and fill activities. Twenty-one species of mollusks are included in Appendix C, Table C.1, including 18 types of freshwater mussels that are associated with varying sizes of springs, creeks, and rivers, two freshwater snails, and one tree snail. The freshwater mussel species all face similar threats associated with habitat modification. These include direct habitat modifications such as impoundments, dredging/channelization, stream bed destabilization, and streamflow depletion (e.g., water extraction). They are especially vulnerable to changes in water quality conditions (e.g., excessive sedimentation, environmental contaminants, and eutrophication) and changes to existing hydrological regimes. Similarly, as filter feeders, they are vulnerable to changes in nutrient cycling. Given the reliance all freshwater mussels have on host fish during the larval period of their life cycle, impoundments or other effects influencing host fish species may affect these species. Additionally, mollusk species may be threatened by the invasive species (e.g., Asiatic Clam (*Corbicula fluminea*)), which could be spread by

dredge and fill activities. Tree Snails are less likely to be affected as they occur in terrestrial, arboreal environments; nonetheless, direct habitat fragmentation is possible.

Plants

Ninety-nine plants are included in Appendix C, Table C.1. These species/subspecies/varieties can be grouped by guild into the following categories: lichens, graminoids, annual forbs, perennial forbs, sub-shrubs, shrubs, cacti, and trees. These groups are intentionally broad for this macro analysis. Impact analysis on the species/subspecies/varietal level (that takes into consideration microhabitat preferences) is presented in Appendix C, Table C.1.

Nine annual forbs are included in this analysis. Five of these forbs occur primarily in wetland habitats, including non-forested wetlands such as prairies, as well as ponds and lakes, ditches, and road shoulders. Fifty-five perennial forbs are included, and roughly half of these occur in wetland habitats. They occur in a variety of specific habitats within freshwater non-forested and freshwater forested wetlands, including wet prairies, cypress swamps, bogs, fens, and seeps. Some occur in pond or lake habitats, and others occur in floodplains or along the banks of rivers or streams. Two epiphytic orchids in this category grow on trees in forested wetlands. One grass and one sedge species included in this analysis may be affected as well.

Four sub-shrubs, six shrubs, and two tree species considered in the analysis occur in wetland habitats, or in habitats which may border wetlands, and which may be affected by future activities that may be permitted under the State 404 program. These species occur in both freshwater non-forested and freshwater-forested wetlands. The sole lichen species and the four cacti species occur in upland habitats that are not likely to be affected.

Many of the species analyzed in this document have experienced substantial habitat loss and range restrictions due to a number of factors, including development and land conversion, alteration of fire regimes and fire suppression, threats from invasive species, and changes to hydrologic regimes. Some have been impacted by forestry practices or horticultural collection. Direct impacts to several of the plants may occur from future authorized fill or dredging activities (which could result in direct mortality or direct impact on wetland habitats). Indirect impacts from wetland dredge or fill activities may affect not only hydrophytes but also some upland species occurring in habitats that border wetlands, from the building of access roads or staging areas. Other indirect impacts include changes in hydrology, water quality, nutrient alteration, and competitive pressure that may arise from shifts in species composition.

CUMULATIVE EFFECTS

This BiOp must evaluate the consequences to species caused by future non-Federal activities within the action area, *i.e.,* cumulative effects. “Cumulative effects are those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation” (50 CFR 402.02). Additional regulations at 50 CFR 402.17(a) identify factors to consider when determining whether activities are reasonably certain to occur. These factors include, but are not limited to: existing plans for the activity; and any remaining economic, administrative, and legal requirements necessary for the activity to go forward. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the ESA.

Within the action area (the assumed waters and their adjacent uplands in Florida), declines in the abundance or range of many federally-threatened, endangered, and other special status species are attributable to various human activities on Federal, State, and private lands, such as human population expansion and associated infrastructure development; construction and operation of dams along major waterways; water retention, diversion, or dewatering of springs, wetlands, or streams; recreation, including off-road vehicle activity; expansion of agricultural or grazing activities, including alteration or clearing of native habitats for domestic animals or crops; and introductions of non-native plant, wildlife, or fish or other aquatic species, which can alter native habitats or out-compete or prey upon native species. Many of these activities are expected to continue within the range of various federally protected wildlife, fish, and plant species, and could contribute to cumulative effects to the species within the action area. Species with small population sizes, endemic locations, or slow reproductive rates will generally be more susceptible to cumulative effects.

The BE (Appendix A) has a section that describes the effects of non-Federal activities that are reasonably certain to occur in the action area. The BE states as compared to the regulatory baseline, the action does not authorize any new activities or increased discharge of pollutants that would significantly increase the magnitude of adverse cumulative environmental impacts to ESA-listed species, and the implementation of the State 404 program by FDEP will ensure effects on ESA-listed species will be evaluated and addressed at project-level. Lastly, as noted in this BiOp's Description of the action, the USFWS's project-specific, species-specific, review of the likelihood that a permit action may jeopardize a species or adversely modify critical habitat will take into account the effects of any unrelated non-federal actions occurring in the project area, similar to the way a cumulative effects analysis is conducted under section 7 of the ESA.

INTEGRATION AND ANALYSIS OF EFFECTS

The action this BiOp is evaluating is the EPA's potential approval of Florida's request to assume administration of the CWA 404 program in assumed waters, defined as waters not retained by the USACE 404 program. The action will occur throughout Florida in assumed waters and may affect them and their adjacent uplands, which is considered the action area. The action is likely to adversely affect the species and critical habitats listed in this BiOp and the BE. This section of the BiOp integrates information presented in this BiOp to summarize stressors and the likely consequences of exposing ESA-listed species to these stressors.

This programmatic BiOp's effects analysis assesses whether, and to what degree, FDEP has structured its 404 program to establish processes that provide EPA , FWC, USFWS, and the 404 permit applicant to collectively implement the provisions of section 404(g)-(l) of the CWA and the State's 404 Program Rule (62-331 F.A.C.), and the FDEP-FWC-FWS Endangered Species Coordination Memorandum of Understanding in a manner that addresses adverse effects to listed species and their critical habitats, and ensures the regulated activities that require State 404 permits are not likely to jeopardize the continued existence of endangered or threatened species or destroy or adversely modify designated critical habitat.

As described in the BE, the State 404 Program requires the analysis for whether effects to listed species and their critical habitats have "reasonable potential" to occur (62-331, F.A.C.; 40 CFR 233.51), and if so, to further determine whether those effects are "likely to be an adverse effect", or "not likely to be an adverse effect". If adverse effects/impacts may occur, conditions or measures to avoid and minimize the impacts would be included as permit conditions and implemented by the permittee. The State 404

program species assessment is modeled after the Federal processes for determining, avoiding, and minimizing effects to listed species and ensures compliance with the ESA and the CWA during State 404 permit application review and permit issuance.

This BiOp confirms the resulting species coordination processes fulfill the following criteria when reviewing future State 404 permit applications:

1. The scope of the action is adequately described;
2. The physical, chemical, or biotic stressors to species that are likely to be produced as a result of the action is estimated;
3. The adverse effects of such activities on ESA-listed species and designated critical habitat is minimized;
4. The applicants participating in permitted activities are informed, encouraged, and screened for potential incidental take exemption eligibility as required by permit issuance;
5. Likely adverse effects on listed species and critical habitat are monitored and evaluated;
6. Permit compliance is monitored and enforced; and
7. If new information becomes available (including inadequate protection for species or low levels of compliance), the action is re-evaluated and modified if warranted.

The FWC will assist FDEP with the coordination of ESA- listed species reviews, which would take place concurrently with their review of impacts to State-listed species (per Chapters 62-330, F.A.C. and 68A-27, F.A.C.) for the State 404 and ERP programs. The FWC may assist FDEP as the State's species coordination lead to be the point of contact for coordination with the USFWS. FWC may provide information and other preliminary assessment assistance to USFWS as USFWS reviews State 404 permit applications and develops recommendations for FDEP/FWC to avoid and minimize adverse impacts to listed species and their habitats.

Key commitments by FDEP, FWC, FWS that ensure ESA-listed species coordination and conservation

The species coordination process includes a USFWS review of all State 404 permit applications for consistency with the ESA and an EPA review (including consideration of USACE, USFWS, and NMFS comments provided to EPA) of applications with a reasonable potential to affect ESA-listed species. Key commitments between FDEP, FWC, and the USFWS to ensure a successful species coordination and conservation related to State 404 permit reviews include:

1) FDEP's processes and procedures to review State 404 applications will be similar to and will utilize the USFWS-approved permitting guidance that is currently used by the USACE, to ensure consistency with CWA and ESA requirements.

2) FDEP, FWC, and USFWS will participate in a State 404 program species coordination technical team. This technical team will oversee the species coordination process, including but not limited to: assisting in the transition of 404 permitting by participating in training efforts; providing a process to elevate questions and decision-making to a group with technical expertise, as needed; assist in refining coordination processes, procedures, and future improvements, as needed, related to State of Florida permitting under Chapter 62-331, F.A.C.

3) Prior to assuming 404 permitting, FDEP and FWC permit review staff will be trained in the new State 404 program species coordination procedures and processes. The FDEP, FWC and the USFWS will collaborate on developing the training materials, and the FWC and the USFWS will be invited to participate in the in-person and/or virtual training meetings for FDEP permit review staff.

4) All State 404 applications will be forwarded to USFWS for review, the majority of which will include FDEP or FWC preliminary determinations for effects to ESA-listed species or species proposed to be listed within a few days of the application provided to the USFWS. These preliminary determinations may include possible effects for species found onsite, potential impacts to critical habitat, and potential protective measures that may address the effects and impacts.
5) Technical assistance in individual project-by-project reviews from the USFWS may be accomplished by individual USFWS staff or by USFWS-approved effect determination tools, as described below.
6) FDEP will incorporate as permit conditions all recommended impact avoidance and minimization measures (protection measures) provided by the USFWS to avoid jeopardizing listed or proposed species and/or adversely modifying designated or proposed critical habitat. In addition, if:
    a) the applicant for a State 404 permit is the holder of a valid and active biological opinion, or Habitat Conservation Plan Incidental Take Permit (HCP/ITP), or a similar binding agreement that is issued by the USFWS and
    b) the species and activities described in the State 404 permit application are covered in the Program assumption BiOp, HCP/ITP (or similar agreement), then no additional avoidance and minimization measures would be required. FDEP would provide the documentation in order for USFWS review the project. If the USFWS concludes that a permit application is likely to jeopardize or adversely modify designated critical habitat and no protection measures are available to reduce the risk to an acceptable level, FDEP will issue a Notice of Intent to Deny the permit.

CONCLUSION

After reviewing the current status of the species, the environmental baseline for the action area, the effects of the potential action, and the cumulative effects, it is the USFWS's biological opinion that EPA's action, as proposed, is not likely to jeopardize the continued existence of ESA-listed species listed identified in this BiOp and is not likely to destroy or adversely modify designated critical habitat identified in this BiOp.

As described in the BE and this BiOp, activities regulated by section 404 of the CWA can have significant adverse effects on ESA-listed species and their critical habitats. EPA's approval of the State's 404 program activates the FDEP-FWC-USFWS MOU which establishes a process whereby the USFWS will be provided an opportunity to review all State 404 permit applications, and analyze impacts to ESA-listed species and designated critical habitat that may result from activities permitted by the State 404 program and provide technical assistance to FDEP with respect to avoiding and minimizing effects on .ESA-listed species and their critical habitats During this review, the USFWS will have an opportunity to provide additional information concerning potential effects to ESA-listed species, recommend measures to minimize effects, and provide monitoring and reporting recommendations on a project-specific and species-specific basis.

Our opinion is that the proposed action (including the subsequent program activities it will cause) has built in a sufficiently structured process to insure that the State's administration of section 404 of the CWA in assumed waters is not likely to cause an appreciable reduction in the likelihood of both the survival and recovery of any listed species by reducing the reproduction, numbers or distribution of that

species. It is also our opinion that the proposed action has built in a sufficiently structured process to insure State's administration of section 404 of the CWA in assumed waters is not likely to result in destruction or adverse modification of critical habitat.

INCIDENTAL TAKE STATEMENT

Section 9 of the ESA and Federal regulations pursuant to section 4(d) of the ESA prohibit the "take" of endangered and threatened species, respectively, without special exemption. "Take" is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the USFWS as an act which actually kills or injures wildlife, which may include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the USFWS as actions that create the likelihood of injury to listed species by annoying them to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of sections 7(b)(4) and 7(o)(2), taking that is incidental and not intended as part of the agency action is not considered to be prohibited taking under the ESA provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

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

For species proposed for listing under the ESA, the prohibitions against taking endangered species under section 9 of the ESA or under a Section 4(d) rule for threatened species do not apply until the species is listed. If the conference opinion is adopted as a biological opinion following a listing or designation under section 4 of the ESA, the Reasonable and Prudent Measures, with their implementing Terms and Conditions, will be nondiscretionary. Terms and Conditions must be undertaken, for the exemption in section 7(o)(2) to apply.

For proposed activities in which the State has permitting authority and for which incidental take of ESA-listed species is reasonably certain to occur, the amount and extent of incidental take anticipated from these proposed activities will be quantified and evaluated on a project-specific basis through the technical assistance process conducted between the USFWS and the State.

Amount or Extent of Take Anticipated

While the BE provided a detailed analysis of typical impacts related to stressors to ESA-listed species, inability to anticipate the locations of future State 404 permit applications did not allow the Service to conduct site- and species-specific analyses to estimate the number of individuals that might be affected by the permitted activities. .

However, through implementation of the State 404 program (62-331, F.A.C.) and EPA's oversight of the State 404 program and coordination of Federal review of state permit actions (40 CFR 233), this

project-specific information will be provided to the USFWS because USFWS will receive all State 404 permit applications.

This affords the USFWS the opportunity to appropriately evaluate project effects on a project-specific and species-specific basis. This review will allow the USFWS to provide technical assistance to the State to adjust an action that may result in the take of ESA-listed species. As described in our conclusion, we assume that through technical assistance with the State, appropriate measures to minimize incidental take and detrimental effects associated with activities regulated by the State 404 program will be developed by the USFWS, and that these measures will ensure that each permit will minimize adverse effects and thereby avoid jeopardy to ESA-listed species and avoid destruction or adverse modification of critical habitat.

If it is determined, through technical assistance on permit reviews with State that take of ESA-listed species is still expected to occur after implementation of recommended minimization measures, the amount or extent of incidental take will be quantified, at that time by the appropriate Field Office of the USFWS, in coordination with FDEP/FWC. FDEP/FWC and USFWS will review reports and track the levels of take estimated through the technical assistance process and exempted by this Incidental Take Statement.

Incidental take exemption will be afforded to EPA when its approval of the State's assumption of the administration of section 404 of the CWA, including its implementation process, is carried out as described in this BiOp. In addition, any take incidental to the execution of activities permitted by a State 404 permit issued through the implementation process described in this BiOp will be exempt from Section 9 and Section 4(d) prohibitions if the permittee implements all permit conditions such as effect minimization measures, monitoring, and reporting as agreed upon by the State, and the USFWS.

If FDEP chooses not to follow, or is unable to comply with the Reasonable and Prudent Measures and associated Terms and Conditions of this Incidental Take Statement, they may seek protections from the take prohibitions of the ESA by obtaining take authorization pursuant to section 10(a)(1)(A) and 10(a)(1)(B) of the ESA or exemption through a separate ESA Section 7(a)(2) consultation if another Federal nexus exists.

In summary, because of the large scale and broad scope of the proposed action, the best scientific and commercial data available are not sufficient to enable the USFWS to accurately estimate the specific amount of incidental take at this time that is anticipated to occur as a result of the action. However, the amount or extent of incidental take of listed species will be quantified during the technical assistance process that is required in accordance with the State 404 program rule (62-331, F.A.C.), the FDEP, FWC, USFWS MOU, and EPA oversight regulations (40 CFR 233). This Incidental Take Statement does not apply in the absence of any take prohibited under Section 9 or Section 4(d) of the ESA.

Reasonable and Prudent Measures

The following reasonable and prudent measures are necessary and appropriate to minimize impacts of incidental take to species identified in this BiOp.

1. EPA (the action Agency) will use its authorities under the CWA to minimize impacts to listed

species pursuant to its oversight of the State's 404 Program.
2. The State of Florida (the Applicant) will use its authorities under the State of Florida 404 Program Rule (62-331) and other authorities pertaining to the protection of fish, wildlife, and plants to minimize impacts to ESA-listed species pursuant to its administration of the State's 404 Program.
3. The parties (FDEP, FWC, and USFWS) will implement the FDEP, FWC, USFWS MOU.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the ESA, the Action Agency (EPA) and the Applicant (FDEP) must comply with the following terms and conditions, which implement the reasonable and prudent measure described above and outline required reporting/monitoring requirements. In accordance with 50 CFR 402.14(i)(1)(iv), these terms and conditions are non-discretionary and must be complied with by EPA or FDEP, as indicated below.

Terms and Conditions the EPA must comply with:

1. EPA shall oversee the operation of the State 404 program to ensure the State 404 program operates in accordance with the requirements stipulated in 40 CFR 233.
2. EPA shall coordinate Federal review of State 404 permit actions in accordance with the requirements stipulated in 40 CFR 233.50.

Terms and Conditions the FDEP must comply with:

1. FDEP shall participate in a State 404 program species coordination technical team with FWC and USFWS per the FDEP-FWC-USFWS MOU. This technical team will oversee the species coordination process, including but not limited to: assisting in the transition of 404 permitting by participating in training efforts; providing a process to elevate questions and decision-making to a group with technical expertise, as needed; assist in refining coordination processes, procedures, and future improvements, as needed, related to State of Florida permitting under Chapter 62-331, F.A.C.
2. FDEP shall implement a training program to familiarize FDEP and FWC permit review staff with the State 404 program species coordination procedures and processes. FDEP shall collaborate with FWC and USFWS on developing the training materials, and shall invite FWC and USFWS to participate in the in-person and/or virtual training meetings for FDEP permit review staff.
3. FDEP shall forward all State 404 applications to USFWS for review, in accordance with the timeframes and processes described in the BE and this BiOp's description of the proposed Action.
4. FDEP shall accept technical assistance in individual project-by-project reviews from the USFWS via individual USFWS staff coordination or by USFWS-approved effect determination tools.
5. FDEP shall incorporate as permit conditions all recommended impact avoidance and minimization measures (protection measures) provided to FDEP by the USFWS to avoid jeopardizing listed species and/or adversely modifying designated or proposed critical habitat.
6. If the applicant for a State 404 permit is the holder of a pre-existing valid and active biological opinion with an incidental take statement, or a Habitat Conservation Plan with an Incidental Take Permit (HCP/ITP) that was issued by the USFWS and the species and activities described

in the State 404 permit application are covered by that particular biological opinion, or HCP/ITP, then FDEP may stipulate as a permit condition that the applicant must comply with that biological opinion or ITP. FDEP will confirm the validity and applicability of the applicant's pre-existing biological opinion or HCP/ITP with the USFWS before taking any final action on the State 404 permit application.

7. FDEP will issue a Notice of Intent to Deny the permit if the USFWS concludes that a permit application is likely to jeopardize or adversely modify designated critical habitat and no protection measures are available to reduce the risk to an acceptable level.
8. FDEP will provide an annual report to the USFWS that:
    a. Summarizes the number and types of State 404 permits issued or denied, including data on impacts to ESA-listed species or critical habitat.
    b. Includes a table that identifies all ESA-listed species taken by State 404 permitted activities along with the amount or extent of such take.
    c. Identifies any permits that were elevated in accordance with the FDEP-FWC-USFWS MOU and how those elevations were resolved.
9. If prior to the completion of a permitted activity, new information (e.g. listing of new species, new critical habitat, or modifications to permitted activity) shows that the magnitude of impacts to listed species is greater than originally anticipated by USFWS, or that the amount of incidental take originally anticipated by USFWS is exceeded, FDEP, in accordance with its authority under 62-331.080, F.A.C., will reopen the permit and coordinate with the USFWS to: 1) determine if the additional impacts are likely to jeopardize any species; and 2) determine if additional minimization measures, reporting, or monitoring are required as deemed necessary by USFWS.
10. FDEP will inform 404 permittees that if a permittee locates dead or injured ESA-listed species, immediate notification must be made to the appropriate Field Office of the USFWS. Pertinent information including the date, time, location, and possible cause of injury or mortality (e.g. impingement or entrainment) of each species shall be recorded and provided to the USFWS. Instructions for proper care, handling, transport, and disposition of such specimens will be issued by the Services. Care must be taken in handling sick or injured animals to ensure effective treatment and in handling dead specimens to preserve biological material in the best possible state.

Conservation Recommendations

Section 7(a)(1) of the ESA directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. We recommend that EPA, FDEP, and State 404 permit applicants implement the following actions:

1. In consultation with the Service, develop a conservation program for threatened and endangered species and develop conservation plans that specifically addresses threats to listed species and how implementation of CWA programs can ameliorate those threats;
2. EPA and FDEP may further aid the recovery of ESA-listed species by sponsoring additional research and development that improves the wildlife value of activities regulated by the CWA 404 program (e.g., creation of shallow-water littoral shelves in stormwater retention ponds for the benefit of wading birds).

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or

benefitting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

REINITIATION NOTICE

This concludes formal consultation on the action. As described in 50 CFR §402.16, reinitiation of consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. For the purposes of this programmatic consultation, any exceedance of take for a State 404 permit action that has not been completed will be addressed as described in FDEP's term and condition number 9. Additionally, the listing of a new species or critical habitat shall not trigger reinitiation of consultation on this action (approval of Florida's assumption of the CWA 404 program). Since the State would administer the CWA 404 program, the USFWS has no obligation to conduct section 7 consultation on individual permits because the issuance of such a permit is not a Federal action. However, the State's regulations require that the State comply with the technical assistance process with USFWS for ESA listed species and critical habitat. Accordingly, any effects to newly listed species or their critical habitat would be sufficiently considered and addressed.

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