CLEAN WATER ACT SECTION 404(B)(1) EVALUATION FOR THE CIVIL WORKS PROJECT

PREFACE

This document is a Section 404(b)(1) Evaluation for the Central and Southern Florida, Everglades Agricultural Area (EAA), Florida project. As such, it addresses, at a general level, the potential environmental effects of the wetland and aquatic ecosystem alterations expected from dredge and fill and the construction of the structural components of the recommended plan.

Location

The study area for the project encompasses the Northern Estuaries (St. Lucie River and Estuary [including Indian River Lagoon] and the Caloosahatchee River and Estuary), Lake Okeechobee, a portion of the EAA, the Water Conservation Areas (WCA), Everglades National Park (ENP), and the Southern Estuaries (specifically focused on Florida Bay).

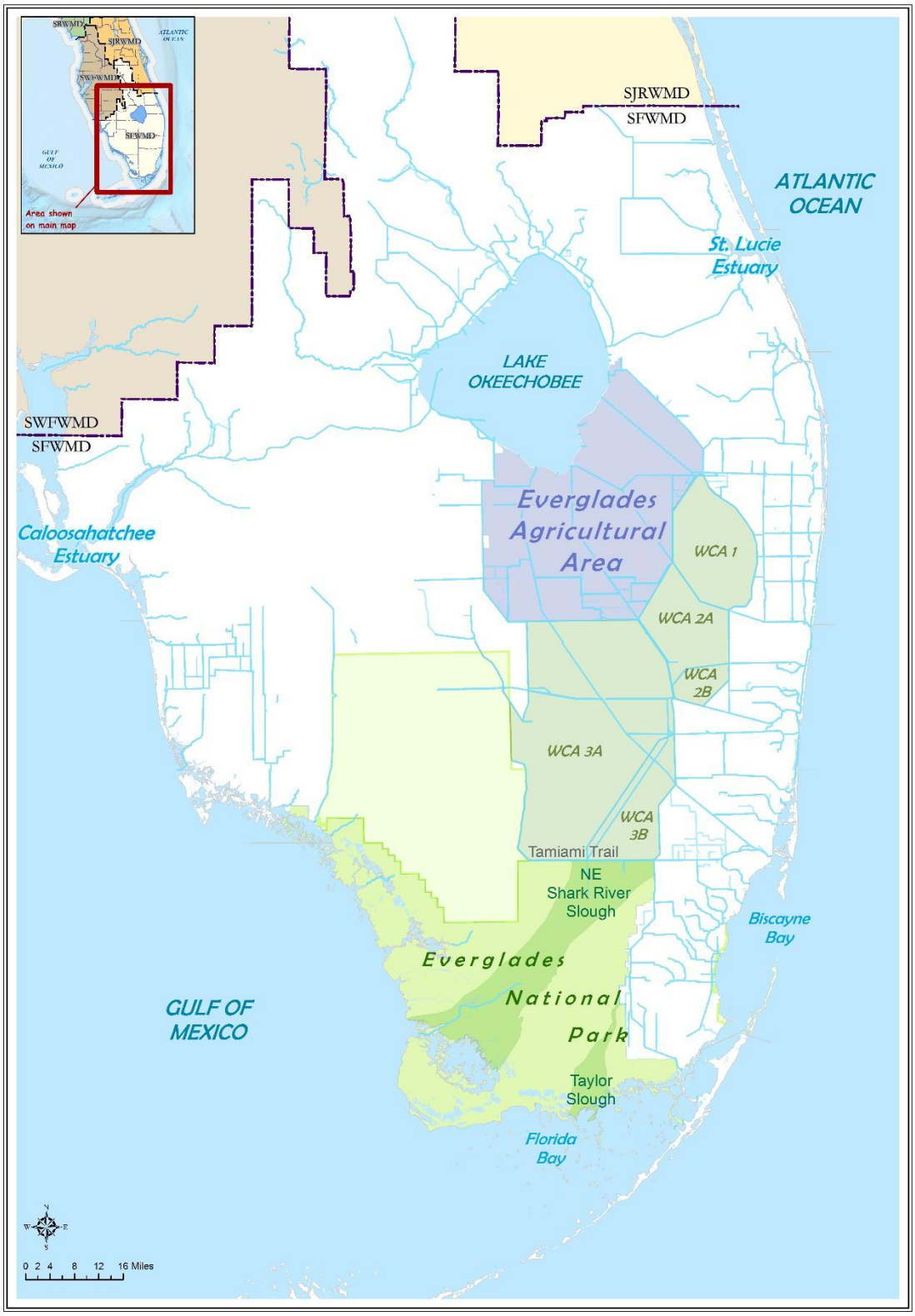

Figure 1. Project Area Map

Project Description

Plan Features

The components of the CEPP New Water Modification include improved conveyance, storage reservoir, and stormwater treatment area (STA) components along with water control structures and a pump station.

Storage and treatment of new water will be possible with the construction of a 11,300-acre, above-ground storage reservoir and 6,600-acre STA. The reservoir will accept a portion of the Lake Okeechobee water currently discharged to the estuaries. This Lake Okeechobee water is diverted to the A-2 Reservoir via the North New River and Miami Canals. The preliminary design includes an intake canal along the northern boundary of the parcels between the two canals for operational flexibility.

While some refinements were made within the operational flexibility available in the 2008 Lake Okeechobee Regulation Schedule (LORS), assumptions ultimately extended beyond this flexibility due to adjustments made to the tributary/climatological classifications. Additional information and documentation of these assumptions are found in the **Appendix A** (Engineering) of the SFWMD Section 203 Report.

Authority and Purpose

In section 1308(a) of the Water Resources Development Act of 2018, Congress authorized the project for ecosystem restoration, Central and Southern Florida, Everglades Agricultural Area, Florida in accordance with section 601 of the Water Resources Development Act of 2000, as recommended in the addendum to the Central Everglades Planning Project Post Authorization Change Report (CEPP PACR), Feasibility Study and Draft Environmental Impact Statement prepared by the South Florida Water Management District (SFWMD) and dated May 2018, with such modifications as the Secretary of the Army considers appropriate. This authorization modified the New Water Phase of the Central Everglades Planning Project, which was authorized by Congress in the Water Resources Development Act of 2016. Pertinent background information on the CERP and the CEPP, which represents a significant increment of CERP implementation, is provided in **Section 1.0** of the Main Report**.**

The Central and Southern Florida (C&SF) Flood Control Project, as constructed, had unintended adverse impacts to the Greater Everglades including the Northern Estuaries, WCA 3, ENP, and Florida Bay. Historically, freshwater flowed southward from Lake Okeechobee to Florida Bay from surface (sloughs, transverse glades, and overland from through wetlands) and groundwater sources and resulted in a mosaic of vegetative communities as well as a narrower range of salinity fluctuations in Florida Bay than exist today. While historic conditions sustained healthy and extensive ecological communities (ridge and slough, wet prairies, tree islands, sawgrass prairies, mangrove communities, and seagrass beds), these communities have been degraded under the managed system. The purpose of the Federal action is to improve the quantity, quality, timing, and distribution of water flows to the central Everglades (WCA 3 and ENP).

General Characteristics of Material

The soils in the Everglades are primarily composed of peats and mucks. Deep, clean sands characterize the area east of the Everglades and south of Lake Okeechobee, while wet, gray or grayish-brown, sandy soils underlain by sandy clay cover the area west of the Everglades. The peat and muck soils, which are dark brown to nearly black, cover approximately 90 percent of the area being considered in the study

area. They were formed in marshes or swamps by the partial decay of plant materials, with some admixture of mineral soil in the case of muck. Peat, by definition, consists of 65 percent or more organic material with relatively little mineral matter. Muck, on the other hand, consists of 25 to 65 percent plant material mixed with sand, silt, and clay. The peat and muck soils may differ from each other in the kind of plant material that they contain, in the corresponding depths, and/or in the nature of the underlying material. The peat and muck may rest directly on limestone or on an intermediate layer of sand or marl. The highly organic soils have been divided into four types: Okeechobee muck, Okeelanta peaty muck, Everglades' peaty muck, and Everglades' peat. A fifth type of organic soil, which is not extensive in the area, is Loxahatchee peat. Where peat is encountered in the borrow area, it would be removed and not used as construction material.

The material may be reused or would be disposed of offsite in a Class 1 landfill. Soil testing would be conducted to better define the soil characteristics and as a result of that soil testing, other disposal options may be pursued.

Timing and Duration of Discharge

Installation timing of the project features has yet to be determined. The time and duration of discharge would be further defined during the detailed design phase.

Substrate Elevation and Type

The natural topography of the area is nearly flat with slopes less than 2 percent, with the exception of the unnatural features (e.g., canals and levee; see **Table C.4-1**).

Sediment Type

The substrate at the installation site, including EAA, the WCAs, and ENP, is calcium carbonate limestone rock overlain with peat and muck soils.

Physical Effects on Benthos

No adverse impacts to benthic organisms are anticipated other than displacement of those organisms in the construction footprint of the proposed project. Highly prolific organisms are expected to quickly re-establish in the natural wetlands restored through improved hydrology.

Water Circulation, Fluctuation, and Salinity Determination

An ecological monitoring plan (**Annex D**) has been developed to monitor hydrology, water quality, and associated changes within the project area.

Suspended Particulate/Turbidity Determinations

Best management practices would be used to minimize the suspension and transport of soils, levee materials, and roadway materials into water adjacent to or downstream of the construction area including use of sediment controls, turbidity screens, or sediment blockages for adjacent wetlands.

In general, any short-term impacts to water quality associated with construction of the project would be ameliorated by construction sequencing, best management practices for erosion and sedimentation control, and monitoring during construction.

Contamination Determinations

From the 1920s through the 1960s, most of the land parcels incorporated in the project footprint were cultivated for agricultural use. A few parcels continue to be farmed; however, crops and/or cultivation

practices have changed dramatically. Residual pesticide contamination associated with past and present crop production can be detected in the soils on many of the parcels; albeit, at concentrations that are not likely to present unacceptable risks to human health or environmental receptors. For parcels that are frequently inundated under present hydrologic conditions, the proposed project is not likely to significantly increase the risk of environmental harm associated with the fate and transport of the residual contamination. For parcels that are not frequently inundated under present hydrologic conditions, the proposed project may increase the risk of environmental harm associated with the fate and transport of residual contamination. Additional HTRW investigations may be conducted to determine what project top soils might require isolation (by encapsulating in levee berms) to minimize the risk of contaminant bioaccumulation or mobilization.

Aquatic Ecosystem and Organism Determinations

No long-term adverse impacts on aquatic organisms are anticipated. Wetland and estuarine ecosystems are expected to greatly improve because of implementation of the CEPP New Water Modification. The proposed project is not expected to cause or contribute to violations of State Water Quality Standards, jeopardize the existence of any federally endangered or threatened species, nor impact a marine sanctuary. No significant degradation is expected, and all appropriate and practicable steps would be taken to minimize impacts.

Effects on Plankton

No adverse impacts to plankton are anticipated. Concentration of freshwater diatoms should increase, at a minimum, in a narrow zone associated with water deliveries into ENP.

Effects on Benthos

No adverse impacts to benthic organisms are anticipated other than displacement of those organisms in the construction footprint of the proposed project. Reduction of freshwater flows to the Caloosahatchee Estuary and the St. Lucie Estuary and an increase of freshwater flows to Florida Bay would provide improved habitat for the benthos.

Effects on Nekton

There should be no adverse impacts to freshwater swimming aquatic organisms, including fishes, during construction. Additionally, no adverse impacts are expected downstream in the waters of Florida Bay and the adjacent coastline. Estuarine fish species most likely to occur in these areas include the small forage species, such as killifish (*Cyprinodon* spp. and *Fundulus* spp.), mosquito fish (*Gambusia affinish*), juvenile sciaenids (*Leiostomus* spp.), silversides (*Atherinidae*), and mullets (*Mugil* spp.). Larger secondary consumers include gray snapper (*Lutjanus griesus*), tarpon (*Megalops atlantica*), snook (*Centopomus* spp.), red drum (*Sciaenops ocellatus*), and spotted seatrout (*Cynoscion nebulosus*). Freshwater deliveries through ENP would provide improved habitat and nursery opportunities for fishes in downstream estuaries connecting coastal wetlands to the bay.

Effects on Aquatic Food Web

Periphyton forms the base of the food web within the project area. Implementation of the project is expected to increase periphyton mat biomass and productivity throughout the site as well as freshwater diatoms. Other than minor, temporary impacts within the construction footprint of the proposed spreader channels, no adverse impacts to the aquatic food web are anticipated.

EFFECTS ON AQUATIC SITES

Hardground and Coral Reef Communities

There are no hardground or coral reef communities located within the proposed project site or the nearshore waters affected by the project. Corals found within the waters of Biscayne Bay are outside of the area of potential effect.

Sanctuaries and Refuges

Biscayne National Park and a portion of ENP are downstream of the project area and are recognized as tropical marine environments of national significance well known for their productive reef ecosystems that play a critical role in the dynamics of the larger Florida Keys reef ecosystem. The project is intended to improve the quantity, timing, and distribution of water delivered to Florida Bay and should not have a negative effect on the sanctuaries and refuges.

Wetlands

The dominant vegetation community in the region is a matrix of sawgrass prairie with tree islands. At the lowest elevations near the coast, mangroves replace the freshwater wetlands. The transition zone between the mangroves and the freshwater prairie is a needle rush-salt grass zone on the freshwater side and stunted scrub mangrove on the coastal side. As a result of the project, approximately 233 acres of low quality wetlands, currently in agriculture production, would be removed by construction and excavation activities. This loss is considered minimal and is not anticipated to have any adverse effects. The A-2 STA will restore 3000 acres of wetlands on former agricultural lands for direct benefit beyond the original 2014 Central Everglades Planning Project (CEPP) project implementation report and final environmental impact statement. The proposed project is anticipated to provide positive ecological benefits, including improving hydroperiods and hydropatterns for approximately 1,000,000 acres of wetlands in WCA 3A, 3B,and ENP, by improving the quantity, timing, and distribution of water delivered to the downstream estuaries, Florida Bay, and other receiving waters.

Mud Flats

There are no mud flats within the construction footprint or areas impacted by the proposed project.

Vegetated Shallows

Submerged aquatic vegetation (SAV) is present throughout the nearshore waters. The trend shows the following species in order from the shoreline to the deeper waters: widgeon grass (*Ruppia maritime*), turtle grass (*Thalassia testudinum*), manatee grass (*Syringodium filiforme*), shoal grass (*Halodule wrightii*), and Johnsons seagrass (*Halophila johnsonii*). Reduction of freshwater flows to the Caloosahatchee Estuary and the St. Lucie Estuary and an increase of freshwater flows to Florida Bay would provide improvements to SAV.

Riffle and Pool Complexes

There are no riffle or pool complexes within the project footprint and none should be impacted by the proposed project.

Threatened and Endangered Species

There are 32 federally listed threatened and endangered species potentially present in the project area. The BA was submitted to FWS on May 1, 2018 and is included within **Appendix A** to document potential effects to threatened and endangered species. A final BO is expected from FWS prior to December 31, 2019.

Determination of Compliance with Applicable Water Quality Standards

CEPP New Water Modification will comply with water quality standards applicable to the project and adjacent waters. Proposed features are located in and adjacent to waters designated as Class III by the State of Florida. In accordance with Florida Administrative Code (F.A.C.) Rule 62-302 ("Surface Water Quality Standards"), the use classification of Class III waters is "Recreation, Propagation, and Maintenance of a Healthy, Well- Balanced Population of Fish and Wildlife." In addition to the minimum and general criteria for surface waters found in Section 62-302.500(1) F.A.C., there are numerous water quality criteria for specific parameters for Class III waters listed in Section 62-302.530 F.A.C. Although the CEPP New Water Modification is not expected to affect most of the parameters listed in this rule, certain parameters (e.g., turbidity, dissolved oxygen and nutrients) listed in the criteria may be affected by construction and operations activities. The construction and operation of the proposed project components would comply with applicable water quality standards.

POTENTIAL EFFECTS ON HUMAN USE CHARACTERISTICS

Municipal and Private Water Supply

No municipal or private water supplies would be adversely impacted by the implementation of the Project. Refer to **Section 4** of the Main Report and **Appendix C.2.1** for additional information pertaining to SFWMD Section 203 Report water supply analyses.

Recreational and Commercial Fisheries

The proposed project would benefit recreational and commercial fisheries through salinity improvements within the Northern and Southern Estuaries.

Water-Related Recreation

Water-related recreation would be improved by project features and the associated recreation plan. Further detail is included in **Appendix F**.

Parks, National and Historical Monuments, National Seashores, Wilderness Areas, Research Sites, and Similar Preserves

The project would enhance environmental conditions at these types of sites within the project area. For more information, refer to **Section C.4.37.3.6.5.2, Sanctuaries and Refuges.**

Essential Fish Habitat

Essential Fish Habitat in the Area

The project area includes two distinct regional estuarine and nearshore coastal systems: the Southern Estuaries, including Biscayne Bay and Florida Bay, and the Northern Estuaries, including the Caloosahatchee River and the St. Lucie Estuary.

The Southern Estuaries, a shallow estuarine system (average depth less than 3 feet), comprise Biscayne National Park and a large portion of ENP. Florida Bay is the main receiving water of the Greater Everglades, heavily influenced by changes in timing, distribution, and quantity of freshwater flows into the Southern Estuaries. Lake Okeechobee discharges into the two northern estuaries. The St. Lucie Canal feeds into the St. Lucie Estuary, and the Caloosahatchee Canal/River feeds into the Caloosahatchee Estuary to the west.

Biscayne Bay and Florida Bay

The Southern Estuaries contain EFH for corals, coral reef and live bottom habitat, red drum (*Sciaenops ocellatus*), penaeid shrimps (*Penaeus* spp.), spiny lobster (*Panulirus argus*), other coastal migratory pelagic species, and the snapper-grouper complex. Species generally present in the southern estuaries region include brown shrimp (*Penaeus aztecus*), pink shrimp (*Penaeus duorarum*), white shrimp (*Penaeus* sp.), spiny lobster, stone crab (*Menippe mercenaria*), gulf stone crab, red drum, Spanish mackerel (*Scomberomorus maculatus*), and gray snapper (*Lutjanus griseus*). EFH in the Southern Estuaries are composed of seagrasses, estuarine mangroves, intertidal flats, the estuarine water column, live/hard bottoms, and coral reefs.

Caloosahatchee River

The Caloosahatchee River Estuary contains EFH for juvenile brown shrimp, juvenile gray snapper (*Lutjanus griseus*), smalltooth sawfish (*Pristia pectinata*), juvenile pink shrimp, adult and juvenile red drum, adult and juvenile Spanish mackerel, and juvenile stone crab. Downstream habitats include oyster reefs and seagrass beds (submerged aquatic vegetation).

St. Lucie Estuary

The proposed project is within the jurisdiction of the South Atlantic Fishery Management Council (SAFMC) and is located in areas designated EFH for wormrock, live bottom habitat, the American oyster (*Crassostrea virginica*), pink shrimp, white shrimp, brown shrimp, Florida red drum, grouper (*Epinephelus* spp.), gray snapper (*Lutjanus griseus*), white grunt (*Haemulon plumieri*), red porgy (*Pagrus pagrus*), spiny lobster, and the snapper-grouper complex. In addition, the nearshore hardbottom habitat outside of the St. Lucie Estuary is designated Essential Fish Habitat-Habitat Areas of Special Concern (EFH-HAPC) for the snapper-grouper complex.

ASSESSMENT OF EFFECTS ON HARDGROUND AND CORAL REEF COMMUNITIES

This project is not expected to affect coral reef or hardbottom communities in the project area. There are no coral reefs or hardbottom communities located within the proposed project site or the nearshore waters affected by the project. Corals found within Florida Bay and Biscayne Bay are outside the area of potential effect.

Assessment of Effects on Sanctuaries and Refuges

Biscayne National Park and a portion of ENP are downstream of the project area and are recognized as tropical marine environments of national significance well known for their productive reef ecosystems that play a critical role in the dynamics of the larger Florida Keys reef ecosystem. The proposed project is intended to improve the quantity, timing, and distribution of water delivered to Florida Bay.

Assessment of Effects on Wetlands

The dominant vegetation community in the region is a matrix of sawgrass prairie with tree islands. At the lowest elevations near the coast, mangroves replace the freshwater wetlands. The transition zone between the mangroves and the freshwater prairie is a needle rush-salt grass zone on the freshwater side and stunted scrub mangrove on the coastal side. As a result of the project approximately 233 acres of wetlands, currently in agriculture production, would be removed by construction and excavation activities. This loss is considered minimal and is not anticipated to have any adverse effects. The proposed project is anticipated to provide positive ecological benefits, including improving hydroperiods and hydropatterns in ENP by improving the quantity, timing, and distribution of water delivered to the downstream estuaries, Florida Bay, and other receiving waters.

Assessment of Effects on Mud Flats

There are no mud flats within the construction footprint or areas impacted by the project.

Assessment of Effects on Vegetated Shallows

SAV is present throughout the nearshore waters. The trend shows the following species in order from the shoreline to the deeper waters: widgeon grass (*Ruppia maritime*), turtle grass (*Thalassia testudinum*), manatee grass (*Syringodium filiforme*), shoal grass (*Halodule wrightii*), and Johnsons seagrass (*Halophila johnsonii*). Reduction of freshwater flows to the Caloosahatchee Estuary and the St. Lucie Estuary and an increase of freshwater flows to Florida Bay would provide improvements to SAV. Without operational changes and/or active pumping, the project is not anticipated to have any effect on SAV.

Assessment of Effects on Riffle and Pool Complexes

There are no riffle or pool complexes within the project footprint and none should be impacted by the project.

Assessment of Effects on Plankton

No adverse impacts to plankton are anticipated. Concentration of freshwater diatoms should increase, at a minimum, in a narrow zone associated with water deliveries into ENP.

Assessment of Effects on Benthos

No adverse impacts to benthic organisms are anticipated other than displacement of those organisms in the construction footprint of the project.

Assessment of Effects on Nekton

There should be no adverse impacts to freshwater swimming aquatic organisms including fishes during construction. Additionally, no adverse impacts are expected downstream in the waters of Florida Bay and the adjacent coastline. Estuarine fish species most likely to occur in these areas include the small forage species such as killifish (*Cyprinodon* spp. and *Fundulus* spp.), mosquito fish (*Gambusia affinish*), juvenile sciaenids (*Leiostomus* spp.), silversides (*Atherinidae*), and mullets (*Mugil* spp.). Larger secondary consumers include gray snapper (*Lutjanus griesus*), tarpon (*Megalops atlantica*), snook (*Centopomus* spp.), red drum (*Sciaenops ocellatus*), and spotted seatrout (*Cynoscion nebulosus*). Freshwater deliveries through ENP would provide improved habitat and nursery opportunities for fishes in downstream estuaries connecting coastal wetlands to the bay.

Determination of Effects on Essential Fish Habitat

The overall benefit to the regional system is expected to be far greater than the localized adverse effects. The restoration of hydrology of the Greater Everglades ecosystem and the increase in spatial extent of protected wetland acreage in the region would produce extensive cumulative beneficial effects. These beneficial effects are expected to substantially outweigh the cumulative adverse effects produced by the aquatic ecosystem alterations that may be necessary to construct some of the project components.

Determination of Cumulative Effects on the Aquatic Ecosystem

The overall benefit to the regional system is expected to be far greater than the localized adverse effects. The hydrologic restoration of the Greater Everglades ecosystem and the increase in spatial extent of protected wetland acreage in the region would produce extensive cumulative beneficial effects. These beneficial effects are expected to substantially outweigh the cumulative adverse effects produced by the aquatic ecosystem alterations that may be necessary to construct some of the project features.

Determination of Secondary Effects on the Aquatic Ecosystem

No adverse secondary impacts on the aquatic ecosystem would occur as a result of the construction. During construction, the sites would be contained with sedimentation barriers. Erosion would be controlled by appropriate erosion control techniques. Sedimentation would be controlled during construction. An ecological and water quality monitoring plan would be implemented during and after construction and specific environmental commitments, engineering and design commitments, and operational commitments would be incorporated to avoid, minimize, and/or mitigate for adverse effects.

Findings of Compliance or Non-Compliance with the Restrictions on Discharge

No significant adaptations of the guidelines were made relative to this evaluation.

Considering the project constraints, no practicable alternatives exist that meet the study objectives that would reduce the discharge of a small quantity of fill into waters of the United States.

No practicable alternatives exist that have less adverse impact on the aquatic ecosystem without presenting other significant adverse environmental consequences. The alternatives all have overwhelming beneficial impacts as described in section 4.1.5 Wetlands and section 4.25 Mitigation in the CEPP New Water Modification Final Environmental Impact Statement.

The discharge of fill materials is not anticipated to cause or contribute to violations of any applicable State water quality standards for Class III waters or Outstanding Florida Waters where applicable. The discharge operation is not anticipated to violate the Toxic Effluent Standards of Section 307 of the Clean Water Act.

The placement of fill materials in the project area is not anticipated to jeopardize the continued existence of any species listed as threatened and endangered or result in the likelihood of destruction or adverse modification of any critical habitat as specified by the Endangered Species Act of 1973, as amended.

The placement of fill material is not anticipated to result in significant, adverse effects on human health and welfare, including municipal and private water supplies; recreational and commercial fishing; and plankton, fish, shellfish, wildlife, and special aquatic sites. The life stages of aquatic species and other wildlife is not anticipated to be adversely affected. Significant adverse effects on aquatic ecosystem diversity, productivity, and stability and recreational, aesthetic, and economic values are not anticipated.

Based on the guidelines, the proposed discharge site for the discharge of fill and/or dredged material is specified as complying with the requirements of these guidelines.

CLEAN WATER ACT SECTION 404(B)(1) EVALUATION FOR THE CORPS' REGULATORY ACTION

I. PROJECT DESCRIPTION

a. Location. The proposed A-2 Stormwater Treatment Area (STA) would be located on lands referred to as A-2 STA site, which is located in the Everglades Agricultural Area (EAA) in Palm Beach County, Florida. The A-2 STA site contains approximately 6,500 acres of land and is bordered to the east by agricultural lands, the A-1 Flow Equalization Basin (FEB) and US Highway 27; to the south by the Holey Land Water Management Area (Holey Lands); to the west by the Miami Canal (L-23 Canal); and to the north by agricultural lands.

b. General Description. The applicant's preferred alternative plan includes the placement of fill material within waters of the United States to construct approximately 6,500 acres of effective treatment area, as well as associated levees, canals, pump stations, and water control structures. Portions of the Miami Canal would need to be improved to supply the STA with the capacity of water needed to fully operate the STA.

c. Authority and Purpose. Section 404 of the Clean Water Act (33 USC §1344) and Section 10 of the Rivers and Harbors Act (33 U.S.C. §403)

The overall project purpose as defined by the USACE, Regulatory Division for purposes of this final EIS and evaluation of the SFWMD's Department of the Army permit application is to improve quantity, quality, timing and distribution of water flows to the Miami Canal, Water Conservation Area 3, Everglades National Park, and Florida Bay while increasing water supply for municipal and agricultural users.

General Description of Dredged or Fill Material.

(1) General Characteristics of Material. The soil profile on A-2 STA lands consists of sand with fragmental limestone (gravel sized to boulder sized) and some silt. Muck is present below the fill in layers that are 1 to 5 feet thick. A formation of silty, sandy limestone is present next in the profile and extends to depths in the range of 12 to 25 feet below surface grades. Below the limestone formation, sand with some gravel and silt are interbedded with limestone lenses and layers. The borings also disclosed relatively thin lenses and layers of clayey sands and very sandy.

The excavation of the seepage canal, inflow/outflow canal, borrow areas and construction of the levee embankments will begin with the scrapping off the top layer of peat/topsoil which is estimated to be between 1 and 2 feet deep. The second type of material encountered for excavation will be the caprock layer, which varies in depth between 3 and 8 feet, and averages 4 feet deep.

All of this material will be onsite as fill material. The last layer of material to be excavated will be the silty sand layer (which is part of the upper Ft. Thompson Formation). This layer extends beyond the canal bottom elevation and will constitute the remaining construction material for the embankments. The two types of embankment construction materials will be mechanically processed in different gradations of construction fill.

(2) Quantity of Material.

Earthen embankment: Soil and caprock will be excavated from the project footprint and used to as fill material to construct features such as earthern embankments, levees, and access roads. Additional soils were excavated from the A-1 Flow Equalization Basin footprint, which is located to the east of the project site, and stockpiled on the A-2 STA project site for use as additional fill materila. It is anticipated that the project would not have excess soils.

(3) Source of Material. On-site.

d. Description of the proposed Discharge Site.

(1) Location. All excavated material will be disposed of on-site and used for construction of the treatment system.

(2) Size. The STA-2 site would be located on approximately 6,500-acre of land. The STA will

consist of three new east-west flowing cells consisting of emergent vegetation and submerged aquatic vegetation treatment areas.

(3) Type of Site. The A-2 STA site will consist of a series of levees, canals and other water conveyance systems, pump stations, and culverts. The proposed impoundment would replace agricultural lands, wetlands, and canal/ditches with wetland vegetation.

(4) Type of Habitat. The A-2 STA site consists of 6,500 acres of effective treatment area. A total of 173 acres of agricultural canals and 110 acres of shallow agricultural ditches are located within the A-2 STA footprint and proposed to be filled to adjacent wetland elevations. Canal banks are vegetated with herbaceous and shrubby vegetation including common ragweed, frogfruit, torpedograss, smutgrass, beggar tick, saltbush, Brazilian pepper, and castor bean. The 260-acre freshwater herbaceous wetland which lie along the eastern third of the site, have been previously farmed. These areas have not been farmed since 2004 and wetland vegetation has recruited back into the area. Their lack of recent cultivation have allowed nuisance wetland vegetation species to dominate all strata. The uplands consist of existing levees and farm roads.

(5) Timing and Duration of Discharge.

Discharge would occur at the time of construction. Construction on the inflow/outflow canal is estimated to begin in April 2020, while construction of the STA is estimated to begin in January 2021 and be completed by December 2023.

e. Description of Disposal Method.

Levee construction material will generally come from excavation of canals and from on-site construction activities. Excavated fill will likely be placed on proposed levees and access road. The project design aims to balance the quantities of fill needed to be excavated on site as close as possible so that there is minimal surplus material to dispose of. The SFWMD shall only dispose of any unstable material in areas approved by the regulatory agencies

Upland disposal. The material required for the embankment construction would be excavated from the construction of the canals and A-2 STA footprint. The quantity of material to be obtained from the excavation of the inflow/ouflow canal is limited to the size of the canals and/or conveyance requirements. The balance of the material for the construction of the embankments would be obtained from borrow areas inside the impoundment and material from the A-1 FEB footprint. The design concept aims to balance the quantities of fill needed to be excavated on-site as close as possible so that there is not any surplus material to dispose of. It is expected and assumed that very little of the excavated material will be classified as unsuitable for the construction of the levees and embankments. Therefore, any minimal amount of unsuitable excavated material will be utilized within the interior of the levees/embankments. Excess topsoil and peat that will be scrapped off the surface prior to embankment foundation preparation and seepage canal excavation will be placed within the levees.

II. FACTUAL DETERMINATIONS

a. Physical Substrate Determinations.

(1) Substrate Elevation and Slope. The levee would be constructed on top of caprock surface at elevations ranging from approximately 8 feet to 10 feet in height. The levee would have a crest width of 14 feet with a design side slope of 3H:1V (horizontal:vertical) on both sides. To complete the excavation of the seepage canal, the soils would be excavated to -7 foot elevation with a bottom width of 20 ft and side slopes of 1V:2.5H to center along all sides of the impoundment to match the existing depth and grade of the partially constructed seepage canal.

(2) Sediment Type. Levee construction material will generally come from the excavation of adjacent canals. Approximately 1 to 2 feet of organic muck soil lies over hard limestone cap rock. Generally, levees will be constructed on top of the existing muck layer. Leaving the muck in place helps minimize seepage through the levee section. The muck is substantially less permeable than the relatively coarse nature of the rubblized rock and soil placed above it for the levee construction. The muck tends to help seal the base of the levee section aiding seepage control. The proposed fill for the embankments will be composed from on-site soils of select granular materials primarily limestone or quartz, gravel and sand sized particles.

(3) Dredge/Fill Material Movement. The fill material will be stabilized and would not be subject to erosion. Erosion control measures would be used during canal widening to prevent and contain any turbidity during excavation or movement of dredge materials. The fill material will be stabilized at the earliest practicable date. Erosion control measures would be used during canal widening to prevent and contain any turbidity during excavation or movement of dredge materials.

(4) Physical Effects on Benthos.

Benthic organisms may be temporarily displaced during construction activities. Short-term impacts to benthos are expected in seepage canals with removal of material. However, they should re-establish rapidly after the construction activities have been completed.

b. Water Circulation, Fluctuation and Salinity Determination.

(1) Water Column Effects.

The water column in the immediate vicinity of excavation within the canals is anticipated to be temporarily impacted during construction as widening activities and slopes are created. Turbidity and erosion will be controlled during and post-construction. No long lasting, negative adverse effects on the water column are expected.

(2) Current Patterns and Circulation.

Construction and expansion of the seepage canal would have minimal effect on current hydrologic circulation patterns. Construction of the levees will impound water within the A-2 footprint. The movement of water within the impoundment would be from north to south. In the interim operations, a temporary pump would be installed in the northeast corner of the STA. Water would be pumped from the Miami Canal into the STA to hydrate and establish the desired wetland vegetation needed for operations. Water depths are expected to be at a target level of 1.5 feet. Prior to the USACE, Civil Works completing the adjacent A-2 Reservoir,

the A-2 STA would accept a portion of EAA runoff and Lake Okeechobee discharge from the Miami Canal prior to returning it to the Miami Canal.

Specifically, the proposed A-2 STA will receive inflows from the Miami (L-23) Canal via a gated spillway (SW-2). These inflows will then be conveyed east via 4.2 miles of inflow canal, pumped south by a 650 CFS pump station (PS-2), and then discharged west to one or more canal segments (located at the western limits of each individual cell) via three gated box culverts (STAC-2, STAC-3, STAC-4).

Following collection in canal segments located at the western limits of each cell, treated water will be selectively discharged to a 4.1+/- mile long discharge canal via gated box culverts located in the southwest corner of Cells 1 through 3 (STAC-5, STAC-6, STAC-7, respectively). Finally, the discharge canal will return treated water to Miami Canal (L-23) via a double box culvert (STAC-1) which will be constructed at the southwest corner of the STA.

Related features to be constructed as part of this project include a bridge over the inflow canal just west of structure SW-2, backfilling a 2.4+/- mile long segment of the STA 3/4 seepage canal, relocation of the G-200 pump station, repurposing existing seepage pump station G-372S, a culverted connection (SW-2) between the A-1 FEB's northern and eastern seepage canals, an additional gated box culvert (STAC-8) to allow routing STA 3/4 inflow canal water to the A-2 STA, and another spillway structure (SW-4) that would allow hydraulic isolation of the eastern and western reaches of the STA 3/4 inflow canal.

Following completion of the A-2 Reservoir by the USACE, the primary means of delivery to the A-2 STA will be via USACE constructed discharge structure(s) which will discharge from the reservoir directly to the STA's distribution channel. Additionally, the A-2 Inflow Canal will be repurposed to also allow Miami Canal inflows to, and reservoir discharges from, the A-2 Reservoir.

Water would enter the A-2 STA, flow through the three cells within the STA before being discharged. The A-2 STA would have the ability to be hydrologically connected to the adjacent treatment and storage impoundments.

(3) Normal Water Level Fluctuations and Salinity Gradients.

Water level fluctuations within the A-2 STA should improve from water-controlled for agricultural purposes to wetland sustainable level as the A-2 STA would hold water for managed releases.

c. Suspended Particulate/Turbidity Determinations.

(1) Expected Changes in Suspended Particulates and Turbidity Levels in the Vicinity of the Disposal Site.

There may be a temporary increase in turbidity levels in the project area during dredging of canals. Turbidity will be short-term and localized and no significant unacceptable adverse impacts are expected. State standards for turbidity will not be exceeded. Turbidity will be monitored during and post construction.

(2) Effects on the Chemical and Physical Properties of the Water Column.

There may be temporary impacts to the chemical and physical properties of nearby waters

during construction activities. However, there will be no permanent long-lasting negative impacts to the water column as a result of project implementation. An environmental protection plan, to be prepared during detailed design, will address concerns regarding monitoring of equipment, maintenance and security of fuels, lubricants etc. The Proposed A-2 STA will assist in making progress towards achieving water quality goals for total phosphorus in the Everglades Protection Area.

(a) Light Penetration.

Some decrease in light penetration may occur in the immediate vicinity of the construction area during construction. This effect will be temporary and will have no adverse impact on the environment.

(b) Dissolved Oxygen (DO).

There may be a slight decrease in DO in the immediate construction area of the canal during dredging operations. DO levels are anticipated to return to normal post-dredging. This is not anticipated to cause a significant impact.

(c) Toxic Metals, Organics, and Pathogens.

Project implementation will include heavy equipment for construction of the STA and associated structures. Operation of this equipment may result in the release of petroleum products, such as fuel and hydraulic fluid. Fueling areas may experience spills. The use of equipment could result in the release of hazardous and toxic materials or waste into the project area. Best management practices (BMPs) shall be implemented during construction activities to reduce the risk of release of these hazardous or toxic materials or waste.

(d) Aesthetics.

The existing aesthetic character of the A-2 STA site is similar to the EAA as a whole. The landscape is flat and has a predominantly uniform and organized appearance. Portions of the A-2 STA area has taken on the appearance of former agricultural fields that have reverted to wetland vegetative because farming these lands has ceased and some of the acreage has been inactive for several years. The wetlands are more natural in appearance than the inactive agricultural lands. It is expected that there may be views of construction equipment, dust plumes, exposed excavations, and partially completed culverts and other structures would be visible to resident and workers who pass near the construction sites in the course of their regular activities. They would not represent a significant adverse aesthetic impact; however, because these views would be temporary and in character with agriculture and construction occurring elsewhere within the EAA. Once the STA is in operation, the local landscape will retain the uniform and organized character that currently exists, while the current mix of marsh and vegetated areas would be replaced by open water. On balance, the long-term aesthetic change resulting from the project would not be a significant adverse impact.

The aesthetic quality of the water in the immediate area of the project may be temporarily affected by turbidity during construction. This will be a short-term and localized condition. Proposed canals will be sloped to provide vegetation and

wildlife habitats. The exterior impoundment embankment would be earthen and grassed and provide some aesthetic value.

(3) Effects on Biota.

(a) Primary Productivity and Photosynthesis.

Primary productivity and photosynthesis may be affected as a result of changes in phosphorus loads and concentrations and in water levels in project affected areas. The expected results of reduces phosphorus loading and concentrations is improved conditions for native vegetative communities in downstream areas, and the opposite would favor other invasive and exotic species.

Dredging and sloping canals should provide littoral habitat within the canals. Wetlands within the buffer area would be incidentally created through seepage and rainfall and redistribution of muck. The hydrology provided within the impoundment footprint would sustain wetland vegetation except during unanticipated dry-downs, but the frequency of dry-downs would be minimal.

(b) Suspension/Filter Feeders.

An increase in turbidity in the canals and wetlands could adversely impact burrowing invertebrate filter feeders within and adjacent to the immediate construction area. It is not expected that a short-term, temporary increase in turbidity will have any long-term negative impact on these productive organisms.

(c) Sight Feeders.

No significant impacts on these organisms are expected as the majority of sight feeders are highly mobile and can move outside the affected area.

(d) Contaminant Determinations.

Fine-grained materials at the bottom of canals will be sampled prior to dredging to determine whether they contain significant levels of toxic materials. Also, the soils within the STA footprint would be sampled for contaminants. The toxic materials of primary concern are persistent pesticides. Other deposited fill material which will be dredged from the proposed borrow site will not introduce, relocate, or increase contaminants at the fill area.

(e) Aquatic Ecosystem and Organism Determinations.

(1) Effects on Plankton. No adverse impacts on autotrophic or heterotrophic organisms are anticipated. However, improvements in the aquatic environment are expected due to reductions in exotic, invasive, and agricultural vegetation and improved water quality. Therefore, construction of the STA will provide more ecologically valuable habitat for any organisms located within the STA and downstream of the project site.

(2) Effects on Benthos. No adverse impacts to benthic organisms are anticipated. However, as a result of the A-2 STA, improvements in the aquatic environment are expected due to reductions in exotic and invasive vegetation and improved water

quality. Therefore, construction of the STA will provide more ecologically valuable habitat for any organisms located downstream of the project site.

(3) Effects on Nekton. No long-term adverse impacts on nekton are anticipated. However, as a result of the A-2 STA, improvements in the aquatic environment are expected due to reductions in exotic and invasive vegetation and improved water quality. Therefore, construction of the STAs will provide more ecologically valuable habitat for any organisms located downstream of the project site.

Within the A-2 STA footprint, the wetland areas currently experience fluctuations of wet and dry conditions. In the existing portion of the wetlands, canals, and ditches, mostly small forage fish may be temporarily displaced by construction and turbid water. However, they would be able to retreat to deeper areas of the aquatic systems during construction. Therefore, no long-term adverse impacts on nekton are anticipated.

(4) Effects on the Aquatic Food Web.

No adverse impacts on aquatic organisms are anticipated. Any effects due to construction are estimated to be relatively minor. No permanent effects are expected. Foraging habitat is expected to increase as a result of the construction and maintenance of the wetlands within the A-2 STA. There is expected to be a relatively minor temporary effect on the aquatic food web due to construction activities. Aquatic resources within the seepage canals and adjacent natural areas should maintain their functional value.

(5) Effects on Special Aquatic Sites.

a. Hardbottom and Coral Reef Communities.

There are no hardbottom or coral reef communities located within the proposed project site.

b Sanctuaries and Refuges.

Adjacent wildlife management areas should not be negatively impacted by the project.

b. Wetlands.

The A-2 STA site contains approximately 283 acres of agricultural canals and shallow ditches, and a 230-acre wetland system within the 6,500 acre site. The 230-acre wetland system consists of a previously farmed area that has been abandoned since 2004 and since the area became fallow, the area has reverted to wetland. Vegetation within the wetland includes a variety of invasive and non-invasive grass and shrub species including Common reed (*Phragmites australis*), Torpedo grass (*Panicum repens*), Carolina Willow (*Salix carolinensis*), and Napier grass (*Pennisetum purpureum*). Other plants present within the STA project area consist of facultative-wet species adapted to life in saturated conditions. The wetland contains hydric soils which appear to stay saturated through most of the wet season.

Direct wetland impacts include re-grading of wetlands, dredging wetlands, placement of fill material into wetlands for levees or roads and any temporary fill necessary for construction staging areas within the project footprint. Indirect impacts to the wetlands

consist of flooding and a change in the depths of hydrology. The direct and indirect impacts to wetlands associated with the applicant's preferred alternative are estimated to be 230 acres of wetlands.

The 230 acres of agricultural canals and shallow ditches as well as the 5,987 acres of land within the proposed A-2 STA footprint would be converted to emergent and submerged aquatic vegetation cells once the STA is hydrated.

It is anticipated that there will be ecological benefits directly within the footprint of the proposed A-1 Shallow FEB impoundment. Submerged and emergent plant communities will increase thereby improving foraging and habitat for wading birds and native fish; and improvements to the water quality entering the downstream areas.

(a) Mud Flats.

Mud flats will not be impacted by this project.

(b) Vegetated Shallows.

Vegetated shallows will not be impacted by the project.

(c) Riffle and Pool Complexes.

Riffle and Pool complexes will not be impacted by the project.

(6) Endangered and Threatened Species.

The federally listed protected species expected to be present on the A-2 STA site include the Audubon's crested caracara, the wood stork, the Florida panther, the Everglade snail kite, and the eastern indigo snake.

Although no Audubon's crested caracara nests were observed on the project site, a caracara communal roost is located approximately 5 miles to the west of the project site. Also, the area to the west supports several caracara nests.

Even though the A-2 STA site is outside of the core foraging area of any active wood stork colony, wood storks are often observed in adjacent areas and on the project site. Direct impacts to the wood stork would likely be an increase in preferred aquatic foraging habitat available in the A-2 STA from the conversion of 6,500 acres of agricultural lands (including 230 acres of wetlands) to flooded cells with emergent vegetation and SAV.

Although it is unlikely that the Florida panther would use these areas for any extended length of time, the project site borders both primary and secondary habitat zones. Direct effects could occur from construction vehicles striking the Florida panthers, and for the conversion of dry lands to marsh habitat. Indirect impacts to this species are anticipated as a result of loss of habitat for prey items as well as a cumulative loss of ranging, resting, and foraging habitat in the EAA.

The A-2 STA site is adjacent to an Everglade Snail Kite Priority Management Zone. Although the Everglade snail kite is not expected to utilize the existing site, the Corps expects that the kites will nest and forage in the STA once operated.

The Eastern indigo snake has a potential for being present in the EAA and in the A-2 STA

footprint. Direct impacts to the Eastern indigo snake are anticipated as agricultural lands are utilized by the eastern indigo snake as habitat. Construction of the A-2 STA would result in the conversion of 6,270 acres of agricultural lands wetlands to a water environment, which would eliminate 6,270 acres of eastern indigo snake habitat.

The USACE, Regulatory Division has determined that the project may affect, but is not likely to adversely affect the Audubon's crested caracara, the wood stork, the Florida panther, the Everglade snail kite, and the Everglade snail kite designated critical habitat. The USACE has determined that the project may affect the eastern indigo snake. By letter dated September 5, 2019, the USACE requested concurrence from the USFWS with the determinations for the Audubon's crested caracara, the wood stork, the Florida panther, the Everglade snail kite, and the Everglade snail kite designated critical habitat; and requested initiation of formal consultation for the determination for the eastern indigo snake. The USFWS is reviewing the Biological Assessment and the content of this EIS to determine if they concur with the USACE's determinations and effects.

The USACE, Regulatory Division determined that the project would have no effect on the species within the NMFS' purview since the project would not affect any marine threatened or endangered species.

(7) Other Wildlife.

Localized disturbances to wildlife are expected during the construction period. Modification of habitat would result in permanent dislocation for some species that primarily thrive in agriculture lands or dry conditions; however, impacts to species that use agricultural areas are expected to be negligible. In order to comply with the Migratory Bird Treaty Act prior to construction or flooding of the STA, the entire area will be carefully checked to ensure that migratory birds are not currently nesting. In fact, habitat for wading birds, waterfowl, and other species that use Everglade's marshes and wetlands would increase. In addition, water quality improvements will enhance habitat conditions for wildlife.

No adverse impacts to small foraging mammals, reptiles, or wading birds, or wildlife in general are expected. Environmental features, such as the seepage buffer area, deep water fish refugia, canal seepage littoral areas, and internal sloped levees will provide opportunities and minimize impacts to fish and wildlife species.

(8) Actions to Minimize Impacts.

All possible protection and conservation measures will be taken during construction in order to preserve and enhance environmental, aesthetic, recreational, and economic values in the project area. In addition, standard construction BMPs will be implemented during construction to avoid affecting the surrounding environments. Monitoring programs have also been developed to ensure the project does not harm, but in fact aids in the recovery of the Everglades ecosystem.

d. Proposed Disposal Site Determinations.

(1) Mixing Zone Determination.

The dredged material will not cause unacceptable changes in the mixing zone water quality requirements as specified by the State of Florida's Water Quality Certification permit procedures. No adverse impacts related to depth, current velocity, direction and variability, degree of turbulence, stratification, or ambient concentrations of constituents are expected from implementation of the project.

(3) Potential Effects on Human Use Characteristics.

(a) Municipal and Private Water Supplies.

No municipal or private water supplies would be adversely impacted by the implementation of the project. The impoundment will act to recharge both the surficial and Floridan aquifers.

(b) Recreational and Commercial Fisheries.

Recreational users of the project areas may be disturbed by noise and other evidence of construction during the construction periods. No adverse impacts to recreational and commercial fisheries are expected as result of the project implementation. The SFWMD is considering if the STA could provide recreational fishing opportunities.

(c) Water-related Recreation.

Canals in the area provide a resource for water-based activities. The network of access roads typically situated along the levees adjacent to the canals provides widespread access to these water resources. Changes through removal or additions of levees, canals, bridges, and water control structures will change public access abilities.

Water related recreation in the immediate vicinity of construction will likely be impacted during construction activities within the canals with an increase in traffic. However, this will be a short-term impact. The SFWMD is considering if the impoundment could provide additional recreational opportunities in the form of boating, fishing and wildlife viewing.

(d) Aesthetics. The project would involve an initial period when construction would be evident to people within viewing range of the project sites. Views of construction equipment, dust plumes, exposed excavations, and partially completed culverts and other structures would be visible to residents and workers who pass near the construction sites in the course of their regular activities, and to motorists traveling on roads adjacent to the project sites. These views would be temporary in nature. Once the project is in operation, the long-term appearance of the project site would consist of expansive open water areas bordered by a variety of constructed features, including levees; roads along the tops of the levees; and water control structures, culverts, and pump stations spaced at varying intervals. The local landscape would retain the uniform and organized character that currently exists, while the current mix of marsh and vegetated areas would be replaced by open water. Although the future condition with the project would result in less overall visual diversity, the presence of additional water area would likely be perceived as a positive change or of more visual interest when compared with the current condition. On balance, the long-term aesthetic change resulting from the project would not be a significant adverse impact.

(e) Parks, National and Historic Monuments, National Seashores, Wilderness Areas, Research Sites, and Similar Preserves.

State and local parks do exist south and east of the project site. These include the WCAs, Holey Land Wildlife Management Area, and Rotenberger Wildlife Management Area. The impacts during construction would be temporary. These impacts would be minimized and avoided as practicable.

e. Determination of Cumulative Effects on the Aquatic Ecosystem.

Many projects will affect the northern and southern Everglades in the future, many of which are components of the Comprehensive Everglades Planning Project (CEPP). Cumulatively, these restoration efforts will provide substantial improvements in water quality, water deliveries, and timing of these deliveries. These efforts will also improve habitat for fish and wildlife, including threatened and endangered species.

Many restoration programs would affect the northern and southern Everglades in the future. These projects focus on restoration of natural hydrology and improved water quality in the project-affected environment, as well as in other physiographic regions within the study area. Cumulatively, these restoration efforts would provide substantial improvements in water quality, water deliveries, and timing of these deliveries. It should be noted that additional projects would be needed to meet the State's overall water quality goal for the Eastern and Western Flowpaths. Among the specific ecological benefits from these future projects, freshwater releases to the Northern Estuaries would assist to normalize salinity and dissolved oxygen and reduce turbidity and nitrification. Furthermore, STAs, storage reservoirs, and Aquifer Storage and Recovery wells are anticipated to improve the quality of water in the region (WCAs, estuaries, and C-51 East Basin). Finally, implementation of Best Management Practices to treat agricultural runoff prior to discharge would reduce phosphorus levels in EAA waters. Past, present, proposed, and future actions were evaluated to determine the potential cumulative effects on hydrology, threatened and endangered species, fish and wildlife resources, surface water quality, ecological resources (vegetation and wetlands), and cultural, historic and archaeological resources.

f. Determination of Secondary Effects on the Aquatic Ecosystem.

There will be no adverse secondary impacts on the aquatic ecosystem as a result of the construction. During construction the site will be contained enclosing the construction areas with sedimentation barriers. Erosion will be controlled by compaction of soils, construction of ditches, and embankments, maintenance of relatively flat grades, and other appropriate erosion control techniques. Sedimentation will be controlled during construction by use of sediment controls basins and traps, filter berms, straw bales, etc. Impacts associated with construction traffic and equipment will be localized due to construction occurring in phases. Phasing construction will allow wildlife to utilize undisturbed portions of the site. Monitoring plan would be implemented during and after construction to ensure no adverse impacts to water quality.

III. FINDINGS OF COMPLIANCE OR NON-COMPLIANCE WITH THE RESTRICTIONS ON DISCHARGE.

(i) No significant adaptations of the guidelines were made relative to this evaluation.

(ii) No practicable alternative exists which meets the study objectives that does not involve discharge of fill into waters of the United States.

(iii) After consideration of disposal site dilution and dispersion, the discharge of fill materials will not cause or contribute to, violations of any applicable State water quality standards for Class III waters. The discharge operation will not violate the Toxic Effluent Standards of Section 307 of the Clean Water Act.

(iv) The A-2 STA project will result in the temporary displacement of threatened and endangered species. However, no permanent adverse impacts are expected.

It is anticipated that the construction of the A-2 STA project will not jeopardize the continued existence of any species listed as threatened or endangered or result in the likelihood of destruction or adverse modification of any critical habitat as specified by the Endangered Species Act of 1973, as amended. The USFWS is currently reviewing the project to determine if they concur with the USACE's determinations. The U.S. Fish and Wildlife Service (USFWS) will recommend conservation and protection measures for species that could occur in the A-2 STA lands.

(v) The placement of fill material will not result in significant adverse effects on human health and welfare, including municipal and private water supplies, recreational and commercial fishing, plankton, fish, shellfish, wildlife, and special aquatic sites. Significant adverse effects on aquatic ecosystem diversity, productivity and stability, and recreational, aesthetic, and economic values will not occur.

f. On the basis of the guidelines, the proposed disposal site for the discharge of dredged material is specified as complying with the requirements of these guidelines.