

#### DEPARTMENT OF THE ARMY

CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
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JACKSONVILLE, FLORIDA 32232-0019

#### RECORD OF DECISION

ACTION ID: SAJ-2018-03427(SP-KDS)

APPLICANT: South Florida Water Management District

PROJECT NAME: A-2 Stormwater Treatment Area

I have reviewed and evaluated, in light of the overall public interest, the documents and factors concerning the Department of the Army (DA) permit application associated with the A-2 Stormwater Treatment Area (A-2 STA), the Proposed Regulatory Action, as well as the stated views of interested agencies and the public. In doing so, I have considered the possible consequences of the Proposed Regulatory Action in accordance with regulations published in 33 Code of Federal Regulations (C.F.R.) Parts 320 through 332 and 40 C.F.R. Part 230.

As described in the Environmental Impact Statement (EIS), titled Final Environmental Impact Statement for Central and Southern Florida, Everglades Agricultural Area (EAA), Florida and prepared by the U.S. Army Corps of Engineers, Jacksonville District (Corps) under the National Environmental Policy Act (NEPA), the Proposed Action is to construct the A-2 STA consisting of 6,500 acres of effective treatment areas divided into three east-west flowing cells. The Proposed Regulatory Action includes the discharge of dredged or fill material into 288.4 acres waters of the United States (8.4 acres of wetlands and 280 acres of tributaries) in order to construct the A-2 STA and associated infrastructure. Of the 288.4 acres of waters of the United States, approximately 5.6 acres of tributaries and 8.4 acres of wetlands will be completely filled to become levees. The remaining 274.4 acres of tributaries will be converted from shallow, open waters to wetlands. As such, a Department of the Army permit under Section 404 of the Clean Water Act (33 U.S.C. §1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §408) and approval under Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 408) are required for the Proposed Regulatory Action.

The EIS evaluated the potential effects on the human environment of the construction of the A-2 STA and reservoir. The Proposed Action from the regulatory perspective is the construction of the STA. The South Florida Water Management District (SFWMD), the local non-federal sponsor, proposes to construct the STA component of the project prior to execution of a Project Partnership Agreement for the Federal project. Therefore, the EIS serves two purposes: 1) consider the impacts of the Federal Civil Works project, the A-2 STA and Reservoir, authorized in Water Resources Development Act (WRDA) 2018, on the human environment, and 2) consider the impacts of the construction and operation of the A-2 STA, as described in the SFWMD's Section 404 and Section 10 permit application and subsequent additional information, on the human environment. This Record of Decision (ROD) provides the Corps' permit decision pursuant to Section

404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act, and Section 14 of the Rivers and Harbors Act. The Corps is also preparing a separate ROD for the Federal project.

For clarification, this document will refer to the A-2 STA as a standalone feature with the term Proposed Regulatory Action. When the A-2 STA and Reservoir are being discussed as combined features and the final preferred action, this document will use the term CEPP New Water Modification.

The EIS evaluated the complete Proposed Regulatory Action, which is the construction and operation of the STA. However, the SFWMD is proposing to construct the project in three phases. Phase I includes site preparation within the footprint of the Inflow/Outflow canal. Phase II includes construction of portions of the Inflow/Outflow Canal for the A-2 STA. Phase III will include the remainder of the STA and associated infrastructure. The worked included in each phase is described below:

Phase I: Site preparation, including mechanical clearing, grubbing vegetation, and demucking, within the approximately 340-acre footprint of the A-2 STA Intake and Outfall Canal.

Phase II: Phase II includes the construction of the A-2 STA Inflow/Outflow Canal and the seepage canal. The A-2 STA Inflow/Outflow Canal is approximately 4-miles of a conveyance canal paralleling the north property line of the STA including clearing and grubbing within the limits of construction. Interior and Exterior Road Levees will be constructed on either side of the Inflow/Outflow Canal. The Interior Levee will also be the embankment for the future Cells 1 and 2 of the A-2 STA. This conveyance canal will be isolated from other surface waters (the Miami Canal) until construction of the A-2 STA. The A-2 STA Seepage Canal, is a canal along the north property line to minimize seepage flows to adjacent lands. This canal will not be functional until completion of the A-2 STA. Phase I results in the discharge of fill in 1.9 acres of waters of the United States (tributaries including ditches and canals). The remainder of the tributaries in the Inflow/Outflow Canal will be excavated to become a deeper open water.

Phase III: Phase III includes the construction of (1) an STA with approximately 6,500 acres of effective treatment area divided into three east-west flowing cells, (2) a water control structure in the Miami Canal at the northwest corner of the STA, and (3) additional infrastructure including pump stations. A final operations plan has not been submitted for review. As such, only the initial operational period referenced as the Operational Testing and Monitoring Period (OTMP) is included in Phase III. When A-2 STA construction is complete and prior to implementing regular or interim operations, the STA will enter into OTMP. OTMP is considered part of construction phase and includes inundating the cells of the STA to facilitate vegetation grow-in for the STA. This OTMP will begin as soon as levees facing the A-2 reservoir side are complete. During this interim operating period to support vegetation establishment, flows shall be released from Lake Okeechobee and water will be directed from the Miami Canal into the A-2 STA, through the cells, and then either discharged back into the Miami Canal or

retained within the A-2 STA. This period is expected to last approximately 2 years. This stabilization or grow-in phase allows for the maturation of desired vegetation, identification and correction of hydraulic short circuiting and the equilibration of operations across portions of the existing and expanded facility treatment works. Phase III results in the discharge of fill in 286.5 acres of waters of the United States (8.4 acres of wetlands and 278.1 acres of tributaries including ditches and canals). Of the 286.5 acres of waters of the United States, approximately 3.7 acres of tributaries and 8.4 acres of wetlands will be completely fill to become levees. The remaining 274.4 acres of tributaries will be converted from shallow, open waters to wetlands. The remainder of the 221.6 acres of wetlands will be graded to obtain desired elevations but will remain wetlands.

Work is approved conditionally within Phases II and III provided the applicant submits final 408 approval for Phase II; and complete site design plans, a final operational plan, water quality certification, NPDES permit, and a water quality monitoring plan for Phase III. Pending receipt of the required documentation, written verification from the Corps will be required for the Permittee to begin work on Phases II and III.

#### I. Background

In WRDA 2016, Congress authorized the Central Everglades Planning Project (CEPP). CEPP included a suite of restoration projects in the central Everglades and included a 14,000-acre Flow Equalization Basin (FEB), referred to as the A-2 FEB, in the same general footprint as the currently proposed Reservoir. A FEB is a shallow above-ground impoundment that provides surface water storage, flow equalization, and also some limited water quality improvement functions. Since congressional authorization of CEPP in WRDA 2016, the State of Florida experienced excessive rainfall well above average, resulting in greater releases from Lake Okeechobee to the Northern Estuaries than in an average rainfall year. The rainfall experienced in the months of June 2017, September 2017, and October 2017 was approximately 190% greater than the average rainfall expected for these months due in large part from Tropical Storm Philippe and Hurricane Irma. As a result of the greater than average rainfall in 2017, former Florida Governor, Rick Scott, declared a state of emergency under Executive Orders 16-59, 16-155, and 16-156.

Immediately following the Governor's Executive Orders, the Florida State Legislature passed the Water Resources Law of 2017 (Laws of Florida, Chapter 2017-10, formerly known as Senate Bill 10). The law, signed by Governor Scott May 9, 2017, directed the SFWMD to pursue an expedited process to provide increased storage, treatment capacity, and conveyance in the Everglades Agricultural Area (EAA) jointly with the U.S. Army Corps of Engineers and consistent with CERP. The SFWMD is the state agency responsible for water resources management in south Florida and acts as the non-Federal sponsor for Federal water resources projects, including CERP. The SFWMD developed the Central Everglades Planning Project Post Authorization Change Report (CEPP 203 Study), Feasibility Study and Draft Environmental Impact Statement pursuant to Section 203 of WRDA 1986 (33 U.S.C. §2231(a)(1), as amended – Study of

Water Resources Development Projects by Non-Federal Interests to increase the amount of water storage and treatment in the currently authorized CEPP plan. In section 1308(a) of WRDA of 2018, Congress authorized the project for ecosystem restoration, Central and Southern Florida, Everglades Agricultural Area, Florida in accordance with section 601 of the WRDA of 2000, as recommended in the addendum to the CEPP 203 Study, Feasibility Study and Draft Environmental Impact Statement prepared by the SFWMD and dated May 2018, with such modifications as the Secretary of the Army considers appropriate. The Corps began preparation of an EIS in accordance with NEPA to evaluate and document effects on the human environment of the SFWMD recommended plan prepared under Section 203 of WRDA.

A NEPA scoping letter dated April 16, 2018, invited comments from Federal, State, and local agencies, federally recognized Indian Tribes, and other interested private organizations and individuals. Scoping comments were accepted through May 1, 2018. A Notice of Intent (NOI) to prepare a Draft EIS for the SFWMD Section 203 Preferred Alternative was published in the Federal Register (FR Volume 76, Number 232) on April 16, 2018.

On June 8, 2018, a Draft EIS titled South Florida Water Management District (SFWMD) Section 203 Everglades Agricultural Area Southern Reservoir (EIS Number 20180126) was issued by the Corps for a 45-day review period. A Notice of Availability (NOA) was published in the Federal Register on June 8, 2018 (*Federal Register*, Vol. 83, No. 111, 26666). Public meetings were held on June 26, 27, and 28 of 2018. The comment period on the Draft EIS closed on July 23, 2018.

In an effort to begin site preparation work on the STA, on December 18, 2018, the SFWMD submitted an application to stockpile material obtained from offsite excavation in 230 acres of wetlands within the A-2 STA footprint. The material was being stockpiled for future construction of the A-2 STA and Reservoir. On June 4, 2019, the SFWMD revised their stockpile application and requested authorization to discharge fill into 14 acres of tributaries to clear, grub and demuck a 700-foot swath of land in preparation to construct the A-2 STA inflow and outflow canal. However, as the project purpose was the site preparation for the construction of the STA and associated infrastructure, the Corps requested submittal of an application for the complete A-2 STA project. On August 6, 2019, the SFWMD submitted an application for the complete A-2 STA including associated infrastructure like the inflow and outflow canal and pump stations. The project no longer includes the proposed stockpiling in wetlands. A public notice for the STA was posted to the website and mailed to adjacent property owners on September 5, 2019.

The Corps released the Final EIS, titled Central and Southern Florida, Everglades Agricultural Area (EAA), Florida, on January 24, 2020. An NOA was published in the Federal Register on January 24, 2020 (*Federal Register*, Vol. 85, No. 16, 4321). A Regulatory Division public notice announcing the availability of the Final EIS was issued on January 28, 2020. The comment period on the Final EIS closed on February 24, 2020. The Corps received 29 letters from Federal, state, local governments, industry,

and non-governmental organizations s as well as over 150 emails from members of the public.

#### II. Project Purpose and Need

a. **Purpose**: The overall project purpose of the regulatory action is improve the quality of water flows to the central Everglades (Water Conservation Area 3 and Everglades National Park) and Florida Bay. In addition, if the Corps constructs the proposed A-2 Reservoir, the overall project purpose would include improvement of the quantity, quality, timing and distribution of water flows to central Everglades (Water Conservation Area 3 and Everglades National Park), and Florida Bay while increasing water supply for municipal, industrial, and agricultural users.

**Need**: As discussed in Section I of this document, in 2016 and 2017, the State of Florida experienced excessive rainfall well above average, resulting in greater releases from Lake Okeechobee to the Northern Estuaries than in an average rainfall year. This rainfall demonstrated the need to provide additional storage, treatment, and conveyance in the EAA beyond what was authorized in CEPP in 2016, to further reduce water management releases from Lake Okeechobee to the Northern Estuaries, and to deliver water essential to Everglades' restoration, consistent with CERP performance goals.

- III. **Alternatives Considered:** The A-2 STA, the Proposed Regulatory Action, can operate as a standalone feature and has independent utility. However, the A-2 STA was designed to function with the reservoir. Therefore, the Corps looked at alternatives that considered both the STA and reservoir assuming both will be constructed. The federal project includes the STA and reservoir; however, the regulatory action is only the STA.
- a. **Preliminary Screening**: Due to the size and complexity of the STA and Reservoir project's objectives, the alternatives analysis was approached by first analyzing the water quality treatment and water storage methods available and selecting the methods that best fits the STA and reservoir project objective. The water storage methods evaluated are not presented in this document because the regulatory action is limited to the water quality treatment aspect. Details regarding the water storage methods considered can be found in Section 3.1 of the Draft EIS. Then alternatives that included different sizes, configurations, and operations of the water quality treatment method and water storage feature. The water quality treatment is needed in close proximity to the water storage to provide treatment for that water.

Water quality can be improved using a variety of methods. The Draft EIS evaluated four water quality treatment methods in a preliminary screening analysis to determine the appropriate water quality improvement method to achieve the project purpose. The criteria for preliminary screening included:

- Effectiveness: ability to meet objectives and avoid constraints
- Operational Flexibility: ability to adapt to changing conditions

- Environmental Effects: avoidance of negative impacts
- Constructability: feasibility of construction
- Human Health and Safety: avoid or minimize risks
- Land Availability: sufficient or suitable property for construction and operation
- Efficiency: relative cost effectiveness in meeting downstream objectives
- i. **Stormwater Treatment Areas (STAs):** STAs, or large-scale constructed treatment wetlands, have been operated by the SFWMD for over 20 years to reduce nutrients, primarily phosphorous, from water prior to being discharged into the Everglades. STAs are typically managed as shallow, above-ground impoundments and are vegetated with a variety of native and non-native species. Most STAs consist of multiple parallel flow-ways that include treatment cells dominated by emergent aquatic vegetation (EAV) followed by treatment cells dominated by submerged aquatic vegetation (SAV). Water is directed through STAs via pump stations and passive and/or operable water control structures with the goal of maximizing phosphorus retention. Water levels and vegetation conditions are managed to promote desirable wetland vegetation survival while strategic herbicide application is used to prevent or minimize the colonization and expansion of undesirable, nuisance, and exotic vegetation. Due to their long history of success, STAs were retained for consideration during screening.
- ii. *Chemical Precipitation:* Chemical Precipitation using ferric chloride, aluminum or other salts of iron can be utilized for phosphorus removal from water. Although the amount of land required for chemical precipitation is substantially less than STAs, there are some drawbacks to using this process to improve water quality. The chemicals required for chemical precipitation are expensive and due to the large volumes of water to be treated, the process would not be cost-effective. Additionally, excessive sludge and waste products would require disposal, adding to the substantial costs and creating an environmental issue with sludge disposal. In addition, there are concerns that the water discharged to the Everglades after undergoing chemical precipitation may not be compatible with the Everglades and may result in other adverse environmental impacts. As such, due to excessive costs and environmental concerns, Chemical Precipitation was eliminated from further consideration.

## iii. Dredging of Lake Okeechobee near Primary Canal Intakes:

This measure would involve dredging sediment from Lake Okeechobee in the areas just north of the confluence of the EAA canals and Lake Okeechobee. The removal of the sediment should decrease the amount of residual nutrients that would be suspended in the water before flowing to the Everglades. Although it is likely that this measure would have some success in nutrient removal, it would likely be on an extremely small scale, and substantial treatment would still be required before water could flow to the Everglades. Due to the relative inefficiency of this measure, it was eliminated from further consideration.

iv. Hybrid Wetland Treatment Technology (HWTT): HWTT systems employ chemical treatment systems for phosphorus removal and utilize wetland vegetation to the maximum extent possible to minimize chemical amendment use. Chemical coagulants are added, either continuously or intermittently, to the front end of the treatment system, which contains one or more deep zones to capture the resulting floc material. A fundamental concept of the HWTT technology is that the floc resulting from coagulant additional generally remains active and has the capability of additional phosphorus sorption. Both active and passive reuse of floc material is practiced in this technology. Passive re-use refers to the accumulation of viable flocs on plant roots and stems that are situated near the front-end and mid-regions of the systems. Active re-use refers to the mechanical re-suspension of settled floc. HWTT systems in use north of Lake Okeechobee have shown promising results with total phosphorus concentration reductions ranging from 70 to 95 percent. Although HWTT has been shown to be cost effective for smaller watersheds and aquatic systems, there remains a high level of technological and cost uncertainty in applying HWTT to large volume treatment efforts. While there may be opportunities to incorporate HWTT in other CERP projects, HWTT was not considered for this increment of CERP and was therefore eliminated from further consideration.

All four water quality treatment methods are effective; however, only STAs have the effectiveness at treating this volume and area of water and the operational flexibility needed for to meet the project purpose. Therefore, the preliminary screening determined STAs were the best water quality treatment method to pursue for this project. Once that was determined, additional alternatives were considered to determine the specifics design and operational criteria.

#### b. Alternatives Considered

- i. **No Action No Build:** Due to the location and configuration of waters of the United States on the project site, the no Action No Build alternative would result in no construction of features related to water quality/water storage.
- ii. **No Action No Corps Permit (FEIS Alternative 1)** The 2014 CEPP Final PIR/EIS authorized plan, known as Alt4R2 is the No Action Alternative. The Corps considers it a No Action alternative because the plan was approved by Congress. The 2014 CEPP plan included a 14,000 acre FEB, referred to as A-2 FEB, plus the existing A-1 FEB. The No Action alternative results in the permanent loss of 24 acres of waters of the United States and creates 13,210 acres of wetlands from upland farm fields.
- iii. **Alternative C240A (FEIS Alternative 2) –** Alternative C240A was identified as the Preferred Alternative in the Draft EIS. Alternative R240A includes a 240,000 ac-ft aboveground reservoir and a 6,500-acre STA, located on the A-2 parcel and A-2 Expansion area that will work in conjunction with the existing 60,000 ac-ft A-1 FEB, STA-2, and STA-3/4 to meet State water quality standards. The proposed A-2 East Reservoir is 10,500 acres and designed to have a normal full storage water depth

of approximately 23 feet. This alternative also includes 1,000 cfs of additional conveyance capacity in the Miami Canal within the EAA and 200 cfs of additional conveyance capacity in the North New River Canal within the EAA. For this alternative, A-2 East Reservoir outflows can be sent to the new A-2 West STA (located adjacent to and directly west of the A-2 East Reservoir), to the existing A-1 FEB, to the existing STA-2, and/or to the existing STA-3/4. Outflows from the A-2 West STA would be conveyed via a conflict structure to convey water under the STA 3/4 Inflow Canal to the Miami Canal south of the existing G-373 divide structure. A-2 East Reservoir outflows can also be conveyed to either the Miami or North New River Canals via the intake canal.

Alternative C240A also includes an intake canal located adjacent to and directly north of the A-2 West STA, the A-2 East Reservoir, and the A-1 FEB. The intake canal extends from the Miami Canal to the North New River Canal, which allows flexibility to convey water into the reservoir from either side of the project area. A new inflow pump station conveys water into the A-2 East Reservoir from the intake canal.

The Alternative 2 (C240A) project features consist of:

- 240,000 ac-ft storage reservoir, plus A-1 FEB
- 10,500-acre reservoir, approximately 23 ft. deep
- 6,500 acre STA (3,500 acres on existing CEPP A-2 FEB footprint, additional 3,000 acres on A-2 Expansion lands)
- Conveyance improvements to the Miami and NNR Canal (1,200 cfs)
- Multi-purpose project operations
- New conflict structure to route treated STA water under the STA 3/4 intake canal and discharge to the Miami Canal south of G-373 divide structure.

Alternative 2 (C240A) results in the permanent loss of 14 acres of waters of the United States and creates 6,260 acres of wetlands from farm fields and enhances 221.6 acres of wetlands.

iv. **Alternative R240B** - Alternative R240B includes a 240,000 ac-ft aboveground reservoir and a 6,500-acre STA, located on the A-2 parcel and A-2 Expansion area that will work in conjunction with the existing 60,000 ac-ft A-1 FEB, STA-2 and STA-3/4 to meet State water quality standards. The proposed A-2 West Reservoir is 10,500 acres and designed to have a normal full storage water depth of approximately 23 feet. This alternative also includes 1,000 cfs of additional conveyance capacity in the Miami Canal within the EAA and 200 cfs of additional conveyance capacity in the North New River Canal within the EAA. For this alternative, A-2 West Reservoir outflows can be sent to the new A-2 East STA (located adjacent to and directly east of the A-2 West Reservoir), to the existing A-1 FEB (via the existing STA-3/4/A-1 FEB inflow canal), to the existing STA-2, and/or to the existing STA-3/4.

Outflows from the A-2 East STA would be conveyed to the Miami Canal south of the existing G-373 divide structure via a new east-west A-2 East STA outflow canal located adjacent to and directly south of the A-2 West Reservoir. A-2 West Reservoir outflows can also be conveyed to either the Miami Canal via a reservoir outflow structure or to the North New River Canal via the intake canal.

Alternative R240B also includes an intake canal located adjacent to and directly north of the A-2 West Reservoir, the A-2 East STA, and the A-1 FEB. The intake canal extends from the Miami Canal to the North New River Canal, which allows flexibility to convey water into the reservoir from either side of the project area. A new inflow pump station conveys water into the A-2 West Reservoir from the intake canal.

v. Alternative R360C - Alternative R360C includes a 360,000 ac-ft aboveground reservoir and an 11,500-acre STA, located on the A-1 parcel, the A-2 parcel, and the A-2 Expansion area, that will work in conjunction with the existing STA-2 and STA-3/4 to meet State water quality standards. The proposed A-1 Reservoir and A-2 East Reservoir are 20,500 acres combined and designed to have a normal full storage water depth of approximately 18 feet. For this alternative, the existing 16,500-acre shallow A-1 FEB is modified to a reservoir. This alternative also includes 1,000 cfs of additional conveyance capacity in the Miami Canal within the EAA and 200 cfs of additional conveyance capacity in the North New River Canal within the EAA. For this alternative, A-1 Reservoir and A-2 East Reservoir outflows can be sent to the new A-2 West STA (located adjacent to and directly west of the A-2 East Reservoir), to the existing STA-2, and/or to the existing STA-3/4. Outflows from the A-2 West STA would be via a conflict structure to convey water under the STA 3/4 Inflow Canal to the Miami Canal south of the existing G-373 divide structure. A-1 Reservoir outflows can be conveyed to the North New River Canal via a reservoir outflow structure and A-2 East Reservoir outflows can be conveved to either the Miami or North New River Canals via the intake canal.

Alternative R360C also includes an intake canal located adjacent to and directly north of the A-2 West STA, the A-2 East Reservoir and the A-1 Reservoir. The intake canal extends from the Miami Canal to the North New River Canal, which allows flexibility to convey water into the reservoir from either side of the project area. A new inflow pump station conveys water into the A-1/A-2 East Reservoir from the intake canal.

vi. **Alternative R360D** - Alternative R360D includes a 360,000 ac-ft aboveground reservoir and an 11,500-acre STA, located on the A-1 parcel, the A-2 parcel, and the A-2 Expansion area, that will work in conjunction with the existing STA-2 and STA-3/4 to meet State water quality standards. The proposed A-2 Reservoir and the A-1 North Reservoir are 20,500 acres combined and designed to have a normal full storage water depth of approximately 18 feet. For this alternative, the existing 16,500-acre shallow A-1 FEB is modified to be a 11,500-acre STA in the south (A-1 South STA) and a 3,500-acre reservoir in the north (A-1 North Reservoir). This alternative also includes 1,000 cfs of additional conveyance capacity in the Miami Canal within the EAA and 200 cfs of additional conveyance capacity in the North New River Canal within the

EAA. For this alternative, A-1 North Reservoir, and A-2 Reservoir outflows can be sent to the new A-1 South STA, to the existing STA-2, and/or to the existing STA-3/4. Outflows from the A-1 South STA would be conveyed to the Miami Canal south of the existing G-373 divide structure via a new east-west A-1 South STA outflow canal located adjacent to and directly south of the A-2 Reservoir. A-1 North Reservoir outflows can be conveyed to the North New River Canal via a reservoir outflow structure and A-2 Reservoir outflows can be conveyed to the Miami Canal via a reservoir outflow structure.

Alternative R360D does not include an intake canal along the north boundary of the project area and instead includes two inflow pump stations, one located at the northeast corner of the A-1 North Reservoir that would convey water from North New River Canal and one located at the northwest corner of the A-2 Reservoir that would convey water from the Miami Canal. Having separate inflow pump stations allows flexibility to convey water into the A-1 North Reservoir and A-2 Reservoir from either side of the project area.

vii. **Alternative C360C** - Alternative C360C includes the exact same storage, treatment, and conveyance improvements and related infrastructure as Alternative R360C above. However, Alternative C360C includes additional operational flexibility and can serve multiple purposes including environmental benefits and other water related needs as identified in Component G of the CERP.

These six alternatives were screened based on the four criteria: effectiveness, acceptability, completeness, and efficiency. Alternative R240A was determined to be the most cost effective plan that achieved the project objectives. The No Action No Build alternative would not allow for any water quality improvement and therefore would not meet the project objectives. Alternative 240A was the Recommended Plan in the Draft EIS. A detailed discussion is provided in Section 3 of the FEIS.

viii. **CEPP New Water Modification (FEIS Alternative 3):** Since publication of the Draft EIS, minor design refinements were made to Alternative C240A to reduce seepage, manage offsite impacts, and ensure water quality benefits. The A-2 STA and Reservoir project's minor design refinements were not substantial changes that are relevant to environmental concerns; therefore, the Corps determined that there is no significant new circumstances or information relevant to environmental concerns and bearing on the CEPP New Water Modification or its impacts and, as such, a supplemental Draft EIS is not required. Alternative 3 is identified as the Preferred Alternative for the Final EIS. While the overall project design and footprint is the same between Alternative 2 and Alternative 3, the CEPP New Water Modification (Alternative 3) was designed to optimize the performance of the CEPP 203 Study Recommended Plan (Alternative 2). The changes to the Alternative 2 included the addition of a secondary seepage canal and additional minor design modifications to reduce seepage, manage offsite impacts, and ensure water quality benefits.

The project features remain the same as described in Alternative 2:

- 240,000 ac-ft storage reservoir, plus A-1 FEB
- Reservoir designed to provide 10,500 ac-ft of storage,, approximately 23 ft. deep
- STA with treatment area of 6,500 acres (3,500 acres on existing CEPP A-2 FEB footprint, additional 3,000 acres on A-2 Expansion lands)
- Conveyance improvements to the Miami and NNR Canal (1,200 cfs)
- Multi-purpose project operations
- New conflict structure to route treated STA water under the STA 3/4 intake canal and discharge to the Miami Canal south of G-373 divide structure.

Alternative 3 (CEPP New Water Modification) results in the permanent loss of 14 acres of waters of the United States and creates 6,260 acres of wetlands from farm fields and enhances 221.6 acres of wetlands.

# c. Determination of Practicable Alternatives and the Least Environmentally Damaging Practicable Alternative (LEDPA):

- i. We have determined that both No Action Alternatives (No Build and Alternative 1 No Corps Permit), would not meet the overall project purpose. The No Build alternative would not allow for construction of any water quality or storage features and would not meet the project purpose. The goal is to improve the water storage and water quality treatment beyond what was authorized in CEPP. Alternative 1 maintains the same project designs authorized in CEPP. Therefore, we have determined that Alternative 1 is not practicable.
- ii. We have determined that both Alternative 2 and Alternative 3 meets the overall project purpose, and is available and practicable. Alternative 2 and Alternative 3 have similar impacts to aquatic resources and are both the LEDPA. However, Alternative 2 would have adverse effects on the public interest including seepage impacts to the agricultural fields to the north of the project site. The analysis of seepage impacts can be found in the FEIS Annex C. Alternative 3 includes management measure, the construction of a "secondary" seepage canal, to address off-site seepage impacts. This management measure coupled with a 30- foot deep seepage cutoff wall, will allow the inflow/outflow canal to be operated independently to achieve its project purpose in providing water to the A-2 Reservoir while also mitigating off-site seepage impacts.
- iii. We have determined that Alternative 3 would meet the overall project purpose, is available, and is practicable. The goal in formulating the alternatives is to provide environmental benefits to the Northern Estuaries, Lake Okeechobee, and the Everglades system, as is the goal of CERP. Therefore, all alternatives are an improvement over the No Action No Corps Permit Alternative because they provide more freshwater storage, treatment, distribution, and timing to improve conditions within the Everglades. The environmental benefits of Alternative 3 are similar to Alternative 2.

The difference between the two is that Alternative 3 contains design modifications to ensure seepage and offsite impacts are reduced. In addition, Alternative 3 includes measures to reduce risk that the project will not achieve water quality benefits and are explained in subsection 4.9 of the Final EIS. Because this alternative would reduce offsite hydrologic impacts and reduce the risk of not achieving the desired water quality improvements than the other practicable alternatives, we have determined that this alternative is the LEDPA.

#### IV. Comments on the Final Environmental Impact Statement

a. The attached comment matrix includes all comments received in response to the FEIS and the Corps' response.

## V. Consideration of Applicable Laws, Regulations, Executive Orders, and Policies

- a. **National Environmental Policy Act (NEPA):** The Proposed Regulatory Action is in compliance with NEPA. The EIS was completed to evaluate a reasonable range of alternatives and the direct, indirect, and cumulative effects associated with three alternatives, including the "no action" alternative. The Corps followed the NEPA process identified in 40 C.F.R. Parts 1500 1508, 33 C.F.R. Part 230, and 33 C.F.R. Part 325, Appendix B, including noticing and timeline requirements, to produce an EIS that discloses to the public the probable impacts of each alternative, taking into account mitigation. The EIS is being utilized to make a permit decision on the Proposed Regulatory Action and Federal Civil Works project authorized in WRDA 2018.
- b. **Section 401 of the Clean Water Act:** A water quality certification pursuant to section 401 of the Clean Water Act will be obtained from the State of Florida, Florida Department of Environmental Protection (FDEP) prior to construction. The FDEP is evaluating the Everglades Agricultural Area Storage Reservoir Project (EAASRP) which includes the A-2 STA and the Reservoir in multiple phases. Each of the phased reviews states whether Water Quality Certification is issued or waived. Currently there are three known phases. Phase 1 includes relocating spoil material from the A-1 Flow Equalization Basin (FEB) (SAJ-2005-00053(IP-AAZ)) and stockpiling it on the project footprint following site preparation activities, to serve as a source of fill for the EAASRP. Phase 2 includes construction of the Inflow/Outflow Canal for the A-2 STA. Phase 3 includes the remainder of the A-2 STA.

By letter dated December 20, 2018, FDEP verified that Phase 1 qualified for an exemption; therefore, WQC was waived. On 11 March 2020, the FDEP issued a permit (0370631-004) for Phase 2 including WQC. An application for Phase 3 has not been submitted. However, in a letter dated 27 February 2020, in response to the FEIS the State of Florida, FDEP wrote the State has no objections to the Preferred Alternative described in the Final EIS. Further, the Preferred Alternative appears to meet the requirements of the water quality certification, pending confirmation based on information to be developed during the pre-construction engineering and design phase.

A Comprehensive Everglades Restoration Plan Regulation Act (CERPRA) permit and/or an Environmental Resource Permit (ERP) will be issued for this project upon submission and review of 90% design and will constitute certification of compliance with state water quality standards pursuant to Section 401 of the Clean Water Act. All conditions of the A-2 STA water quality certification will be required as a condition of the permit in order to minimize adverse impacts to water quality.

c. **Endangered Species Act of 1973:** On May 1, 2018, the Corps initiated consultation with the U.S. Fish and Wildlife Service for potential effects of the proposed A-2 STA and Reservoir project on the federally threatened eastern indigo snake (*Drymarchon corais couperi*; indigo snake) and endangered Florida panther (*Felis concolor coryi*; panther). Additionally the Corps determined the actions may affect, but are not likely to adversely affect the federally threatened Audubon's crested caracara (*Polyborus plancus audubonii*, now *Caracara cheriway*; caracara), federally endangered Everglade snail kite (*Rostrhamus sociabilis plumbeus*; snail kite), and federally threatened wood stork (*Mycteria americana*).

Pursuant to Section 7 of the Endangered Species Act of 1973, as amended, the U.S. Fish and Wildlife Service (FWS) issued a biological opinion (Service Code: 04EF2000-2018-F-0867), dated March 12, 2020, that determined that the recommended plan will not jeopardize the continued existence of the following federally listed species or adversely modify designated critical habitat: eastern indigo snake and Florida panther. The biological opinion also included concurrence with the Corps' determination that the recommended plan may affect but is not likely to adversely affect the following federally listed species or their designated critical habitat: Audubon's (northern) crested caracara, Everglade snail kite, and wood stork. The biological opinion included the STA and the reservoir. All terms and conditions, monitoring requirements, and reasonable and prudent measures associated with the STA will be required by condition of the permit in order to minimize take of endangered species and avoid jeopardizing the species' existence (Appendix A and Section 4.4).

- d. **Fish and Wildlife Coordination Act:** The Proposed Regulatory Action is in compliance with the FWCA. Chapter 4.4 4.6 of the Final EIS identifies the impacts of the CEPP New Water Modification on fish and wildlife species. The FWS signed a Memorandum of Agreement on April 23, 2018 to use the NEPA and ESA processes to meet the intent of the Act via their review of the draft EIS. They also participated in the CEPP 203 Study project planning and did not have any additional comments on the draft EIS. FWS did not provide comments on the EIS specifically related to compliance with the Fish and Wildlife Coordination Act.
- e. **Magnuson-Stevens Fishery Conservation and Management Act:** The Draft EIS notice of availability was provided to the National Marine Fisheries Service (NMFS) on June 8, 2018. In addition, the Corps initiated consultation with NMFS for the project through the public notice of the draft EIS. No additional comments were received from NMFS. The FEIS was updated with an improved Essential Fish Habitat Assessment in Section 4.7. The FEIS was provided to the National Marine Fisheries

Service Southeast Region Habitat Conservation Division January 24, 2020, for final 30 day review, and no comments were received.

- f. Section 106 of the National Historic Preservation Act: A cultural resource assessment survey for the A-2 Expansion Area and the Corps' determination of no adverse effects on any sites eligible for listing in the NRHP within the A-2 Expansion area, which does not include archaeological sites 8PB16039 or 8PB16040, was provided to the Seminole Tribe of Florida, the Miccosukee Tribe of Indians of Florida, and the SHPO on September 17, 2019. The Corps received letters from the SHPO and the Seminole Tribe stating they had no objections to the proposed A-2 permit action and concurred with our determination. There are no burial resources or historic properties within the A-2 STA footprint. Sites 8PB16039 and 8PB16040 are located within the proposed A-2 Reservoir. The SHPO, ACHP, and the Corps have entered into a Programmatic Agreement regarding the A-2 STA and A-2 Reservoir. The Seminole Tribe has declined to participate in the Programmatic Agreement as a Concurring Party; however, the Corps will continue to consult with both Tribes on impacts to historic properties in site 8PB16039 and any decisions regarding inundation or removal of burials at Site 8PB16040.
- g. Section 176(C) of the Clean Air Act (CAA) General Conformity Rule Review: The Proposed Regulatory Action has been analyzed for conformity applicability pursuant to regulations implementing Section 176(c) of the Clean Air Act. The Corps has determined that direct emissions from the proposed activities that require a DA permit will not exceed de minimis levels of a criteria pollutant or its precursors and are exempted by 40 C.F.R. § 93.153. Any later indirect emissions are generally not within the Corps' continuing program responsibility and generally cannot be practicably controlled by the Corps. For these reasons, a conformity determination is not required for this action.
- h. **Executive Order 11998: Floodplain Management:** Executive Order 11988 requires federal agencies to prepare floodplain assessments for proposed actions located in or affecting floodplains. If an agency proposes to conduct an action in a floodplain, it must consider alternatives to avoid adverse effects and incompatible development in the floodplain. If the only practicable alternative involves siting in a floodplain, the agency must minimize potential harm to the floodplain and explain why the action is proposed there. As described in Table 5-1 of Section 5 in the FEIS, the Proposed Regulatory Action is in compliance with this Executive Order.
- i. Executive Order 13175: Consultation with Indian Tribes, Alaska Natives, and Native Hawaiians: On April 18, 2018, the Corps invited the Seminole Tribe of Florida, the Miccosukee Tribe of Indians of Florida, Seminole Nation of Oklahoma, and the Thlopthlocco Tribal Town to Government-to-Government consultation. Section 4.20 of the Final EIS discusses the effects of the CEPP New Water Modification on Native Americans. The same section includes the details of the government-to-government consultations. The Miccosukee Tribe has a Federal Reservation and leased lands within the northern portion of WCA 3A. Due to the

proximity of the CEPP New Water Modification, the A-2 STA and Reservoir CEPP New Water Modification, to these lands, the Miccosukee Tribe has expressed concerns over the conversion of the A-2 FEB approved in CEPP to a deep-water storage reservoir south of Lake Okeechobee. In a letter from the Miccosukee Tribe to the SFWMD dated January 8, 2018, the Miccosukee Tribe states that FEBs provide "critical water quality benefits" that a deep reservoir cannot provide. The Miccosukee Tribe expressed concern that discharges from the STA will not meet the Tribal Water Quality Standard of 10 parts per billion (ppb) total phosphorus (TP) or less. The Tribe supports the CERP and the restoration of the Everglades; however, the Tribe believes that Everglades' restoration should require "more clean water". The Miccosukee Tribe asserts that the lack of water flow across Tamiami Trail has caused "discriminatory flooding of Tribal lands" and that the CEPP New Water Modification will cause more flooding of polluted water within their reservation and leased lands. The Miccosukee Tribe recommends that the de-compartmentalization of the Everglades through construction of CEPP, the opening of the S-12 gates, and the maintenance of culverts on the L-67 and L-29 levees take priority over construction of the CEPP New Water Modification.

The Miccosukee Tribe provided comment letters in response to the Draft EIS on July 17, 2018 and the Final EIS on February 20, 2020. The Miccosukee Tribe comments on the Final EIS can generally be classified into three categories (1) water quality compliance, (2) hydrologic restoration, and (3) cultural resources in the footprint of the reservoir. By letter dated April 16, 2020, the Corps provided a response to the Miccosukee Tribe's comments on the Draft and Final EIS.

The Corps agrees that due to water quality modeling uncertainties, additional measures would be needed to provide reasonable assurance that water quality standards would be met. SFWMD is required to obtain a NPDES permit for the new STA. In addition, water quality and ecosystem monitoring, and adaptive management are project components included in the CEPP New Water Modification designed to further reduce risks associated with modeling uncertainty to the maximum extent practicable and provide reasonable assurance that water quality standards will be attained.

During the October 25, 2019 Government-to-Government Meeting, the Miccosukee Tribe requested two water quality monitoring stations to be placed near the northern boundary of the Miccosukee Reservation to address the Tribe's water quality concerns with this project. In response to this request, the Corps committed, during Government to Government consultation with the Miccosukee Tribe of Florida, to participate in a technical team that includes the non-federal sponsor, the MTIF, and the STOF to consider the placement of additional monitoring stations near the Tribe's reservation land in WCA 3A. Additional monitoring will be used to inform project operations conducted by SFWMD to avoid and minimize impacts to the reservation lands if they decrease from current conditions. Exact locations for water quality monitoring stations will be determined during coordination with the technical team. In addition, the Water Quality Monitoring Plan will be updated to include those stations and baseline sampling will begin prior to implementation of project features. The monitoring stations will be

used to characterize impacts to water quality from the project at the boundaries of the Tribe's reservation.

The Seminole Tribe of Florida provided comments in response to the Final EIS on February 26, 2020. The Seminole Tribe believes that additional reductions will be needed to Lake Okeechobee water management releases and believes the can be obtained through other means. In addition, the Seminole Tribe reserves the right to comment on the CEPP New Water Modification as the secondary and cumulative impacts of the project become more evident. The Seminole Tribe also provided comments on the cultural resources located within the reservoir footprint. By letter dated April 16, 2020, the Corps acknowledged and responded to the Seminole Tribe comment letter.

j. Environmental Justice (Title VI of the Civil Rights Act and Executive Order 12898): The Proposed Regulatory Action does not present any environmental impacts that are high, adverse, and disproportionate to low income, or minority populations. Extensive scoping and public participation ensured potential impacts were understood by the public. The Miccosukee Tribe of Indians of Florida provided a comment expressing concern over the Proposed Actions potential flooding of tribal lands. The potential flooding impacts on tribal lands located within WCA-3A was identified by the Corps as possible environmental impacts that may be disproportionate to low income or minority populations. Since the majority of the increased inflows from the CEPP New Water Modification and the rest of the CEPP project features, to WCA 2A and WCA 3A are delivered during off-peak flow periods, the additional CEPP hydraulic conveyance infrastructure identified in the 2014 CEPP PIR/EIS along both the L-5 and L-6 EAA Canals, and within WCA 3A, will be able to convey the increased flow volume with no increase to extreme high water conditions within WCA 3A. Within the EAA, additional hydraulic design analysis of the Miami and North New River Canal conveyance improvements will be conducted during the Pre-Construction, Engineering, and Design Phase of the project by using additional survey and hydraulic modeling tools to ensure adherence to the flood conveyance requirements identified in the Recommended Plan. In addition, the Corps presented information to the Miccosukee Tribe on October 25, 2020, regarding amount of additional water provided by the project to overdrained Northern Water Conservation Area-(WCA) 3A where part of their reservation is located. The additional water would improve water depths and hydrology to restore Northern WCA 3A but would not exceed water depths in ponded areas in Southern WCA 3A. With respect to water quality concerns, the Corps committed to working with the Tribe and SFWMD to add monitoring stations north of the Tribe to ensure New Water added to WCA 3A doesn't exceed nutrient conditions just north of reservation lands as a water quality assurance measure. The Final EIS Section 4.17 provides a discussion on the CEPP New Water Modifications effects on environmental justice. No additional effects regarding environmental justice would be expected with converting the A-2 parcel from leased agricultural lands to an STA and reservoir.

k. **Section 408:** The A-2 STA Proposed Regulatory Action requires permission under Section 14 of the Rivers and Harbors Act (33 U.S.C. § 408) because the activity, in whole or in part, would alter, occupy, or use a Corps Civil Works project,

CEPP. Section 408 permission for the construction of the 3.5 miles of Inflow/Outflow canal, adjacent seepage canal, and associated levees along the north side of the future A-2 STA was still pending at the time of this ROD. The remainder of the STA and the pump station in the Miami Canal will also require Section 408 approval; however, design for these features is not expected until the end of calendar year 2020. The A-2 STA project construction has been phased to allow work in areas that do not require Section 408 approval first. The project description and special condition require a 408 approval letter be received and written confirmation from the Regulatory Division before proceeding into Phase II or Phase III. Once Section 408 approval is received, the SFWMD can begin work in the associated phase. The permit would be modified to incorporate the conditions of the Section 408 approval.

VI. **Consideration of Mitigation Measures:** Compensatory mitigation is required to offset the loss of function and value to special aquatic sites, specifically wetlands. When evaluating compensatory mitigation options, the Corps will consider what would be environmentally preferable. In making this determination, the Corps must assess the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site and their significance within the watershed, and the costs of the compensatory mitigation project.

The Corps typically gives preference to the use of mitigation bank credits. However, the Corps may opt to override this preference and select a permittee-responsible mitigation project when appropriate.

The project results in direct impacts to 8.4 acres of wetlands and 14.08 acres of agricultural canals and shallow agricultural ditches through the placement of fill. As compensatory mitigation, the SFWMD proposes to achieve ecological lift by removing exotic vegetation within the remaining 221.6 acres of wetlands within the STA footprint. Since the project site is located within the service area for Everglades Mitigation Bank, Phase 1 and Loxahatchee Mitigation Bank, and the federal bank have available credits, the SFWMD's compensatory mitigation option deviates from the order of the options presented in §332.3(b)(2)-(6). However, the Corps has determined that the selected permittee responsible compensatory mitigation option is environmentally preferable.

The STA site is strategically located adjacent to the planned federal A-2 Reservoir, the A-1 FEB, STA 2 and STA 3/4, each of which contribute to improving water quality entering downstream waters. The project has a high likelihood for ecological success and sustainability. The project will increase water levels within the STA and maintain hydrology to sustain the wetlands. Rehydration of the wetlands is expected to not only offset the wetland impacts, but may potentially offer significant supplemental ecological lift for other purposes. The mitigation would offer ecological benefits at the site of the impacts and would offer a large acreage of habitat used by aquatic wildlife, including threatened or endangered species in the local area. The site is more opportunistically placed near large scale ecological resources, such as the Holey Land Wildlife Management Area, and Water Conservation Areas 2 and 3A. Mitigation on this site

offers a vital and high priority mitigation opportunity on a watershed level that goes beyond the mitigation offered at either the Everglades mitigation Bank or the Loxahatchee Mitigation Bank. Additionally, operation of the STA is consistent with the goals of the 2014 CEPP Final PIR/EIS. Therefore, the permittee-responsible mitigation under a watershed approach is the environmentally preferable plan for this project.

The Corps requires mitigation measures to reduce or offset impacts to waters of the U.S. as special conditions of each DA permit issued. These special conditions are identified in Section VIII, and take into account the compensatory mitigation proposed by the applicant, as identified in Section 4.25 of the Final EIS, and also include additional conditions that avoid, minimize, and compensate for effects to waters of the U.S., and those that ensure compliance with Section 7 of the ESA, Section 106 of NHPA, and Section 401 of the CWA.

- VII. **Compliance with 404(b)(1) Guidelines** The EIS analyzed a reasonable range of alternatives for the CEPP New Water Modification under NEPA. In accordance with 40 C.F.R. § 230.10(a)(4), compliance with the EPA's 404(b)(1) Guidelines was demonstrated in Appendix D of the FEIS.
- VIII. **Special Conditions:** The following special conditions will be included in the DA permit to ensure the project is not contrary to the public interest and complies with the 404 (b)(1) Guidelines:
  - **Special Condition 1. Reporting Address:** The Permittee shall submit all reports, notifications, documentation and correspondence required by the general and special conditions of this permit to either (not both) of the following addresses:
    - a. For electronic mail (preferred): <u>SAJ-RD-Enforcement@usace.army.mil</u> (not to exceed 15 MB).
    - b. For standard mail: U.S. Army Corps of Engineers, Regulatory Division, Enforcement Section, P.O. Box 4970, Jacksonville, FL 32232-0019.

The Permittee shall reference this permit number, SAJ-2018-03427(SP - KDS), on all submittals.

**Rationale:** This condition is necessary to assist the Corps in receiving the required forms and reports to ensure compliance with the permit and applicable conditions (33 CFR 325.4, 33 CFR 326).

**Special Condition 2. Commencement Notification:** Within 10 days from the date of initiating the work authorized by this permit the Permittee shall submit a completed "Commencement Notification" Form.

**Rationale:** This condition is necessary to assist the Corps in scheduling compliance inspections to ensure compliance with the permit and applicable conditions (33 CFR 325.4, 33 CFR 326).

**Special Condition 3. Agency Changes/Approvals:** Should any other agency require and/or approve changes to the work authorized or obligated by this permit, the Permittee is advised a modification to this permit instrument may be required prior to initiation of those changes. It is the Permittee's responsibility to request a modification of this permit from the Palm Beach Gardens Permits Section. The Corps reserves the right to fully evaluate, amend, and approve or deny the request for modification of this permit.

**Rationale:** This condition is necessary to ensure compliance with the permit and applicable conditions and to ensure that the proposed work has been conducted in accordance with the permit and all applicable conditions. (33 USC 1344(a), 33 USC 401 et. seq., 33 CFR 320.4(r)(1), 33 CFR 325.4(a)(3); 33 CFR 326).

Special Condition 4. Assurance of Navigation and Maintenance: The Permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structures or work herein authorized, or if in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

**Rationale:** The project is a Section 10 activity and navigational obstructions are prohibited (CECW—OR Memorandum, 18 April 2000); therefore, the Permittee is required to comply with the assurance of navigation and maintenance condition.

**Special Condition 5. Posting of Permit:** The Permittee shall have available and maintain for review a copy of this permit and approved plans at the construction site.

**Rationale:** This condition is necessary to assist the Corps in scheduling compliance inspections to ensure compliance with the permit and applicable conditions (33 CFR 325.4, 33 CFR 326).

**Special Condition 6.** Consent to Easement: A portion of the authorized work may be located within the Federal right-of-way for an identified Federal project and would require a Department of the Army Consent to Easement to begin Phase II and III. By copy of this permit, the proposal is being forwarded to the Corps' Real Estate Division for action on the Consent to Easement. Failure to

obtain the Consent to Easement or waiver invalidates this authorization. The Real Estate Division is responsible for issuing the Consent to Easement. Contact with Real Estate for questions or status updates can done at Post Office Box 4970, Jacksonville, Florida 32232-0019 or by telephone at 904-570-4514.

Rationale: A consent to easement is required when the Corps has a real estate interest (fee or easement) in property (such as along the Miami Canal or other federal project) then a real estate instrument is required to be issued for any and all facilities, etc. that a party wants to construct within the Corps real estate interest (fee or easement). Therefore, the Permittee shall obtain a consent to easement prior to work on land where the Corps has real estate interest.

### Special Condition 7. Cultural Resources/Historic Properties:

- a. No structure or work shall adversely affect impact or disturb properties listed in the *National Register of Historic Places* (NRHP) or those eligible for inclusion in the NRHP.
- b. If during the ground disturbing activities and construction work within the permit area, there are archaeological/cultural materials encountered which were not the subject of a previous cultural resources assessment survey (and which shall include, but not be limited to: pottery, modified shell, flora, fauna, human remains, ceramics, stone tools or metal implements, dugout canoes, evidence of structures or any other physical remains that could be associated with Native American cultures or early colonial or American settlement), the Permittee shall immediately stop all work and ground-disturbing activities within a 100-meter diameter of the discovery and notify the Corps within the same business day (8 hours). The Corps shall then notify the Florida State Historic Preservation Officer (SHPO) and the appropriate Tribal Historic Preservation Officer(s) (THPO(s)) to assess the significance of the discovery and devise appropriate actions.
- c. Additional cultural resources assessments may be required of the permit area in the case of unanticipated discoveries as referenced in accordance with the above Special Condition; and if deemed necessary by the SHPO, THPO(s), or Corps, in accordance with 36 C.F.R. Part 800 or 33 C.F.R. § 325, Appendix C (5). Based on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 C.F.R. § 325.7. Such activity shall not resume on non-federal lands without written authorization from the SHPO for finds under his or her jurisdiction, and from the Corps.

- d. In the unlikely event that unmarked human remains are identified on non-federal lands, they will be treated in accordance with Section 872.05 Florida Statutes. All work and ground disturbing activities within a 100-meter diameter of the unmarked human remains shall immediately cease and the Permittee shall immediately notify the medical examiner, Corps, and State Archeologist within the same business day (8-hours). The Corps shall then notify the appropriate SHPO and THPO(s). Based on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend, or revoke the permit in accordance with 33 C.F.R. § 325.7. Such activity shall not resume without written authorization from the State Archeologist and from the Corps.
- e. If the unlikely event that human remains are encountered on federal or tribal lands, or in situations where Archaeological Resources Protection Act of 1979, or Native American Graves Protection Repatriation Act of 1990 applies, all work and ground disturbing activities within a 100-meter diameter of the unmarked human remains shall immediately cease and the Permittee shall immediately notify the Corps, within the same business day (8-hours). The Corps shall then notify the appropriate THPO(s) and SHPO. Based on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 C.F.R. § 325.7. After such notification, project activities on federal lands shall not resume without written authorization from the Corps, and/or appropriate THPO(s), SHPO, and federal manager. After such notification, project activities on tribal lands shall not resume without written authorization from the appropriate THPO(s) and the Corps.

**Rationale**: This conditions is necessary to ensure compliance with Section 106 of the National Historic Preservation Act (16 USC 470, 33 CFR 320.3(g); 33 CFR 325.2(b)(3); 33 CFR 325, Appendix C; 36 CFR 800).

Special Condition 8. Turbidity Barriers: Prior to the initiation of any of the work authorized by this permit, the Permittee shall install floating turbidity barriers with weighted skirts that extend to within 1 foot of the bottom around all work areas that are in, or adjacent to, surface waters. The turbidity barriers shall remain in place and be maintained until the authorized work has been completed and all suspended and erodible materials have been stabilized. Turbidity barriers shall be removed upon stabilization of the work area.

**Rationale:** This condition is necessary to ensure that contaminated material is not placed within waters of the U.S. (33 CFR 325.4(a)(3), 40 CFR 230).

**Special Condition 9. Erosion Control**: Prior to the initiation of any work authorized by this permit, the Permittee shall install erosion control measures along the perimeter of all work areas to prevent the displacement of fill material outside the work area into waters of the United States. Immediately after completion of the final grading of the land surface, all slopes, land surfaces, and filled areas shall be stabilized using sod, degradable mats, barriers, or a combination of similar stabilizing materials to prevent erosion. The erosion control measures shall remain in place and be maintained until all authorized work is completed and the work areas are stabilized.

**Rationale:** This condition is necessary to ensure that contaminated material is not placed within waters of the U.S. (33 CFR 325.4(a)(3), 40 CFR 230).

**Special Condition 10. Construction Phases:** Construction has been divided into three Phases. Phase I is authorized to proceed when the District Engineer signs the permit. Phase II and III cannot begin until the Permittee receives written confirmation from the Corps. To request authorization of Phase II and III to proceed, the Permittee must submit the following:

- a. Phase II: Final Section 408 approval for the Inflow/Outflow Canal.
- b. Phase III:
  - i. Complete site plans;
  - ii. Final Operations plan;
  - iii. Water Quality certification from the FDEP; and
  - iv. A final water quality monitoring plan that includes the addition of two water quality monitoring stations near the northern boundary of the Miccosukee Reservation lands in Water Conservation Area 3A. The monitoring plan shall include a plan to begin baseline sampling prior to implementation of A-2 STA project features.

Rationale: This ROD addresses the complete regulatory action, the A-2 STA. However, Section 408 approval and permits from other agencies including FDEP (WQC and NPDES) have not been received for the complete project. Therefore, the Corps is authorizing the project in construction phases with specific requirements outlined in this special condition to ensure all permits are received prior to conducting work in the next construction phase. Water quality certification has been waived for Phase I and 408 approval is not required. Phase II has received water quality certification but 408 approval is pending. The SFWMD has not yet received WQC or NPDES permits for Phase III. In addition, a water quality monitoring plan including two monitoring stations nears the Miccosukee Reservation lands in WCA 3A is required before construction of

the STA to ensure tribal concerns are adequately addressed. The FEIS included reference to a draft operations plan. Once a final plan is developed the Corps will evaluate to determine if additional NEPA is required to address the effects on the human environment from the operation of the STA.

**Special Condition 11.Fill Material:** The Permittee shall use only clean fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete block with exposed reinforcement bars, and soils contaminated with any toxic substance, in toxic amounts in accordance with Section 307 of the Clean Water Act.

**Rationale:** This condition is necessary to ensure that contaminated material is not placed within waters of the U.S. (33 CFR 325.4(a)(3), 40 CFR 230).

Special Condition 12. Biological Opinion: This permit does not authorize the Permittee to take an endangered species, in particular the Eastern indigo snake and the Florida panther. In order to legally take a listed species, the Permittee must have separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or a BO under ESA Section 7, with "incidental take" provisions with which you must comply). The enclosed United States Fish and Wildlife Service Biological Opinion (BO) contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. Authorization under this permit is conditional upon compliance with all of the mandatory terms and conditions associated with incidental take of the enclosed BO, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute noncompliance with this permit. The United States Fish and Wildlife Service is the appropriate authority to determine compliance with the terms and conditions of its BO, and with the ESA.

**Rationale**: This condition is necessary to ensure compliance with Section 7 of the Endangered Species Act (16 USC 1531 et seq, 50 CFR 402, 33 CFR 320.4(j)(4), 33 CFR 325.2(b)(5), 33 CFR 325.4(a)(1)).

#### Special Condition 13. Tribal rights

a. The Permittee shall notify the Corps upon becoming aware of issues which implicate the Miccosukee Tribe of Indians of Florida and the Seminole Tribe of Florida so that the Corps can ensure Government to Government coordination and relations.

b. None of the authorizations or conditions in the permit are intended to diminish or alter the governmental authority and powers of the Miccosukee Tribe of Indians and the Seminole Tribe of Florida (Tribes), or diminish or alter the rights of those Tribes, including rights under any tribal agreement with the Permittee or any agency of the U.S. Government. The Permittee shall advise this office and the Tribes when the Permittee becomes aware of issues implicating the powers or rights of the Tribes or other issues that may make necessary a modification to the permit.

Rationale: Government to Government coordination was initiated with the Miccosukee Tribe of Indians of Florida. As discussed in Section V(i), the Miccosukee Tribe of Indians of Florida and Seminole Tribe of Florida expressed concerns over the project. Special conditions were included to address those concerns; however, this condition is required to ensure coordination continues throughout this project.

Special Condition 14. Operations: The Permittee shall not operate the STA beyond what is described in the project description until written authorization is granted by the Corps subject to a future permit evaluation and modification and a National Pollutant Elimination System (NPDES) permit has been received. A minimum of six months prior to planned operation of the facility, the Permittee shall submit an operation plan to the Corps for review and approval. The National Environmental Policy Act analysis for the project will be updated to reflect the operations plan and coordinated for public and agency review as appropriate.

**Rationale:** The draft operating plan that was included in the Final EIS did not have enough details to ensure that adequate NEPA evaluation was completed. Therefore, the Permittee is required to submit the final monitoring plan prior to STA operation beyond the grow in period.

**Special Condition 15.** EAA A-2 Inflow/Outflow canal and associated A-2 STA inflow interim pump station shall not be operated for routine purposes prior to inclusion of these features in the Corps Water Control Plan and/or Corps approval of a temporary deviation that prescribes operational criteria for these features, aside from the limited operations authorized by the Corps' Regulatory permit to support A-2 STA vegetation establishment. During this interim operating period to support vegetation establishment, flows shall be released from Lake Okeechobee and water will be directed from the Miami Canal into the A-2 STA, through the cells, and then either discharged back into the Miami Canal or retained within the A-2 STA.

**Special Condition 16.** Inflow/Outflow Canal and associated inflow interim pump station construction shall not impact the authorized use of the Miami Canal and shall be complementary to the final design of the A-2 STA, A-2 Reservoir and A-2

Reservoir inflow pump station. The final designs of these features will be reviewed separately.

**Special Condition 17.** Final designs and construction contracts for future features will incorporate measures necessary for the A-2 Inflow/Outflow canal to function in conjunction with all other project features to meet overall EAA project purpose.

Special Condition 18. Compensatory Mitigation: Within 6 months from the date of initiating the Phase II work authorized by this permit, the Permittee shall complete all construction and implementation mitigation activities in accordance with the approved final compensatory mitigation plan included as an attachment of this permit. In addition, within 6 months from the date of initiating the Phase II work authorized by this permit the Permittee shall complete all additional required mitigation plan components as detailed in the plan attached to the permit.

**Rationale**: This special condition is necessary to ensure successful compensatory mitigation for the unavoidable losses of waters of the U.S. due to the construction of the Proposed Regulatory Action. (33 CFR 320.4(r)(1); 33 CFR 325.4(a)(3); 33 CFR 332, 40 CFR 230).

**Special Condition 19. Monitoring and Reporting Timeframes:** To document achievement of the performance standards identified in the approved mitigation plan attached to the permit the Permittee shall complete the following:

- a. Perform a time-zero monitoring event of the wetland mitigation area(s) within 60 days of completion of the compensatory mitigation construction and implementation activities identified in the approved mitigation plan attached to the permit.
- b. Submit the time-zero report to the Corps within 60 days of completion of the monitoring event. The report will include at least one paragraph depicting baseline conditions of the mitigation site(s) prior to initiation of the compensatory mitigation objectives and a detailed plan view drawing of all created, enhanced and/or restored mitigation areas.
- c. Subsequent to completion of the compensatory mitigation objectives, perform semi-annual monitoring of the wetland mitigation areas for the first 2 years and annual monitoring thereafter for a total of no less than 5 years of monitoring.
- d. Submit annual monitoring reports to the Corps within 60 days of completion of the monitoring event. Semi-annual monitoring will be combined into one annual monitoring report.

e. Monitor the mitigation area(s) and submit annual monitoring reports to the Corps until released in accordance with the **Mitigation Release** Special Condition of this permit.

**Rationale:** This special condition is necessary to ensure the required compensatory mitigation is meeting the required performance standards and if not, to determine if measures are necessary to ensure that the compensatory mitigation is accomplishing its objectives. (33 CFR 320.4(r)(1); 33 CFR 325.4(a)(3); 33 CFR 332.6, 40 CFR 230).

**Special Condition 20. Reporting Format:** The Permittee shall submit all monitoring documentation to the Corps on 8½-inch by 11-inch paper, and include the following:

- a. Project Overview:
  - i. Department of the Army Permit Number
  - ii. Name and contact information of Permittee and consultant
  - iii. Name of party responsible for conducting the monitoring and the date(s) the inspection was conducted
  - iv. A brief paragraph describing the purpose of the approved project, acreage and type of aquatic resources impacted, and mitigation acreage and type of aquatic resources authorized to compensate for the aquatic impacts.
  - v. Written description of the location, any identifiable landmarks of the compensatory mitigation project including information to locate the site perimeter(s), and coordinates of the mitigation site (expressed as latitude, longitude, UTMs, state plane coordinate system, etc.).
  - vi. Dates compensatory mitigation commenced and/or was complete.
  - vii. Short statement on whether the performance standards are being met.
  - viii. Dates of any recent corrective or maintenance activities conducted since the previous report submission
  - ix. Specific recommendations for any additional corrective or remedial actions.
- b. Requirements: List the monitoring requirements and performance standards, as specified in the approved mitigation plan and special conditions of this permit, and evaluate whether the compensatory mitigation project site is successfully achieving the approved performance standards or trending towards success. A table is a recommended option for comparing the performance standards to the conditions and status of the developing mitigation site.
- c. Summary Data: Summary data should be provided to substantiate the success and/or potential challenges associated with the compensatory mitigation project. Photo documentation may be provided to support the

findings and recommendations referenced in the monitoring report and to assist the PM in assessing whether the compensatory mitigation project is meeting applicable performance standards for that monitoring period. Submitted photos should be formatted to print on a standard 8½-inch x 11-inch piece of paper, dated, and clearly labeled with the direction from which the photo was taken. The photo location points should also be identified on the appropriate maps.

- d. Maps and Plans:Maps shall be provided to show the location of the compensatory mitigation site relative to other landscape features, habitat types, locations of photographic reference points, transects, sampling data points, and/or other features pertinent to the mitigation plan. In addition, the submitted maps and plans should clearly delineate the mitigation site perimeter(s). Each map or diagram should be formatted to print on a standard 8½-inch x 11-inch piece of paper and include a legend and the location of any photos submitted for review. As-built plans may be included.
- e. Conclusions: A general statement shall be included that describes the conditions of the compensatory mitigation project. If performance standards are not being met, a brief explanation of the difficulties and potential remedial actions proposed by the Permittee or sponsor, including a timetable, shall be provided. The District Commander will ultimately determine if the mitigation site is successful for a given monitoring period.

**Rationale:** This special condition is necessary to ensure the required compensatory mitigation is meeting the required performance standards and if not, to determine if measures are necessary to ensure that the compensatory mitigation is accomplishing its objectives. (33 CFR 320.4(r)(1); 33 CFR 325.4(a)(3); 33 CFR 332.6, 40 CFR 230).

Special Condition 21. Remediation: If the compensatory mitigation fails to meet the performance standards 5 years after completion of the compensatory mitigation objectives, the compensatory mitigation will be deemed unsuccessful. Within 60 days of notification by the Corps that the compensatory mitigation is unsuccessful, the Permittee shall submit to the Corps an alternate compensatory mitigation proposal sufficient to create the functional lift required under this permit. The alternate compensatory mitigation proposal may be required to include additional mitigation to compensate for the temporal loss of wetland functions associated with the unsuccessful compensatory mitigation activities. The Corps reserves the right to fully evaluate, amend, and approve or reject the alternate compensatory mitigation proposal. Within 120 days of Corps approval, the Permittee will complete the alternate compensatory mitigation proposal.

**Rationale:** This special condition is necessary to ensure the required compensatory mitigation is meeting the required performance standards and if not, to determine if measures are necessary to ensure that the compensatory mitigation is accomplishing its objectives. (33 CFR 320.4(r)(1); 33 CFR 325.4(a)(3); 33 CFR 332.6, 40 CFR 230).

Special Condition 22. Mitigation Release: The Permittee's responsibility to complete the required compensatory mitigation, as set forth in the special condition of this permit titled Compensatory Mitigation will not be considered fulfilled until mitigation success has been demonstrated and written verification has been provided by the Corps. A mitigation area which has been released will require no further monitoring or reporting by the Permittee; however the Permittee, Successors, and subsequent Transferees remain perpetually responsible to ensure that the mitigation area(s) remain in a condition appropriate to offset the authorized impacts in accordance with General Condition 2 of this permit.

**Rationale:** This special condition is necessary to ensure the required compensatory mitigation is meeting the required performance standards and if not, to determine if measures are necessary to ensure that the compensatory mitigation is accomplishing its objectives. (33 CFR 320.4(r)(1); 33 CFR 325.4(a)(3); 33 CFR 332.6, 40 CFR 230).

- **Special Condition 23.** Conditions for projects that the Permittee plans to construct in furtherance of the Central Everglades Planning Project (CEPP), but which are being constructed in advance of final authorization/approval of the associated CEPP project:
  - a. The Corps' analysis of this permit application pursuant to applicable regulations and the National Environmental Policy Act (NEPA) may need to be supplemented as new information becomes available and/or to meet requirements for modifications of the permit.
  - b. The Corps' decision that this project has independent utility is made solely for the purpose of permitting and does not mean that it is or is not a separate project under CEPP.
  - c. Issuing this permit does not constitute approval of any engineering or design for any future consideration of the project under CEPP.
  - d. Future action on related portions of this project or other projects being implemented under CEPP may require additional NEPA compliance analysis and documentation or other related analysis under the Corps' Civil Works Planning Process.
  - e. The issuance of this permit does not constitute approval of this project as being necessary, integral, and cost effective for consideration of the cost sharing for the planning, design, engineering, construction or implementation of a feature of CEPP.

- f. Any work under an authorized federal project cannot be considered for any mitigation that may be required by issuance of this permit.
- g. The Permittee is required to design, construct, and operate the project consistent with the Central and Southern Florida Project as modified.

**Rationale:** This condition is included to address and acknowledge that the A-2 STA is a component of a larger federal project.

- Special Condition 24. As-Built Certification: Within 60 days of completion or cessation of a period of 1 year or more of authorized work within each phase, the Permittee shall submit as-built drawings of the authorized work within that phase and complete "As-Built Certification By Professional Engineer" form to the Corps. Upon expiration of the construction window identified in General Condition 1, the Permittee shall submit a final as-built drawing and certification for all phases. The as-built drawings for each phase and the final submittal shall be signed and sealed by a registered professional engineer and include the following:
  - a. A plan view drawing of the location of the authorized work footprint, as shown on the permit drawings, with transparent overlay of the work as constructed in the same scale as the permit drawings on 8½-inch by 11-inch sheets. The plan view drawing should show all "earth disturbance," including wetland impacts and water management structures.
  - b. A list of any deviations between the work authorized by this permit and the work as constructed. In the event that the completed work deviates, in any manner, from the authorized work, describe on the attached "AsBuilt Certification By Professional Engineer"\_form the deviations between the work authorized by this permit and the work as constructed. Clearly indicate on the as-built drawings any deviations that have been listed. Please note that the depiction and/or description of any deviations on the drawings and/or "As-Built Certification By Professional Engineer" form does not constitute approval of any deviations by the Corps.
  - c. Include the Department of the Army permit number on all sheets submitted.
  - d. Within 60 days of completion of the work authorized by this permit, the Permittee shall provide a courtesy copy of the signed and sealed As-Built drawings to the Corps, Engineering Division. Submittals shall be sent either electronically by email at <a href="mailto:ENPermits.CESAJ@usace.army.mil">ENPermits.CESAJ@usace.army.mil</a> or by standard mail at Post Office Box 4970, Jacksonville, Florida 32232-0019.

**Rationale:** This condition is necessary to ensure compliance with the permit and applicable conditions and to ensure that the proposed work has been

conducted in accordance with the permit and all applicable conditions. (33 USC 1344(a), 33 USC 401 et. seq., 33 CFR 320.4(r)(1), 33 CFR 325.4(a)(3); 33 CFR 326).

## IX. Public Interest Review

a. Table 1 provides the A-2 STA's effects on the public interest.

| Table 1: Public Interest Review  | Effects |             |                        |            |            |                   |
|--|---------|-------------|------------------------|------------|------------|-------------------|
|  | None    | Detrimental | Neutral<br>(mitigated) | Negligible | Beneficial | Not<br>Applicable |
| 1. Conservation: The A-2 STA will add over 6,500 acres of land to conservation with public access.   |         |             |                        |            | Х          |                   |
| 2. Economics: The economic benefit of this project include increased employment during construction and monitoring procedures.   |         |             | X                      |            |            |                   |
| 3. Aesthetics: Section 4.13 of the Final EIS   |         |             |                        |            | X          |                   |
| <ol> <li>General Environmental Concerns: The project impacts waters of the U.S. and uplands that provide habitat for wildlife including endangered species. Water quality certification has been issued by the SFWMD for Phase I and II of the A-2 STA project; therefore, adverse water quality impacts are not expected. The wildlife utilization of the site will likely decrease during construction but may increase once the above ground impoundment is constructed and flooded. The environmental impacts of developing this site are minimized by existing and on-going impacts at the site from agricultural activities. The extent of aquatic habitat onsite will increase significantly upon implementation of the proposed project.</li> <li>Wetlands: Section 4.15 of the Final EIS</li> </ol> |         |             | X                      |            | ×          |                   |
| 6. Historic Properties: Section 4.18 of the Final EIS.   |         |             |                        |            |            |                   |
| The A-2 STA does not affect historic properties or cultural resources.   | Х       |             |                        |            |            |                   |
| 7. Fish and Wildlife Values: Section 4.4 through 4.7 of the Final EIS  |         |             | Х                      |            |            |                   |
| 8. Flood Hazards: Section 4.17.2 of the Final EIS  |         |             | Χ                      |            |            |                   |

| Table 1: Public Interest Review  | Effects |             |                        |            |            |                   |
|--|---------|-------------|------------------------|------------|------------|-------------------|
|  | None    | Detrimental | Neutral<br>(mitigated) | Negligible | Beneficial | Not<br>Applicable |
| 9. Floodplain Values: The A-2 STA is located in the base flood plain (Zone AE based on FEMA maps). The land where the proposed A-2 reservoir and STA would be constructed is agricultural land that has limited natural and beneficial flood plain values. Thus, the proposed changes to CEPP are expected to have little overall effect on natural flood plain values. The project is for ecosystem restoration purposes and is not expected to induce development in the base flood plain. |         |             |                        | ×          |            |                   |
| 10. Land Use: Discussed in Section 4.14 of the Final EIS. In addition, the project is consistent with local land use designations.   |         |             |                        | Х          |            |                   |
| 11. Navigation: The A-2 STA will not have an effect on navigation.   | x       |             |                        |            |            |                   |
| 12. Shoreline Erosion and Accretion: The A-2 STA will not have an effect on shoreline erosion and accretion.   | Х       |             |                        |            |            |                   |
| 13. Recreation: Section 4.17 of the Final EIS  |         |             |                        |            | Χ          |                   |
| 14. Water Supply and Conservation: Section 4.17.2 of the Final EIS   |         |             | Х                      |            |            |                   |
| 15. Water Quality: Section 4.9 of the Final EIS  |         |             | Χ                      |            |            |                   |
| 16. Energy Needs: The A-2 STA will not have an effect on energy needs.   | Х       |             |                        |            |            |                   |
| 17. Safety: The A-2 STA would be designed to dam safety requirements.  |         |             | Χ                      |            |            |                   |
| 18. Food and Fiber Production: Section 4.16 of the Final EIS   |         |             |                        | Х          |            |                   |
| 19. Mineral Needs: The A-2 STA will not have an effect on mineral needs.   | Х       |             |                        |            |            |                   |
| 20. Consideration of Property Ownership: The A-2 STA is consistent with local land use and has minimized impacts to adjacent properties through seepage management measures.   |         |             | X                      |            |            |                   |
| 21. Needs and Welfare of the People: Section 4.17 of the Final EIS   |         |             | Х                      |            |            |                   |

- b. The relative extent of the public and private need for the proposed structure or work has been considered: Public needs include employment opportunities during construction and improved water quality. This project is a public project and there are no private needs.
- c. The practicability of using reasonable alternative locations and/or methods to accomplish the objective of the proposed structure or work has been evaluated: The Corps has determined that there are no practicable alternate locations that would accomplish the purpose of the proposed work. The Corps has also determined that there are no practicable alternative methods to accomplish the purpose of the proposed work that would have fewer direct or indirect effects than the CEPP New Water Modification as described in the Final EIS. Alternative 3 (CEPP New Water Modification) represents the LEDPA, as described in Section III(b).
- d. The extent and permanence of the beneficial and/or detrimental effects that the proposed structures or work may have on the public and private uses which the area is suited has been reviewed: The A-2 STA Proposed Regulatory Action would result in the placement of fill material into 14 acres of waters of the U.S., resulting in a permanent adverse effects to these waters. The A-2 STA Proposed Regulatory Action will also result in the placement of fill in 274.4 acres of tributaries; however, these tributaries will be converted from shallow, open water features to wetlands and will not result in a permanent loss of waters. The placement of fill material into the tributaries and wetlands would result in a net increase in aquatic resource functions and services, providing a permanent beneficial effect to the aquatic ecosystem. The loss of waters of the U.S for the Proposed Regulatory Action would cause a permanent detrimental effect to the functions and services of the aquatic resources. The loss of waters of the U.S as a result of the Proposed Regulatory Action would be offset by the required compensatory mitigation. Additional permanent and temporary adverse and beneficial effects would occur to other resource areas, as identified in Chapter 3 of the Draft EIS.

#### Findings

- a. The evaluation of the modified Proposed Action, CEPP New Water Modification, described in the FEIS and alternatives was done in accordance with all applicable laws, executive orders, regulations, and agency regulations. The EIS and supporting documents are adequate and contain sufficient information to make a reasoned permit decision.
- b. The selected alternative is the STA component of Alternative 3 CEPP New Water Modification, the Proposed Action, with appropriate and practicable mitigation measures to minimize environmental harm and potential adverse impacts of the discharges on the aquatic ecosystem and the human environment. The CEPP New Water Modification, as mitigated by these conditions, is considered the environmentally preferred alternative under NEPA.

- c. The discharge complies with the Section 404(b)(1) guidelines, and the CEPP New Water Modification is considered the least environmentally damaging practicable alternative, with the inclusion of appropriate and practicable general and special conditions in the permit to minimize pollution or adverse effects to the aquatic ecosystem.
- d. Issuance of a Department of the Army permit, with the inclusion of special conditions on the permit, as prescribed by regulations published in 33 C.F.R. Parts 320 to 330, and 40 C.F.R. Part 320 is not contrary to the public interest.
- e. The compensatory mitigation identified in Section VIII was determined using the *Uniform Mitigation Assessment Method*, and is sufficient to ensure no net loss of aquatic resource functions and services for effects to waters of the U.S. associated with the Proposed Action. The required compensatory mitigation deviates from the order of options presented in 33 C.F.R. 332.3(b)(2) (6), as there are mitigation banks available that include the Proposed Action in their service area. Therefore, the required compensatory mitigation is permittee-responsible mitigation consisting of enhancement activities using a watershed approach.

| APPROVED BY:         |                             |
|----------------------|-----------------------------|
|                      | Date: <u>1 7 April 2020</u> |
| Andrew D. Kelly, Jr. |                             |
| Colonel, U.S. Army   |                             |
| District Commander   |                             |