



RECORD OF DECISION

CENTRAL AND SOUTHERN FLORIDA, EVERGLADES AGRICULTURAL AREA RESERVOIR AND STORMWATER TREATMENT AREA GLADES, OKEECHOBEE, LEE, HENDRY, BROWARD, MIAMI-DADE, MONROE, MARTIN, ST. LUCIE AND PALM BEACH COUNTIES, FLORIDA

The Final Environmental Impact Statement (FEIS) dated 1 May 2020, for the Central and Southern Florida, Everglades Agricultural Area (EAA) Reservoir and Stormwater Treatment Area (STA), Florida addresses modifications to an ecosystem restoration project in the Glades, Okeechobee, Lee, Hendry, Martin, St. Lucie, Broward, Miami-Dade, Monroe, Martin and Palm Beach Counties, Florida. In section 1308(a) of the Water Resources Development Act (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 Water Resources Development Act of 2000, as recommended in the addendum to the South Florida Water Management District (SFWMD) Section 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 final recommendation is contained in the Section 1308(b) of Water Resources Development Act of 2018 Report to Address Concerns, Recommendations, and Conditions Identified in the Assistant Secretary of the Army for Civil Works (ASA(CW)) Review Assessment, to be completed with this Record of Decision (ROD). Based on this report, the reviews by other Federal, State, and local agencies, Tribes, input of the public, and the review by my staff, I find the plan to be technically feasible, environmentally justified, cost effective, subject to ongoing review in accordance with environmental statutes, and in the public interest. This Final EIS is also being used to support permit decisions on an application from the Non-Federal Sponsor, the SFWMD, to construct and operate a component of the Preferred Alternative, the A-2 Storm Water Treatment Area. The SFWMD proposes to discharge dredged or fill material into waters of the United States in order to construct and operate the stormwater treatment area prior to execution of a Project Partnership Agreement for the project. As such, the SFWMD will need to acquire a Department of the Army permit under Section 404 of the Clean Water Act, and a permission under 33 USC 408, prior to construction.

The Final EIS, incorporated herein by reference, evaluated various alternatives that would provide additional storage, treatment capacity, and conveyance beyond what was authorized in the Central Everglades Planning Project in 2016 and reduce releases to the estuaries consistent with CERP goals. The Recommended Plan has been optimized to address the ASA(CW) concerns, recommendations, and conditions. The changes to the previously authorized SFWMD Section 203 Study Recommended Plan 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 recommended plan is the National Ecosystem Restoration (NER) Plan and includes:

- 11,300 (10,500 acres of storage) acre reservoir, approximately 23 ft. deep(240,000 ac-ft storage capacity), jointly operated with the existing State A-1 Flow Equalization Basin
- 6,600 (6,500 acres of treatment) acre STA (3,600 acres on existing CEPP A-2 FEB footprint, additional 3,000 acres on A-2 Expansion lands)

- Conveyance improvements to the Miami and North New River Canal (1,000 cfs & 200 cfs respectively)
- 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
- Approximately 12.5 miles of a “secondary” seepage canal that will offset by approximately 185 feet and be parallel to the Inflow/Outflow Canal between the Miami and North New River Canal
- Cutoff wall material changed from soil-bentonite to soil-cement-bentonite
- Water quality and ecosystem monitoring, and adaptive management

In addition to a “no action” plan, two alternatives were evaluated. The alternatives included: Alternative 2 - SFWMD Section 203 Study Recommended Plan; and Alternative 3 - Corps Recommended Plan. The Alternative 3 - Corps Recommended Plan addresses concerns regarding seepage and flood risk. The Final EIS supplements the 2014 CEPP Final PIR/EIS, which incorporates other alternatives by reference. The NER Plan, Alternative 3, was identified as the environmentally preferable alternative.

For all alternatives, the potential effects were evaluated, as appropriate. A summary assessment of the potential effects of the recommended plan are listed in Table 1:

Table 1: Summary of Potential Effects of Recommend Plan

	Significant adverse effect	Insignificant effects due to mitigation	Insignificant effects	Resource unaffected by action
Aesthetics	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Aquatic resources/wetlands	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Invasive species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fish and wildlife habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Threatened/Endangered species	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Historic properties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other cultural resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floodplains	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hazardous, toxic & radioactive waste	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hydrology	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Land use	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Navigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Noise levels	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Public infrastructure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Socio-economics	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental justice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Soils	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tribal trust resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climate change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

All practicable means to avoid or minimize adverse environmental effects were analyzed and incorporated into the recommended plan. Best management practices (BMPs) as detailed

in the Final EIS will be implemented to minimize impacts. Specific avoidance and minimization measures include: Threatened and endangered species – Pre-construction surveys will be conducted and an environmental protection plan will be implemented that includes standard construction guidelines to avoid and/or minimize impacts on eastern indigo snakes, Audubon's crested caracara, wood stork, and Everglade snail kite during construction. The U.S. Fish and Wildlife Service provided a final biological opinion on 12 March 2020, to provide incidental take for eastern indigo snakes and confirmation of CERP panther habitat unit credit to avoid and minimize impacts to panthers associated with the EAA Reservoir; Cultural Resources – A Programmatic Agreement under Section 106 of the National Historic Preservation Act was executed 19 February 2020 to finish cultural resource surveys and consultation during design; Flood Risk and Seepage Management – an additional seepage collection canal is added to the North of the project to provide greater flexibility to manage seepage from the Reservoir without drawing down water levels in agricultural areas immediately North of the Reservoir; Tribal Trust Resources – monitoring for water levels and quality were included to inform project implementation and operations to protect tree islands and flora, fauna on the Miccosukee Tribe of Indian's reservation in WCA 3A. Monitoring and adaptive management measures are described in the monitoring and adaptive management plan developed for the SFWMD Section 203 Study and modified with the Corps Recommended Plan to include additional water quality monitoring and coordination; and Water Quality – a National Pollutant Discharge Elimination System (NPDES) permit will be obtained and a monitoring and adaptive management plan will be implemented to reduce uncertainty and risk to assist the project in meeting applicable water quality standards.

No compensatory mitigation is required as part of the recommended plan. The A-2 Reservoir converts 11,300 acres of shallow A-2 FEB wetlands to deep water habitat and eliminates wetland benefits gained in the area by the No Action Alternative (**Section 4.15 Wetlands**). However, the overall project improves hydrologic conditions in over one million acres of Everglades' wetlands.

Public review of the Draft EIS was completed on 22 July 2018. All comments submitted during the public comment period were responded to in the Final EIS. A 30-day public review and state and agency review of the Final EIS was completed on 24 February 2020. Comments from state and federal agency review did not result in any changes to the Final EIS.

The following are conditions applicable to the planning, design, and operations of the STA and the reservoir of this EAA project:

(1) The EAA project cannot be used for state restoration purposes. The EAA should be designed with the capability to prevent the flow of new water captured for the EAA project from entering into any of the State of Florida facilities constructed to assist the state in their Everglades Construction Project, as identified within Section 528(e)(2)(B)(ii) of P.L. 104-303 (110 STAT. 3770) of WRDA 1996, or the state's Restoration Strategies as represented to U.S. District Courts and in discussions of associated federal and state consent decrees. The EAA shall be designed so the flow connections between the EAA and the state facilities can be "opened" and "closed" so that the EAA project has the ability to prevent any water from the project from entering these state facilities which are required to treat the existing flow of waters. Until the State of Florida has completed all of their Restoration Strategies and those Restoration Strategies meet all state water quality standards as determined by state and federal water quality regulators, the EAA reservoir may only be operated to flow the amount of water that the new EAA STA A-2 alone can treat to meet all federal and state water quality standards, as well as any additional treatment necessary for passage of water to Everglades restoration. During this time, flows shall be released from Lake Okeechobee into the EAA reservoir through the Miami or North New River canal system.

(2) The EAA reservoir may, in turn, not be allowed to store any extra water other than what can be treated and released to all applicable standards (by the current sampling methods/criteria) by the new EAA A-2 STA facility for benefits determined to be essential to Everglades restoration, until the state satisfies the water quality treatment needs of its Everglades Construction Project and meets all of their Restoration Strategies.

(3) USACE cannot implement the EAA project in a way that interferes with or supersedes any pending or future judicial proceedings or agreements related to those proceedings or the state's independent efforts to meet the state's water pollution control obligations. USACE must ensure that any construction initiated prior to the completion of the state's Restoration Strategies does not result in new flows from the EAA project that harm the state's efforts to comply with applicable water quality standards. All features of the state's Restoration Strategies must be completed and meet state water quality standards prior to initiating any operations which would allow water from the Federal EAA project to enter any of the state's Restoration Strategy facilities. The Federal project may operate independently of the state's Restoration Strategy facilities in accordance with paragraphs (1) and (2) and other applicable guidance.

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, dated 12 March 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. All terms and conditions, monitoring requirements, and reasonable and prudent measures resulting from these consultations will be implemented in order to minimize take of endangered species and avoid jeopardizing the species' existence (**Appendix A and Section 4.4**).

Pursuant to section 106 of the National Historic Preservation Act of 1966, as amended, the U.S. Army Corps of Engineers determined that historic properties may be adversely affected by the recommended plan. The Corps and the Florida State Historic Preservation Office, and the Advisory Council on Historic Preservation entered into a Programmatic Agreement (PA), dated 19 February 2020 (**Appendix C**). The Programmatic Agreement outlines the process in which the Corps will consult with the agencies to avoid, minimize, and mitigate adverse effects to historic properties. The Programmatic Agreement with Florida SHPO and the advisory Council on Historic Preservation (ACHP) to conduct a phased identification and evaluation of historic properties during the project's design phase. Dependent on further consultation with the Florida SHPO and the results of Phase I cultural resources investigations, project design modification may be necessary to avoid or minimize impact to historic properties. Phase II NRHP eligibility testing or mitigation may be required if impacts cannot be avoided. All terms and conditions resulting from the agreement shall be implemented in order to minimize adverse impacts to historic properties.

Pursuant to the Clean Water Act of 1972, as amended, all discharges of dredged or fill material associated with the recommended plan have been found to be compliant with the Section 404(b)(1) Guidelines (40 CFR 230). The Clean Water Act Section 404(b)(1) Guidelines evaluation is found in Appendix D.

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 prior to construction. In a letter dated 27 February 2020, the State of Florida, Florida Department of Environmental Protection wrote that the "The Department will continue to coordinate with the Corps and SFWMD to acquire the information necessary for the authorization of any future

phases of this project. The Department is working expeditiously to provide authorization for the construction of the Everglades Agricultural Area Storage Reservoir Project.” A Comprehensive Everglades Restoration Plan Regulation Act (CERPRA) permit and/or an Environmental Resource Permit (ERP) will need to be issued for this project upon submission and review of 90% design and that will need to constitute certification of compliance with state water quality standards pursuant to Section 401 of the Clean Water Act. All conditions of the water quality certification will need to be implemented in order to minimize adverse impacts to water quality (**Section 4.9 Water Quality**).

A determination of consistency with Florida Fish and Wildlife Commission (FWC) authorities with the Florida Coastal Zone Management program pursuant to the Coastal Zone Management Act of 1972 was obtained from the FWC on 5 July 2018 in response to the Draft EIS. Final consistency concurrence will be documented via a CERPRA permit and/or an ERP from the State of Florida. All conditions of the consistency determination shall be implemented in order to minimize adverse impacts to the coastal zone.

All applicable environmental laws have been considered and coordination with appropriate agencies and officials has been completed. Prime Or Unique Farmlands: Coordination with the U.S. Department of Agriculture The National Resources Conservation Service was initiated via email on May 15, 2018 to determine how many acres of Unique Farmlands may be impacted by the project and consultation will be completed during final design. Essential Fish Habitat: The recommended plan would not affect essential fish habitat, and was coordinated with the National Marine Fisheries Service during the development of the 2014 CEPP Final PIR/EIS and NMFS. The Corps’ no effect determination was updated during review of the current EIS.

Several stakeholders identified concerns related to offsite flooding associated with the EAA Reservoir. Hydrologic and hydraulic model simulations were run for the EAA A-2 Reservoir and STA. The inclusion of the additional (or secondary) seepage canal within the A-2 project boundary will allow the necessary operational flexibility within the A-2 Inflow/Outflow Canal during pumping operations while significantly reducing the potential for water level impacts north of the A-2 project footprint by maintaining water levels in line with those managed within agricultural fields to the north. Additional site specific surveys, geotechnical data collection and geotechnical investigations, including seepage modeling, will need to be conducted during the Pre-Construction Engineering and Design phase to demonstrate the effectiveness of the proposed seepage management components and/or to evaluate further design refinements necessary to ensure negligible effects from the proposed reservoir (**Appendix E – Updates to Annex A SFWMD Section 203 Study**).

Stakeholders also raised concerns related to whether the proposed project would be environmentally compliant with applicable water quality requirements and consistent with Army policy governing water quality improvements and cost-sharing for CERP projects. A National Pollutant Discharge Elimination System (NPDES) permit will be obtained by the Non-Federal Sponsor prior to operating the A-2 STA. In addition, water quality and ecosystem monitoring, and adaptive management are project components in the recommended plan designed to reduce risks associated with modeling uncertainty and provide reasonable assurance that applicable water quality standards will be met. Cost-share of O&M between the Federal Government and non-federal sponsor of STA operations is expected to be up to 50 percent and adjusted based on monitoring of restoration flows indicating flow volumes exceed or fall short of the projected volume (**Section 4.9 Water Quality**).

Technical, environmental, economic, and cost effectiveness criteria used in the formulation of alternative plans were those specified in the Water Resources Council's 1983 Economic and

Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies. All applicable laws, executive orders, regulations, and local government plans were considered in evaluation of alternatives. Based on the review of these evaluations, I find that benefits of the recommended plan outweigh the costs and any adverse effects. This Record of Decision completes the National Environmental Policy Act process.

May 15, 2020

Date

R. D. James
Assistant Secretary of the Army
(Civil Works)