PROJECT DEFINITION REPORT

EVERGLADES AGRICULTURAL AREA STORAGE RESERVOIR AND TREATMENT WETLAND PROJECT

PS ID 101089

OCT 2017

REVISION #0

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Approvals

The signatures in this section of the project definition report should be revised to represent the various areas providing significant resources to the project.

Eva Velez, Division Director, Everglades Policy & Coordination — Date: 10/13/2017

Matt Morrison, Bureau Chief, Everglades Policy & Coordination — Date: 10/11/17

Jennifer Leeds, Section Administrator, Everglades Policy & Coordination — Date: 10/10/2017

Document prepared by: Mike Albert Extension: 6900

Project Location

The study area for the Feasibility Study will need to consider both the entire CEPP planning area for impacts and more specifically the lands considered for construction of the EAA Storage Reservoir and Treatment Wetlands.

The CEPP study area (Figure 1) is described in detail in the CEPP PIR and encompasses the Northern Estuaries (St. Lucie River and Indian River Lagoon and the Caloosahatchee River and Estuary), Lake Okeechobee, the Everglades Agricultural Area (EAA), the Water Conservation Areas (specifically WCAs 2 ad 3), Everglades National Park (ENP), the Southern Estuaries (specifically focused on Florida Bay), and a portion of the Lower East Coast (LEC).

The Feasibility Study will consider alternatives which may include the A-1 FEB, STA 2, STA 3/4, the A-2 parcels and adjacent canals and District works. The A-2 Parcel is an area of DISTRICT-owned land located between the Miami Canal and the North New River Canal consisting of approximately 14,000 acres of land to the east of the Miami Canal which is bordered to the north by private agricultural lands, to the east by the A-1 parcel, and to the south by the Holey Land Wildlife Management Area.

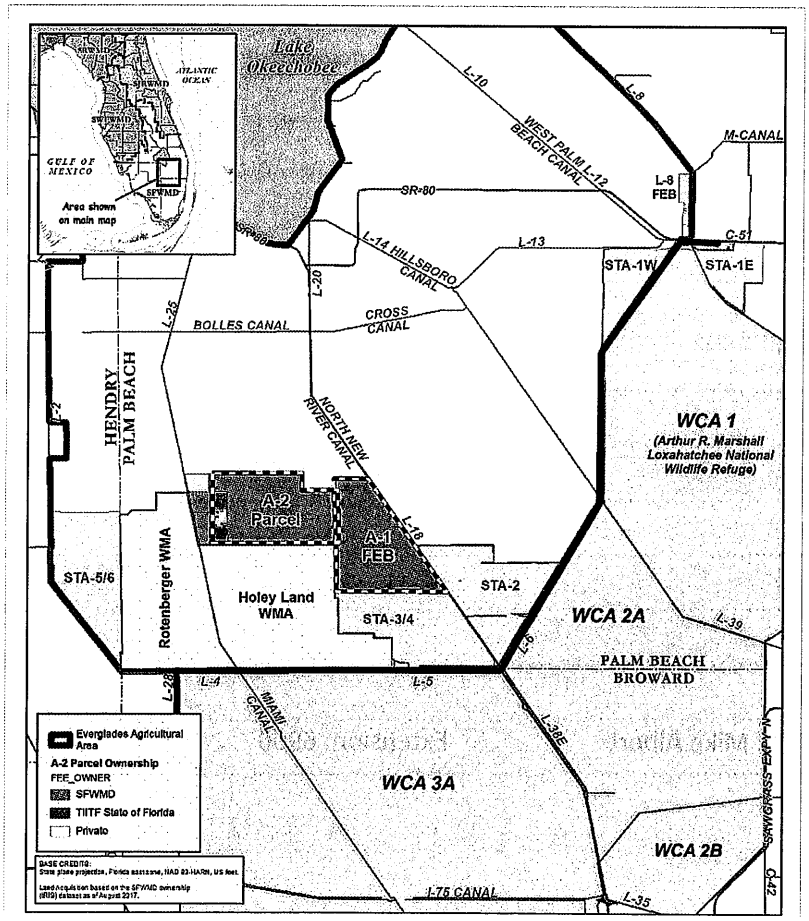

Figure 1. Study Area

Project Description

This PDR describes the planning effort for the final increment of the CERP Everglades Agricultural Area Storage Reservoirs (Component G) and treatment needed to achieve the CERP 300,000 ac-ft of average annual flow to the central portion of the Everglades to restore ecosystem conditions. The project will modify the CEPP New Water Component, and other CEPP components if required, to achieve the CERP 300,000 ac-ft of average annual flow to the central portion of the Everglades to restore ecosystem conditions. Ultimately, this project will be designed and constructed and these later phases are only described conceptually in this PDR.

Project Scope

The scope of this project is to prepare a technical and policy compliant Feasibility Study to the Assistant Secretary of the Army, on or before March 30, 2018, for the Everglades Agricultural Area (EAA) Storage Reservoir and Treatment Wetlands. The Feasibility Study will develop a project that will ultimately be designed and constructed, however, the current scope defined in this PDR will concentrate on the planning portion of this project. The work will include technical analysis, public and government agency outreach to ensure a NEPA compliant process, and preparation of the Feasibility Study. This project anticipates the following activities to be performed by a combination of District staff and consultants:

- Hydrologic and Hydraulic Modeling and Plan Formulation
- Feasibility level design
- Environmental Assessments
- Economic and Environmental Impact Analysis
- Biological Assessment
- Real Estate Activities
- Public and Interagency Meetings as required to meet NEPA and Environmental Compliance
- Document Production of the Feasibility Study

Future design and construction phases of this project will be determined based on the outcome of the plan and subsequent authorization of the Feasibility Study. It is anticipated that construction will include dam embankments, canals, levees, pump station(s), water control structures and appurtenant SCADA and monitoring as required.

Background

The Central Everglades Planning Project (CEPP) is part of the CERP and is cost-shared between USACE and the District. The project sets the foundation for restoring the central portion of the Everglades ecosystem and sending additional water south. CEPP captures water lost to tide and re-directs water flow south to the central Everglades, Everglades National Park and Florida Bay.

The CEPP encompasses a vast majority of the remaining natural area of the Everglades and is designed to send an additional 210,000 ac-ft of new water on an average annual basis by reducing undesirable discharges to the northern estuaries and sending water south from Lake Okeechobee. The CEPP includes

incremental portions of certain CERP project components that focus restoration on more natural flows into and through the central and southern Everglades, restoring more natural water flow, depth and durations into and within the central Everglades by:

- Increasing storage, treatment and conveyance of water south of Lake Okeechobee
- Removing canals and levees within the central Everglades
- Retaining water within the central Everglades
- Retaining water within Everglades National Park and protect urban and agricultural areas from flooding.

The CEPP includes increments of the following components that were part of the CERP:

- Everglades Agricultural Area Storage Reservoirs (G)
- WCA 3 Decompartmentalization and Sheetflow Enhancement (AA and QQ)
- S-356 Pump Station Modifications (FF)
- L-31N Improvements for Seepage (V)
- Everglades Rain-Driven Operations (H)
- Flow to Northwest and Central WCA 3A (II)

The CEPP was authorized by Congress in the 2016 Water Infrastructure Improvements for the Nation (WIIN) Act, also known as the Water Resource Development Act (WRDA) of 2016.

The EAA Reservoir project will increase the amount of storage and treatment wetlands in the CEPP PPA New Water and send additional water south. The Feasibility Study will also reaffirm that the CEPP PPA South, North and New Water project features can accommodate additional flows south that will result from additional storage and treatment wetlands on the Talisman, A-1 and A-2 parcels and other designated lands.

Permitting

This project definition report describes activities thru the development of the Feasibility Study for the EAA Storage Reservoir and Treatment Wetlands. The Feasibility Study will provide the biological assessment necessary to support the environmental and wildlife permitting. The interagency coordination required during the permitting process is anticipated to be led by the USACE with the District providing a supporting role in the consultation process. The District's environmental permitting and compliance group will be an integral part of the project team. Future phases will require additional permitting including CERPRA, 408 and 404 permits which are anticipated for this project. The Engineering and Construction group will also be an integral part of the planning process to insure continuity with future design and construction efforts.

Right of Way

The Feasibility Study will include identifying Right of Way issues and utility relocation require. It is anticipated that some utility relocations will be needed for the project. The project is to be constructed

on District owned lands, however, some Right-Of-Way permits may be required based on the results of the Real Estate assessment.

Real Estate

This project will require support from the District's Real Estate section in securing the project lands. Some land acquisition is anticipated for state- and privately-owned parcels within and bordering the A-2 parcel. Land acquisition will be constrained to willing sellers only, based on the requirements defined in Senate Bill (SB) 10. Lease terminations for District owned lands will also be coordinated based on the requirements of SB10.

Public Use/ Outreach

Significant public outreach will be required to comply with the NEPA process and inform and receive public input. Biweekly public meetings are anticipated throughout the Feasibility Study. The District will be contracting with J-Tech to coordinate and conduct NEPA-required public meetings.

Stakeholder Considerations

Stakeholders for this project will include the public, Miccosukee and Seminole Tribes of Florida, USACE, FWS, FFWC. Outreach to the Tribes will be coordinated through the District's liaison, Armando Ramirez. USACE, with the District's permitting staff and J-Tech, will provide the interagency meetings to complete environmental and wildlife permitting. Public stakeholder coordination will be performed as described in the Stakeholder Considerations section of this PDR.

Operations and Modeling

This project is a modification of a previously identified CERP component. Modeling will be performed by the District's modeling staff using the RSM-GL, RSM-BN and DMSTA models to develop a selected project. Modeling will be performed using the same models developed under the original CEPP PIR and analyzed for impacts to the existing C&SF system. Future design and construction phases will require District modeling and operations staff to insure continuity in operations with the existing C&SF system.

Operations and Maintenance

Project components such as pump stations, water control structures and embankments will be identified in the Feasibility Study. Future design and construction activities will require coordination with the West Palm Beach Field Station to insure design conforms with District standards and operations and maintenance needs are met.

SCADA, Instrumentation, Telemetry, Information Technology

It is anticipated that SCADA, Instrumentation, Telemetry, and Information Technology will be conceptual planned during the Feasibility Study. However, significant staff support will not likely be required until later design and construction phases of the project.

Security and Safety

Safety and security issues will need to be addressed during the design and construction phases of this project. No security or safety issues will be addressed during the Feasibility Study phases of the project.

Environmental

The Feasibility Study will require a Biological Assessment (BA) and Cultural Resource Study of lands impacted by the project. These activities have previously been performed during the CEPP PIR project, however, additional project lands beyond those previously identified in the CEPP PIR will need to be evaluated. This work will be performed by District staff in coordination with the District's consultant, J-Tech. Permitting and the District's tribal liaison, Armando Ramirez, will be involved with the Feasibility Study as well as future design and construction phases.

Monitoring

A monitoring plan was identified during the CEPP PIR process and monitoring requirements will updated based on the recommendations identified during the Feasibility Study. Permitting staff will assist in the Feasibility Study phase of the project with additional District monitoring staff support needed during the design and construction phases of the project.

Commissioning

Commissioning is not applicable during the Feasibility Study phase of this project. Subsequent design and construction phases will require the assistance of Northon Jocelyn and engineering in specifying and testing project pump station(s).

Lessons Learned

During the development of the Scope of Work for technical support and staff augmentation with J-Tech the District relied heavily on the previous work performed in development of the CEPP PIR as well as the Scope of Work developed and executed for the EIS to Construct Stormwater Treatment Areas on Compartment B and C. The scope of work for build-out of B & C successfully utilized private consultants to assist in development of an environmentally and NEPA compliant document and served as a model for support services for this project to complete an aggressive time schedule set in Senate Bill 10.

Conceptual Alternative Options

Plan formulation is a crucial step in the NEPA process and will be led by Jeremy McBryan. Conceptual alternatives will be evaluated and a Tentatively Selected Project (TSP) will be selected based on the analysis performed. Future design phases may include additional Value Engineering (VE) alternatives provided by the design engineer.

Cost Estimates

Cost estimates for the conceptual level plans that will be developed for this Feasibility Study will be provided by J-Tech and reviewed by Jack Ismalon. Detailed design and cost estimates will be provided in future phases based on project needs identified at that time.

Recommendations

Alternatives for completion of the Feasibility included several Course of Actions discussed with the USACE include having the USACE take the lead on developing a Post Authorization Change Report for the CEPP PIR as well as developing a separate, stand-alone PIR for the New Water Component. Based on an aggressive schedule mandated in Senate Bill 10 the District ultimately chose the path of initiating a Feasibility Study through the WRDA's Section 203 process which allows non-Federal interests to develop their own water resource development projects for submission to the Secretary of the Army. The Section 203 regulation includes policy guidance for development of feasibility studies including a NEPA compliant process. The District believes that only the Section 203 process will be capable of meeting SB10 requirements and a knowledgeable and experienced consulting firm would be required to augment the District's staff.

Project Milestones

- Based on the requirements identified in SB10 the District shall report to the State legislature on or before January 9, 2018 on the progress of implementing the EAA Reservoir as identified in the bill.
- Based on the requirements identified in SB10 the USACE should submit a Corps-approved Post-Authorization Change Report (the Feasibility Study) by October 1, 2018. To meet this deadline the District will need to provide USACE with a NEPA and environmentally compliant Feasibility on or before March 30, 2018 to allow for a 180-day Corps review.

Resource Requirements

Resource requirements are identified in this PDR for development of the Feasibility Study only. Future design and construction phase resource requirement should be identified as an addendum to this PDR or in a separate, future PDR.

Function/Discipline	Staff

Planning	Jennifer Leeds
	Leslye Waugh
	Mike Albert
	Brenda Mills
	Jeremy McBryan
Permitting	Nimmy Jeyakumar
	John Shaffer
Real Estate	Ray Palmer
	Marcy Zehnder
	Dave Colangelo
	Bob Schaeffer
	Stephen Collins
	Wayne Lewis
	Delores Arias
Engineering and Construction	Alan Shirkey
	Lucine Dadrian
	Jack Ismalon
Modeling	Walter Wilcox
	Michael Brown
	Harold Hennessey Correa
	Naiming Wang
	Danielle Morancy
	Raul Novoa
	Sandeep Dabral
Policy/Legal	Brian Accardo
	Megan Jacoby
	Paul Warner
	Abe Cooper
Cultural Resources/Tribal Liaison	Armando Ramirez
Environmental Assessments	Bob Taylor

Project Deliverable and Schedule

Provide guidance for project. Dates should not be used unless required to meet legal deadlines.

Quarters to Complete	Deliverable	Schedule Notes
2	Report to State Legislature	January 9, 2018
4	Section 203 Feasibility Study	March 30, 2018. Submitted to the Secretary of the Army.

Project Funding Sources

The 2017 Legislature appropriated $3 million dollars through Senate Bill 10 for this project, and it is included in the FY2017-18 Adopted Budget in fund 217010, funds center 3310139000, functional area P108, cost element 530100, grant TBD. Also appropriated in Senate Bill 10 is $30 million for land acquisition associated with this project, which is budgeted in fund 406010, funds center 3510144000, functional area P108, cost element 580020, grant TBD. Personnel services funding will come from the various resource cost centers, primarily in fund 101000, although fund 202000 may also be used if needed.

References

Senate Bill 10.

Draft Scope of Work for the EAA Storage Reservoir and Treatment Wetland Feasibility Study.

Central Everglades Planning Project Project Implementation Report.