

Project Name: C&SF: CERP Caloosahatchee River (C-43) West Basin Storage Reservoir and Caloosahatchee Watershed (D P1)
[F/k/a C-43 Basin Storage Reservoir – Part 1; currently 2 PIRs: Caloosahatchee River (C-43) West Basin Storage Reservoir (PIR #1) and Caloosahatchee Watershed (PIR #2)]

Project ID: 1109 (CERP Project WBS # 04)

Lead Agency: USACE / SFWMD

Authority: Not authorized

Funding Source: Federal/State

Strategic Plan Goal(s) Addressed: 1-A.1

Measurable Output(s): 170,000 acre-feet storage

April 1999 (Restudy) Project Synopsis: Excess runoff from the C-43 Basin and Lake Okeechobee flood control discharges will be pumped into the initially proposed above-ground reservoir(s) with a total storage capacity of approximately 160,000 acre-feet. The initial design of the reservoir(s) assumed 20,000 acres (water levels fluctuating up to 8 feet above grade). Water from the reservoir will be injected into aquifer storage and recovery well field with a capacity of approximately 220 million gallons per day and associated pre- and post- water quality treatment located in the C-43 Basin in Hendry, Glades, or Lee Counties for long-term storage. Estuarine demands not met by basin runoff and the aquifer storage and recovery wells will be met by Lake Okeechobee as long as the lake stage is above a pre-determined level.

Current Project Synopsis: As part of the Corps planning process, alternative plans were reviewed. The Caloosahatchee (C-43) Basin Storage Reservoir and Aquifer Storage and Recovery (ASR) project (originally component D in the Yellow Book) have been divided into two projects: The latter portion is now a separate project designated D P2 (part 2), previously USACE WBS #5. In 2007, D P1 (part 1), represented here, was further subdivided into two distinct Project Implementation Reports (PIRs):

- (1) **Caloosahatchee River (C-43) West Basin Storage Reservoir (WBSR)** will capture excess C-43 Basin runoff and regulatory releases from Lake Okeechobee and release water to the Caloosahatchee Estuary when needed helping to restore the Caloosahatchee estuarine and riverine ecosystems by improving hydrologic conditions with improved water delivery and by improving water quality by reducing salinity and nutrient impacts of runoff. To achieve this goal, the team identified two key objectives: (1) provide additional water to the estuary to augment low or no flows over Structure S-79 during the dry season/dry periods, and (2) reduce damaging peak flows to the estuary by capturing and storing excess basin run-off and Lake Okeechobee releases during high flow conditions.
- (2) **Caloosahatchee Watershed** will address further water storage needs for the Caloosahatchee Estuary as well as water quality, water management, and ecological restoration challenges; while also ensuring that agricultural water supply requirements and flood attenuation are not negatively impacted. The project will build on the state's Caloosahatchee River Watershed Protection River Plan (January 2009). Goals include: (1) Identify, evaluate and implement methods and/or means of further decreasing dependency upon water releases from Lake Okeechobee, without disrupting water supply needs in the basin; (2) Identify, evaluate and implement methods and/or means to restore the Estuary by storing and releasing water flows in a more natural manner; and (3) Identify, evaluate and implement methods and/or means to enhance basin water quality.

Current Status:

- (1) *Caloosahatchee River (C-43) West Basin Storage Reservoir (WBSR) 2007 PIR* addresses formulation, evaluation, and justification of a separable reservoir project in the lower basin. Following the *Memorandum for Record Land Valuation and Crediting Policy - CERP Projects* (July 2009), the PIR was updated with an addendum based on the latest policy decision and a re-assessment of alternative cost estimates, including the real estate re-evaluation and was finalized by HQ. A Chief's Report was completed in March 2010. The Record of Decision (ROD) and submission to Congress occurred in April 2011. The project was authorized in the Water Resources Reform and Development Act (WRRDA) 2014. As a state expedited project, the SFWMD designed a reservoir at the Berry Groves site, and final plans and specifications were completed in 2008. The plan includes a 170,000 acre-foot storage reservoir with a 1500 cfs pump capacity. The project is on hold pending execution of a Project Partnership Agreement with the non-Federal Sponsor. If USACE leads the construction efforts the plans and specifications will require conversion to USACE standards. Implementation could take 24 to 36 months.

- (2) *Caloosahatchee Watershed* draft Project Management Plan (PMP) was sent to the SFWMD in November 2008 for comment. However, cost estimates and a schedule associated with the modeling were in flux with policy questions remaining from the overall C-43 WBSR PIR split. PMP adjustments include narrowing scope to river and estuary restoration, addressing the savings clause, the modeling plan and identification of the base conditions. Internal review, local sponsor review and full interagency PDT involvement is ongoing. A final PMP was completed in September 2010. Initiation of the PIR has been delayed.

Est. Cost:

Caloosahatchee River (C-43) West Basin Storage Reservoir: \$ 687,507,000

Caloosahatchee Watershed: \$ 287,000

Project Schedule:

Caloosahatchee River (C-43) West Basin Storage Reservoir:

TBD Start construction.

TBD Storage reservoir construction completed.

Caloosahatchee Watershed:

TBD

Detailed Project Budget Information (rounded):

Caloosahatchee River (C-43) West Basin Storage Reservoir (DP1)	Obligations Thru 2013	FY
USACE		\$8,631,210
SFWMD		\$30,314,001
Total		\$38,945,211

Caloosahatchee Watershed	Obligations Thru FY 2013
USACE	\$286,589
SFWMD	\$0
Total	\$286,589

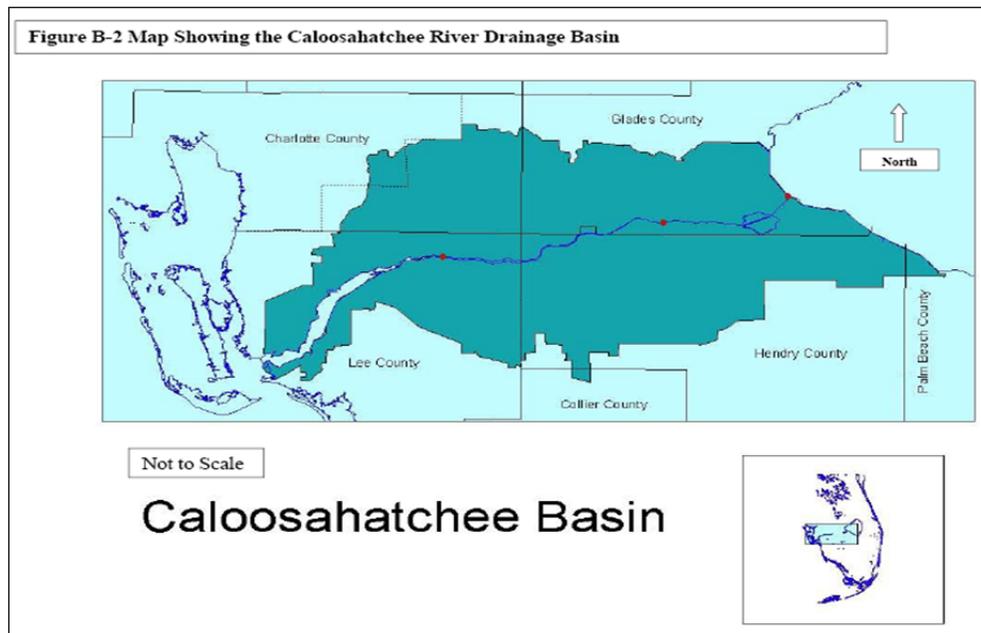
Hyperlinks: http://www.evergladesplan.org/pm/projects/proj_04_c43_basin_1.aspx

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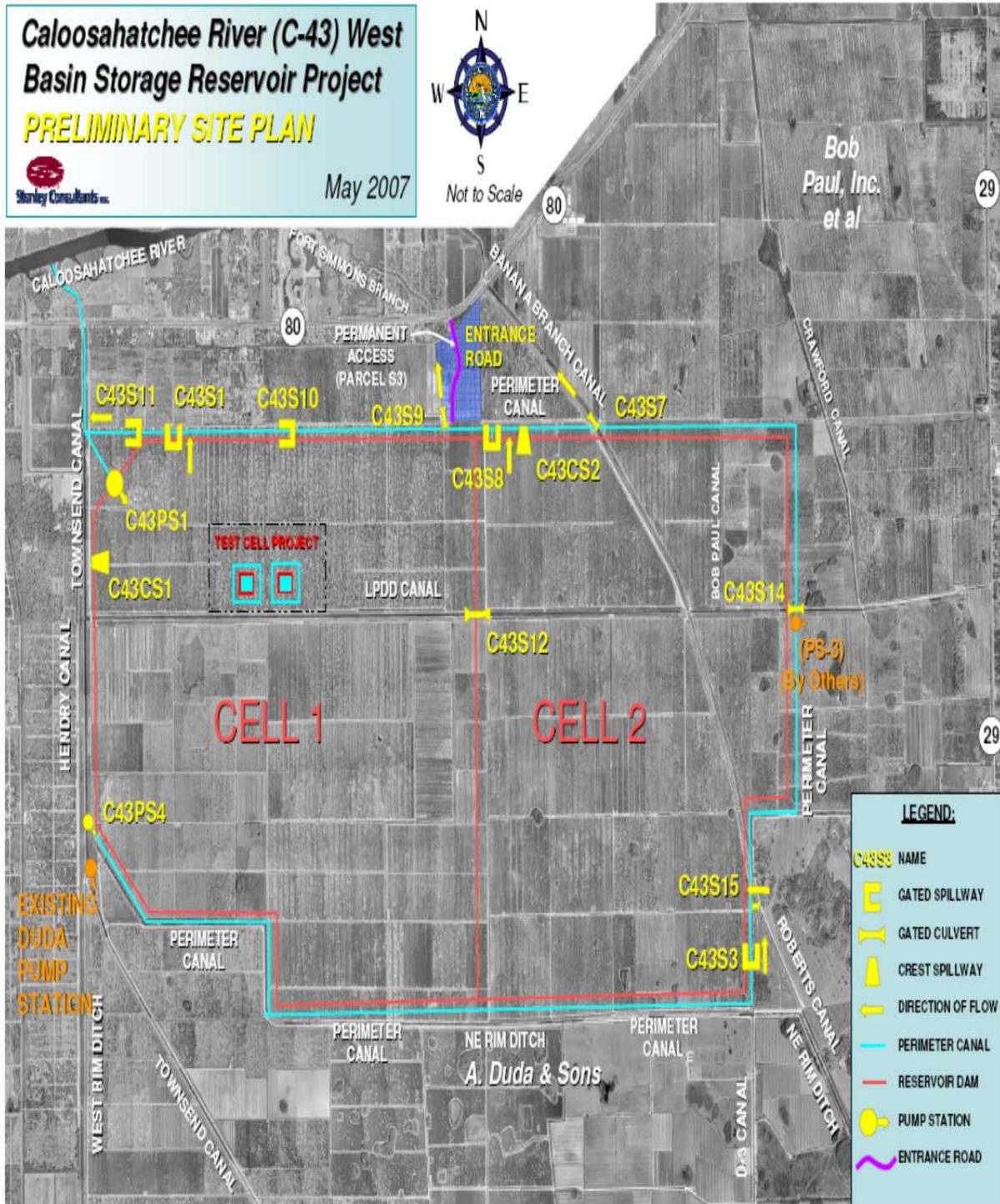
Janet Starnes, Project Manager, SFWMD
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Source: Original project description summarized from the *Central and Southern Florida Project Comprehensive Review Study (Restudy) (1999)*. Cost estimate information is updated to reflect current price levels in October 2009 dollars. Actual expenditures include all federal expenditures through FY11 (Sept, 2011) and sponsor verified and approved in kind credit through 4th quarter FY11. Schedule is updated based on the approved *Integrated Delivery Schedule Through 2020* (February 10, 2010).

Additional Information:



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Project Name: C&SF: CERP - C-43 Basin Storage Reservoir and ASR (D)
Project ID: 1109A (CERP Project WBS #04 and 05)
Lead Agency: SFWMD
Authority: Comprehensive Everglades Restoration Plan Design Agreement
Funding Source: State

Strategic Plan Goal(s) Addressed: Primary: 1.A.1 **Secondary:** 1.A.2

Measurable Output(s): 170,000 ac-ft reservoir; runoff storage from Caloosahatchee River (C-43) basin and Lake Okeechobee; releases to the downstream Caloosahatchee Estuary to restore ecological function and productivity; secondary purposes are limited flood attenuation and water supply, once the estuary needs have been met.

Project Synopsis: There is no longer an expedited portion of the project. All activities are now being conducted under the CERP and the approved Project Implementation Report. The Caloosahatchee River West Basin Storage Reservoir is Part I of the project. The Caloosahatchee Basin ASR is Part II. This project will comprise a significant portion of the total water storage requirement for the C-43 basin. The project consists of an above-ground reservoir located south of the Caloosahatchee River and west of the Ortona lock (S-78). Storage capacity is approximately 170,000 acre-feet. Water depth will vary from 15-25 feet. The reservoir will be constructed on an approximate 10,500-acre parcel in Hendry County, west of LaBelle.

Current Status: Tree clearing efforts to remove approximately 6,000 acres of citrus were completed in October 2010. The Record of Decision for the Caloosahatchee River (C-43) West Basin Storage Reservoir was signed in April 2011, and the approved Project Implementation Report and Environmental Impact Statement were submitted to Congress requesting authorization. The WRRDA of 2014 authorized the project. Water reservation rule development to support the CERP Caloosahatchee River West Basin Storage Reservoir Project was adopted and the effective date is July 16, 2014.

Total Estimated Project Cost: \$610,736,000 (October 2009 price levels)

Scheduled Construction Start Date: TBD
Scheduled Project Completion Date: TBD

Actual Expenditures to date by SFWMD*:

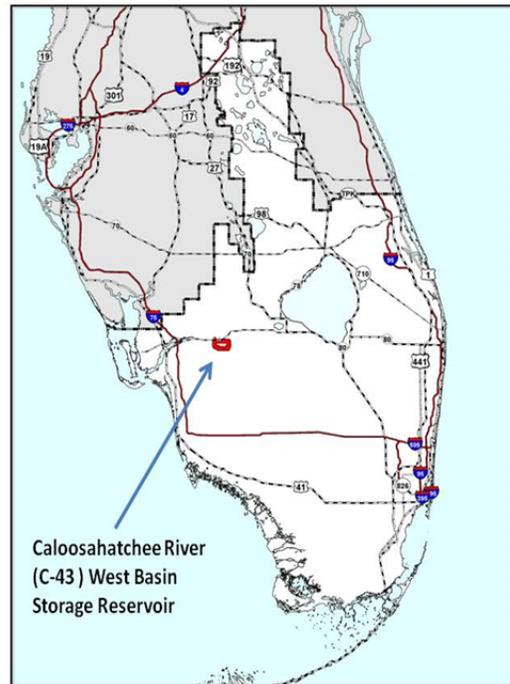
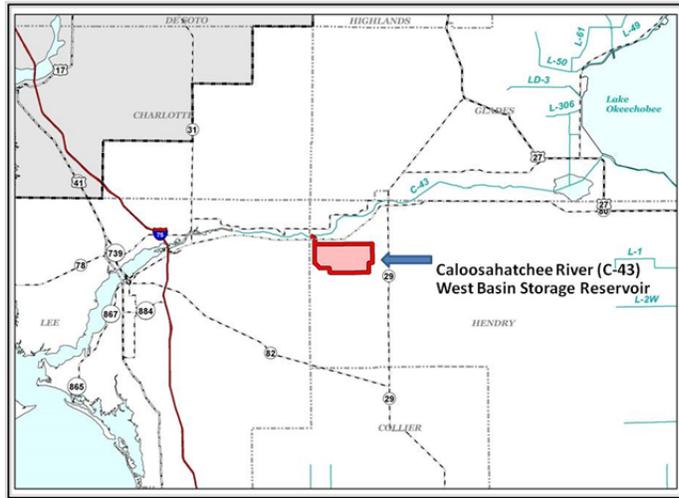
	Thru 2009	2010	2011	2012	2013	2014**	Total
SFWMD	\$19,488,976	\$1,292,385	\$927,823	\$240,546	\$9,452	\$	\$61,815.29

*Credit for expedited work subject to inclusion in authorized Federal project. Amount estimated subject to credit once project is authorized and authorization has been given to credit work accomplished prior to signing of a PPA.

**Through April 2014

Hyperlink:
http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/spl_caloo_c43_reservoir.pdf

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The SFWMD acquired the project land and completed the construction and testing of reservoir test cells to evaluate seepage barriers and levee construction design. This information was applied to the detailed design of the reservoir that SFWMD completed in January 2008.