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Recent Developments in Everglades Restoration

Overview

What Is the Everglades? The Everglades is a unique network of subtropical wetlands in South Florida. Due in part to U.S. Army Corps of Engineers (USACE) water supply and flood control projects (as well as agricultural and urban runoff), the ecosystem was degraded and was approximately half its historical size by the end of the 20th century. The ecosystem is home to Everglades National Park and unique species, including 67 species listed under the Endangered Species Act (16 U.S.C. §§1531 et seq.).

What Is CERP? Congress approved the Comprehensive Everglades Restoration Plan (CERP) in the Water Resources Development Act of 2000 (WRDA 2000; P.L. 106-541). CERP is a framework under which the federal government, with the State of Florida, is attempting to restore the Everglades and improve the timing, distribution, and quality of the water flowing south from Lake Okeechobee to the Everglades. Under CERP, the federal government, through USACE and the Department of the Interior (DOI), is to fund half the costs of restoration; the State of Florida is to contribute the other half. Several tribal and local agencies also are involved in this restoration effort. Originally, CERP was to include 60 projects to be completed over 30 years at a cost of $8.2 billion in 2000 dollars (equivalent to $13.2 billion in 2021 by accounting for inflation). Subsequent reports to Congress projected CERP would take approximately 50 years from its authorization to implement at a total cost of $23.2 billion (in FY2020 dollars) due to inflation, changes in project scope and schedule, and new project authorizations. As of FY2022, the federal government has provided $3.5 billion and the State of Florida has spent an estimated $5.3 billion on CERP in nominal dollars (some of Florida's funding has not been officially credited toward its cost share).

> CERP is expected to cost $23.2 billion (FY2020 dollars) and take until 2050 to complete.

Outside of CERP, USACE has performed complementary efforts to restore the Everglades (most of which predate CERP). Construction of a major project, Kissimmee River Restoration, was completed in July 2021 after 22 years. The federal government has spent over $3.8 billion (nominal dollars) on these *non-CERP projects*.

CERP Projects Must Be Authorized by Congress

WRDA 2000 approved CERP and the process for its implementation. The law also authorized several pilot projects. Subsequent projects require USACE to study and produce a project implementation report (PIR) and obtain congressional authorization before they can receive federal appropriations for construction, including credit or reimbursement for nonfederal work undertaken in advance.

Several laws subsequent to WRDA 2000 authorized projects contemplated under CERP. Some projects received appropriations and are under construction. Studies for other CERP projects are in progress (see **Table 1**).

Table 1. Status of CERP USACE Projects in FY2022

Project Name	Construction Authorization	Status
Site 1 Impoundment	WRDA 2007	Phase I completed Phase II on hold
Picayune Strand	WRDA 2007	Under construction
Indian River Lagoon-South	WRDA 2007	Under construction
C-43 West Storage Basin	WRRDA 2014 and WRDA 2020	Under construction
C-111 Spreader Canal	WRRDA 2014	Phase I completed Phase 2 in planning
Broward County Water Preserve Areas	WRRDA 2014	Under construction
Biscayne Bay Coastal Wetlands	WRRDA 2014	Under construction
Central Everglades Planning Project	WRDA 2016 and WRDA 2020	Under construction
Everglades Agricultural Area Reservoir Storage	WRDA 2018 and WRDA 2020	Under construction
Loxahatchee River Watershed Project	WRDA 2020	Awaiting construction
Lake Okeechobee Watershed Project	N/A	Study in progress
Western Everglades Restoration Project	N/A	Study in progress
Biscayne Bay and Southern Everglades	N/A	Study in progress
Southern Everglades	N/A	Study in progress

Source: Congressional Research Service based on the 2015-2020 CERP Report to Congress; USACE factsheets, work plans, and spend plans; and enacted legislation.

Note: CERP = Comprehensive Everglades Restoration Plan. USACE = U.S. Army Corps of Engineers. WRDA = Water Resources Development Act. N/A = not applicable. WRDA 2007, WRDA 2016, WRDA 2018, and WRDA 2020 are P.L. 110-114, Title I of P.L. 114-322, Title I of P.L. 115-270, and Division AA of P.L. 116-260,

respectively. WRRDA 2014 = Water Resources Reform and Development Act of 2014 (P.L. 113-121).

Selected USACE Authorizations

Central Everglades Planning Project. The Central Everglades Planning Project (CEPP) is a CERP project that Congress authorized in WRDA 2016 (Title I of P.L. 114-322). CEPP prioritizes restoration projects (e.g., CEPP South, CEPP North, and CEPP New Water) in the central portion of the Everglades and aims to address issues associated with the quantity, quality, timing, and distribution of freshwater flows south of Lake Okeechobee into the central Everglades and Everglades National Park. Congress initiated construction for CEPP with FY2020 appropriations.

Everglades Agricultural Area Reservoir Storage Project. WRDA 2018 (Title I of P.L. 115-270) authorized the Everglades Agricultural Area Reservoir Storage Project (EAA Storage), which nonfederal sponsors proposed as an addendum to CEPP. EAA Storage aims to provide capacity to store around 350,000 acre-feet of water coming from Lake Okeechobee and a stormwater treatment area (i.e., a wetland area that removes excess nutrients to improve water quality).

WRDA 2020. WRDA 2020 (Division AA of P.L. 116-260) authorized two CERP projects—Loxahatchee River Watershed Restoration Project for construction and modifications to the Caloosahatchee River West Basin Storage Reservoir. It also authorized two non-CERP activities—Canal 111 South Dade Project and a study at Shingle Creek and Kissimmee River. It combined CEPP and EAA Storage into one project. It authorized USACE to enter into an agreement for a nonfederal sponsor to pursue construction of one CERP project on its own.

Congressional Interest

Appropriations. Following project authorization, the timing and level of federal and nonfederal funding affect project implementation and completion. In FY2022 annual appropriations, Congress provided USACE with $350.6 million for CERP and $2.0 million for non-CERP Everglades study and construction activities. FY2022 annual appropriations also included $9.0 million for USACE operation and maintenance (O&M) activities in the Everglades. In FY2022, USACE also allocated $1.1 billion to Everglades restoration activities out of the $1.9 billion that the Infrastructure Investment and Jobs Act (IIJA; P.L. 117-58) provided for USACE aquatic ecosystem restoration construction. For FY2023, the Administration's USACE budget request included $405.4 million for CERP, $14.3 million for non-CERP Everglades study and construction activities, and $10.7 million for Everglades O&M activities.

DOI implements CERP, conducts science to support restoration, and manages and restores wildlife habitat in the ecosystem. In FY2022, Congress provided $8.2 million and $56.0 million for DOI CERP and non-CERP Everglades activities, respectively. The Administration's DOI FY2023 budget request included $8.3 million for CERP and $60.6 million for non-CERP Everglades activities.

Lake Okeechobee/Herbert Hoover Dike. Water storage and discharges from Lake Okeechobee, managed by USACE, affect the Everglades ecosystem. According to a regulation schedule, USACE may discharge water at certain times and quantities east and west to estuaries and south to the EAA and greater Everglades ecosystem. The Herbert Hoover Dike (HH Dike) is an earthen dam that surrounds Lake Okeechobee. Since 2001, USACE has conducted modification on HH Dike to address structural issues associated with the dike. HH Dike repairs are not categorized as Everglades restoration, but many stakeholders consider them essential to broader restoration efforts in the Everglades ecosystem. HH Dike repairs required USACE to alter discharge regulations and increased discharges from the lake during high-water events. Higher releases of nutrient-rich water from Lake Okeechobee to canals flowing to the St. Lucie and Caloosahatchee estuaries have contributed to harmful algal blooms and have increased sediment in the estuaries and surrounding coastlines. According to USACE, following modification of HH Dike, increased capacity to store water in Lake Okeechobee and changes to regulating discharges from the lake could aid in addressing water quality in canals flowing to the estuaries.

As of September 2021, USACE anticipated completing dike repairs by the end of 2022. Section 1106 of WRDA 2018 directed USACE to expedite the update of the Lake Okeechobee regulation schedule to coincide with completion of HH Dike and to consider all relevant aspects of CERP, including projects not yet constructed (e.g., EAA Storage) in its operating procedures. WRDA 2020 provided further direction to USACE on water management efforts within Lake Okeechobee and authorized a national harmful algal bloom demonstration program with the lake as a focus area (FY2022 appropriations provided the first funding for the program). USACE expects to finalize new discharge regulations for the *Lake Okeechobee System Operating Manual* (LOSOM) by January 2023 to account for the completed HH dike construction. In August 2021, USACE announced a preferred alternative for the new schedule. In July 2022, USACE released a draft environmental impact statement for LOSOM identifying a preferred alternative, with public comments due in mid-September 2022.

WRDA 2022. In 2022, the House and Senate passed different versions of WRDA 2022 (H.R. 7776). The House-passed version would authorize a comprehensive plan for restoring, preserving, and protecting the Everglade's northern estuaries. Both chambers' versions would authorize a study for resiliency improvements to existing projects in central and southern Florida. These provisions include limitations on how these activities may impact CERP progress. The House-passed version also would require an update on CERP, LOSOM, and other Everglades activities to be sent to the authorizing committees. Both chambers' versions would require future accounting updates to CERP nonfederal sponsors and alter how CERP nonfederal cash contributions are calculated and their payment timeline (provisions in the two versions vary). The Senate version also would increase the authorization of appropriations amount for the Indian River Lagoon project.

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