



Updated September 28, 2021

# **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 federal 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 20<sup>th</sup> century. The ecosystem is home to a number of 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 the U.S. Army Corps of Engineers (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 after 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). As of FY2021, the federal government has provided more than \$2.0 billion and the State of Florida has spent an estimated \$5.0 billion on CERP in nominal dollars (although much of this state funding is not yet officially credited toward Florida's share of the cost).

CERP is expected to cost \$23.2 billion (FY2020 dollars) and take 50 years (from 2000) to complete.

Outside of CERP, complementary efforts to restore the Everglades (most of which predate CERP) are ongoing. Construction of a major project, Kissimmee River Restoration, was completed in July 2021 after 22 years. The federal government has spent more than \$3.7 billion on these efforts, collectively referred to as *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 study by USACE and 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 I. Status of CERP USACE Projects

Project Name	Construction Project Name Authorization		
Site I 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 SE 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 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 Project Authorizations**

**Central Everglades Planning Project.** The Central Everglades Planning Project (CEPP) is a CERP restoration project that Congress authorized in the Water Resources Development Act of 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 designated CEPP as a *new construction start* for FY2020 and provided appropriations to begin construction on the CEPP South sub-project.

**Everglades Agricultural Area Reservoir Storage** 

**Project.** The Water Resources Development Act of 2018 (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 approximately 350,000 acre-feet of storage for water flows coming from Lake Okeechobee and a stormwater treatment area (i.e., a wetland area that removes excess nutrients from runoff to improve water quality).

WRDA 2020. The Water Resources Development Act of 2020 (WRDA 2020; Division AA of P.L. 116-260) authorized various Everglades activities. It 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 with a total authorization of appropriations of \$4.4 billion. It authorized USACE to enter into an agreement for a nonfederal sponsor to pursue construction of one CERP project on its own. It deauthorized the Big Cypress Water Conservation Plan, while also prohibiting CERP projects from inclusion in the deauthorization process established by WRDA 2020 for USACE projects.

### **Congressional Interest**

Congress has focused on (1) authorizing and funding Everglades restoration projects and (2) oversight of project implementation and impacts on water flows.

**Appropriations.** The 2018 Seventh Biennial Review of Everglades Restoration by the National Academies of Science, Engineering, and Medicine notes that funding is a key constraint on the rate of restoration progress. The timing and level of federal funding affect project implementation and completion. The Administration's FY2022 request for USACE CERP projects was over \$100 million more than FY2021 enacted levels (see **Table 2**). DOI conducts science to support restoration, and it manages and restores wildlife habitat in the ecosystem.

<b>Table 2. Federal Funding of Everglades Restoration</b>	
(\$ in millions)	

Agency	Project	FY2020	FY2021	FY2022 Req.
USACE	CERP	\$238.8	\$249.7	\$352.3
USACE	Non-CERP	\$10.1	\$10.4	\$6.6
DOI	CERP	\$8.1	\$8.1	\$8.2
DOI	Non-CERP	\$55.9	\$56.8	\$59.4

**Source**: South Florida Ecosystem Restoration Task Force, Fiscal Year 2022 Cross-Cut Budget Request.

**Notes**: Req. = Request; USACE = U.S. Army Corps of Engineers; CERP = Comprehensive Everglades Restoration Plan; DOI = Department of the Interior.

Lake Okeechobee/Herbert Hoover Dike. USACE also regulates water storage and discharges from Lake Okeechobee. 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 repairs 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 Greater 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, repairs of HH Dike aim to increase Lake Okeechobee's capacity to store water and regulate discharges that could improve water quality in canals flowing to the estuaries.

As of September 2021, USACE anticipates 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.

USACE expects to finalize new discharge regulations for the *Lake Okeechobee System Operating Manual* by 2022 to account for the completed project. In August 2021, USACE announced a preferred alternative for the new schedule. The agency plans to use models to modify the alternative in order to optimize the schedule based on public input and other considerations.

Anna E. Normand, Analyst in Natural Resources Policy Pervaze A. Sheikh, Specialist in Natural Resources Policy IF11336

# Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.