



## FULL ANALYSIS

### I. SUBSTANTIVE ANALYSIS

#### A. HOUSE PRINCIPLES ANALYSIS:

The bill does not appear to implicate any of the House Principles.

#### B. EFFECT OF PROPOSED CHANGES:

##### *Background*

Section 601 of the Water Resources Development Act of 2000 approved the Comprehensive Everglades Restoration Plan (CERP) as a framework for modifications and operational changes to the Central and Southern Florida Project needed to restore, preserve and protect the South Florida ecosystem while providing for other water-related needs of the region, including water supply and flood protection.

##### *CENTRAL AND SOUTHERN FLORIDA PROJECT*

The Central and Southern Florida (C&SF) Project is a federal flood control project authorized under section 203 of the Flood Control Act of 1948 (62 Stat. 1176). The multi-purpose project provides flood control, water control, water supply, and other services to the area that stretches from Orlando to Florida Bay. The C&SF Project includes 1,000 miles of canals, 720 miles of levees, and several hundred water control structures. The C&SF Project has performed its authorized functions well for nearly half a century. However, the project has also contributed to the decline of the south Florida ecosystem.

The C&SF Project Comprehensive Review Study (Restudy) re-examined the C&SF Project to determine the feasibility of modifying the project to improve the sustainability of South Florida. As required by the authorizing legislation, the study investigated making structural and operational modifications to the C&SF Project for improving the quality of the environment; improving protection of the aquifer; improving the integrity, capability, and conservation of urban and agricultural water supplies; and improving other water-related purposes. The reconnaissance phase of the Restudy was initiated in June 1993 and the Reconnaissance Report was completed in November 1994. The feasibility phase of the Restudy was initiated in August 1995. The Governor's Commission for a Sustainable South Florida undertook a major effort to assist the Restudy. This effort involved the development of preferred alternatives for the Restudy and culminated in adoption of a Conceptual Plan for the Restudy in August 1996.

In addition, the Water Resources Development Act of 1996 (WRDA96) provided specific congressional direction concerning the Restudy. Specifically, WRDA96 required the completion of a comprehensive plan and submission of the feasibility report and Programmatic Environmental Impact Statement to Congress by July 1, 1999. The Act also established 50-50 cost sharing for C&SF Project modifications, including water quality features essential for restoration, and authorized construction of critical restoration projects. The purpose of this feasibility study was to develop a comprehensive plan for the overall C&SF system and the tools necessary to evaluate the comprehensive plan as well as separable and incremental portions of the project.

##### Comprehensive Everglades Restoration Plan (CERP)

##### *Plan Development*

Between September 1997 and May 1998, a multi-agency Restudy Team and the public developed and evaluated numerous alternative comprehensive plans. In the fall of 1998, traditional public workshops were held on the draft feasibility report, in accordance with the National Environmental Policy Act. During the evaluation, each proposed plan was compared to alternative plans on how well the proposed plan met study goals.

## *The Plan*

The CERP serves as the framework and guide to restore, protect, and preserve the water resources of central and southern Florida, including the Everglades. CERP covers 16 counties over an 18,000-square-mile area, and centers on an update of the Central & Southern Florida (C&SF) Project.

CERP was approved in the Water Resources Development Act of 2000. It includes more than 60 elements that will take more than 30 years to construct at an estimated cost of \$7.8 billion (1999 estimate). CERP's major components are:

- 1) Surface Water Storage Reservoirs.
- 2) Water Preserve Areas.
- 3) Management of Lake Okeechobee as an Ecological Resource.
- 4) Improved Water Deliveries to the Estuaries.
- 5) Underground Water Storage.
- 6) Treatment Wetlands
- 7) Improved Water Deliveries to the Everglades.
- 8) Removal of Barriers to Sheetflow.
- 9) Storage of Water in Existing Quarries.
- 10) Reuse of Wastewater.
- 11) Pilot Projects.
- 12) Improved Water Conservation.
- 13) Additional Feasibility Studies.

Water is the key to reviving the Everglades ecosystem. For the restoration of the Everglades to be successful, four factors must be in place:

Quantity - The right of amount of water must be delivered to the places that need it most.

Quality - The quality of the water must be healthy for the environment.

Timing - The timing of water held and released into the ecosystem will be modified to mimic natural flow patterns.

Distribution - Water will be captured to distribute to the ecosystem, as well as urban and agricultural users in the future.

While the CERP is the cornerstone of regional ecosystem restoration, other USACE projects of a more limited scope are also working toward restoring and enhancing this vast natural system. The restoration of the Kissimmee River is aimed at returning the natural areas of the river and improving wildlife habitat in the northern part of the greater Everglades system. The USACE's Environmental Impact Statement for Southwest Florida will provide a comprehensive framework for evaluating future requests for development permits. The U. S. Fish and Wildlife Service's (USFWS) Multi-Species Recovery Plan provides a comprehensive strategy to address habitat needs of the 68 endangered species in the area.

Water quality improvements are being addressed by the state through Everglades Construction Project, enhanced wetlands used as stormwater treatment areas. The implementation of best management practices contributes to the reduction of pollutants in runoff from cities and farms. The South Florida Water Management District is also developing regional and sub-regional water supply plans to better utilize the water resources of the area.

Efforts to balance growth and resource protection are all important to the overall ecosystem and its restoration. The "Eastward Ho!" initiative directs future development into the historical eastern corridor by revitalizing older urban areas. This effort by Miami-Dade County to address land use and water management will determine the future economic, social, and environmental sustainability for most of urban and rural Miami-Dade County. The Florida Keys Carrying Capacity Study, a joint state and USACE, will provide an information base for managers to make decisions about balancing economic and environmental needs.

Source: [http://www.evergladesplan.org/about/rest\\_plan\\_pt\\_01.aspx](http://www.evergladesplan.org/about/rest_plan_pt_01.aspx)

#### **State of Florida and South Florida Water Management District Financial Commitments to Date**

- Committed \$3.3 billion towards CERP
- Committed 1.8 billion towards Acceler8
- Committed \$1.8 billion towards water quality improvements
- Committed \$200 million towards Lake Okeechobee and Estuary Recovery Plan

#### **Federal Financial Commitment to Date**

- \$300 million

Section 601 of the Water Resource Development act authorized the following projects

PILOT PROJECTS- The following pilot projects are authorized for implementation, after review and approval by the Secretary, at a total cost of \$69,000,000, with an estimated *Federal cost of \$34,500,000* and an estimated non-Federal cost of \$34,500,000:

- (i) Caloosahatchee River (C-43) Basin ASR, at a total cost of \$6,000,000, with an estimated Federal cost of \$3,000,000 and an estimated non-Federal cost of \$3,000,000.
- (ii) Lake Belt In-Ground Reservoir Technology, at a total cost of \$23,000,000, with an estimated Federal cost of \$11,500,000 and an estimated non-Federal cost of \$11,500,000.
- (iii) L-31N Seepage Management, at a total cost of \$10,000,000, with an estimated Federal cost of \$5,000,000 and an estimated non-Federal cost of \$5,000,000.
- (iv) Wastewater Reuse Technology, at a total cost of \$30,000,000, with an estimated Federal cost of \$15,000,000 and an estimated non-Federal cost of \$15,000,000.

INITIAL PROJECTS- The following projects are authorized for implementation, after review and approval by the Secretary, subject certain conditions, at a total cost of \$1,100,918,000, with an estimated *Federal cost of \$550,459,000* and an estimated non-Federal cost of \$550,459,000:

- (i) C-44 Basin Storage Reservoir, at a total cost of \$112,562,000, with an estimated Federal cost of \$56,281,000 and an estimated non-Federal cost of \$56,281,000.
- (ii) Everglades Agricultural Area Storage Reservoirs--Phase I, at a total cost of \$233,408,000, with an estimated Federal cost of \$116,704,000 and an estimated non-Federal cost of \$116,704,000.
- (iii) Site 1 Impoundment, at a total cost of \$38,535,000, with an estimated Federal cost of \$19,267,500 and an estimated non-Federal cost of \$19,267,500.
- (iv) Water Conservation Areas 3A/3B Levee Seepage Management, at a total cost of \$100,335,000, with an estimated Federal cost of \$50,167,500 and an estimated non-Federal cost of \$50,167,500.
- (v) C-11 Impoundment and Stormwater Treatment Area, at a total cost of \$124,837,000, with an estimated Federal cost of \$62,418,500 and an estimated non-Federal cost of \$62,418,500.

(vi) C-9 Impoundment and Stormwater Treatment Area, at a total cost of \$89,146,000, with an estimated Federal cost of \$44,573,000 and an estimated non-Federal cost of \$44,573,000.

(vii) Taylor Creek/Nubbin Slough Storage and Treatment Area, at a total cost of \$104,027,000, with an estimated Federal cost of \$52,013,500 and an estimated non-Federal cost of \$52,013,500.

(viii) Raise and Bridge East Portion of Tamiami Trail and Fill Miami Canal within Water Conservation Area 3, at a total cost of \$26,946,000, with an estimated Federal cost of \$13,473,000 and an estimated non-Federal cost of \$13,473,000.

(ix) North New River Improvements, at a total cost of \$77,087,000, with an estimated Federal cost of \$38,543,500 and an estimated non-Federal cost of \$38,543,500.

(x) C-111 Spreader Canal, at a total cost of \$94,035,000, with an estimated Federal cost of \$47,017,500 and an estimated non-Federal cost of \$47,017,500.

(xi) Adaptive Assessment and Monitoring Program, at a total cost of \$100,000,000, with an estimated Federal cost of \$50,000,000 and an estimated non-Federal cost of \$50,000,000.

### Picayune Strand

Southern Golden Gate Estates encompasses 86 square miles of Collier County between Alligator Alley (I-75) and the Tamiami Trail (U.S. 41) in southwest Florida. Today, most of the area is owned by the state of Florida and is included in the Picayune Strand State Forest. Public lands surrounding the Southern Golden Gate Estates property include Florida Panther National Wildlife Refuge, Fakahatchee Strand State Preserve, 10,000 Islands National Wildlife Refuge and Collier Seminole State Park.

In the early 1960s, Gulf American Corporation (GAC) set out to develop Southern Golden Gate Estates. At that time, there were no state or federal laws setting drainage standards or regulating the development of wetlands. The company dredged 48 miles of canals, built 290 miles of shell-rock roads, and sold thousands of lots before going bankrupt.

This development dramatically changed the natural landscape. The water table dropped by several feet, turning what was once a healthy, cypress-dotted wetland into a distressed system that became a target of invasive nuisance plants. These alterations to the natural system also caused an increase in wildfires, both in frequency and intensity. Runoff that once flowed in a broad, shallow sheet to the coastal estuary was funneled into the Faka Union Canal system. Coastal areas that historically received smaller freshwater discharges over a wide area became too salty. At the same time, the concentrated fresh water discharge from the canal reduced salinity in that area, damaging oyster reef communities and altering the composition of fish and crabs species. Drinking-water well fields near the estuary also became vulnerable to saltwater intrusion.

The total project cost for the tentatively recommended plan to restore the area is estimated at \$362 million to be shared equally by the state and federal government. Most of the cost, \$250 million, is for land acquisition and has already been expended. New appropriations of state and federal money will only be needed for design and construction.

Source: [http://www.evergladesplan.org/docs/fs\\_sgge\\_061504\\_english.pdf](http://www.evergladesplan.org/docs/fs_sgge_061504_english.pdf)

## Indian River Lagoon

The Indian River Lagoon is most biologically diverse estuary system in North America. It is:

- Home to 4,315 plant and animal species.
- Home to 35 threatened or endangered species.
- Included in the National Estuary Program.
- Designated as a Florida Aquatic Preserve and an Outstanding Florida Water.

The Indian River Lagoon (IRL) - South Feasibility Study investigated the options to alter the detrimental affects of the flow of surface waters through the existing C&SF canal system to the St. Lucie River and Estuary and the Indian River Lagoon. The C&SF project features in this study area are C-25 (Belcher Canal), C-24 (Diversion Canal), C-23, and C-44 (St. Lucie Canal). This study focused on making improvements, which will restore the environmental health of the receiving water bodies as well as their watershed.

Martin and St. Lucie counties - Florida's "Treasure Coast" - encompass some of the state's most productive and most threatened estuarine treasures, the Indian River Lagoon and St. Lucie Estuary. Home to more than 4,300 species of plants and animals, and supporting an annual economic contribution of more than \$730 million, the lagoon region will benefit from careful restoration and protection of these water bodies.

The lagoon and estuary have suffered from altered water flow patterns and degraded water quality. In the past few years, excessive rains required additional floodwater releases to the estuary from Lake Okeechobee. These freshwater releases, combined with excess stormwater runoff arriving in the estuary through drainage canals, altered the salinity balance, stressing the estuary's unique ecosystem. In addition, neighborhoods and farms popped up all around the estuary's 827-square mile watershed. Outdated stormwater management systems and runoff from fertilizers caused both an increase in the volume of fresh water and pollution levels entering the estuary and lagoon.

A huge effort, called the Indian River Lagoon South Restoration Project, is underway to reverse the damaging effects of pollution and unnaturally large freshwater discharges into these ecologically vital water bodies. The delicate balance of fresh and salt water in the lagoon and estuary will be restored, polluted water will be treated and depleted habitats will be revitalized.

Indian River Lagoon South Restoration Project features and benefits:

- 12,000 acres of aboveground storage.
- 9,000 acres of manmade wetlands.
- 90,000 acres of natural areas, including 53,000 acres of restored wetlands, providing additional water storage.
- 90 acres of artificial submerged habitat created for aquatic vegetation
- 922 acres of submerged aquatic vegetation restored.
- 7.9 million cubic yards of removed muck.
- 41 percent long-term reduction in phosphorus.
- 26 percent long-term reduction in nitrogen.
- 2,650 acres of benthic habitat created in St. Lucie River and Estuary.
- 889 acres of restored oyster habitat.
- \$6.1 million in improved agricultural productivity, through improved freshwater supplies.

Source: [http://www.evergladesplan.org/docs/fs\\_irl\\_south\\_aug\\_2006.pdf](http://www.evergladesplan.org/docs/fs_irl_south_aug_2006.pdf)

## Federal Authorization versus Federal Appropriation

Federal authorization is the formal act of approving a project. While the authorization provides a cost estimate, no Federal monies are associated with an authorization. Federal appropriations, similar to state appropriations, commit federal dollars to an authorized project. Typically an inflationary factor is built into the authorization act. If at the time of appropriation the estimated costs of a project exceed the authorized cost estimate plus the inflationary factor, the project must be reauthorized before federal appropriations can be spent.

C. SECTION DIRECTORY:

N/A

**II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT**

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None

2. Expenditures:

None

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None

2. Expenditures:

None

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

None

D. FISCAL COMMENTS:

N/A

**III. COMMENTS**

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable because the bill does not: require counties or municipalities to spend funds or to take an action requiring the expenditure of funds; reduce the percentage of a state tax shared with counties or municipalities; or reduce the authority that counties and municipalities have to raise revenue.

2. Other:

B. RULE-MAKING AUTHORITY:

The bill does not expand rule making authority

C. DRAFTING ISSUES OR OTHER COMMENTS:

None

D. STATEMENT OF THE SPONSOR

No statement submitted.

**IV. AMENDMENTS/COUNCIL SUBSTITUTE CHANGES**

N/A