



The Florida Senate

Interim Project Report 2000-62

September 1999

Committee on Natural Resources

Senator Charlie Bronson, Chairman

REVIEW OF FUNDING SOURCES FOR THE RESTUDY

SUMMARY

The Central and Southern Florida Project for Flood Control and Other Purposes (project), first authorized by Congress in 1948, is a multi-purpose project providing flood control; water supply for agricultural, municipal, and industrial use; prevention of saltwater intrusion; water supply for the Everglades National Park, and protection of fish and wildlife resources. Its primary system components include approximately 1,000 miles each of canals and levees, 150 water control structures, and 16 major pump stations. The project was the culmination of earlier U.S. Army Corps of Engineers (Corps) efforts in south Florida, principally for flood protection. Although generally successful in flood protection and water supply, the unintended result of the project has been severe, adverse environmental impacts on the South Florida ecosystem. The Corps and the South Florida Water Management District (SFWMD) have identified a number of major concerns, which the Central and Southern Florida Project Comprehensive Review Study (Restudy) is intended to alleviate.

The Restudy is intended to develop surface water storage reservoirs, create water preserve areas, manage Lake Okeechobee as an ecological resource, improve water delivery to estuaries, provide underground water storage, develop treatment wetlands, improve the Everglade's hydroperiod, increase sheetflow, convert quarries to reservoirs, reuse wastewater, and improve water deliveries to Biscayne Bay and Florida Bay.

The Restudy is expected to cost at least \$8.2 billion over a 39-year period if fully implemented. The SFWMD, as local sponsor, must pay 50 percent of the total costs. For the first 20 years the SFWMD's costs have been annualized at \$200 million, although that amount is insufficient to cover the district's land acquisition costs during the period 2002-2005. The SFWMD reports that it can fund its 2000 share, however. The district is unable to fully fund its annual share with its current resources, however, and contracted for an analysis of funding options by the Nabors, Giblin, and Nickerson firm and the Government Services Group, Inc. The

sources of alternate funding developed for the report include:

- C Land Acquisition Funding Alternatives
 - Lease purchase agreements
 - Revenue bonds
 - Certificates of participation
- C Parcel Property Taxes
- C Tax Distributions From Documentary Stamp and Sales Tax Revenues
- C Water Supply Fees
- C Public Utility Fees
- C Cost Sharing

SFWMD staff has proposed a method for providing the \$200 million annualized Restudy funding needs through the use of Florida Forever funds, a millage increase to the constitutional cap, existing ad valorem revenues, local participation, and \$60 million in state funds from an as yet to be determined source. This proposal is not feasible, however, without a significant increase in the SFWMD's ad valorem levy, which appears unlikely at this time.

Staff recommends that the Legislature consider establishing a long-range funding mechanism to supplement the financial capabilities of the SFWMD for implementing the Restudy, to avoid a misunderstanding in the U.S. Congress and misimpressions about Florida's support for the Restudy.

BACKGROUND

The Central and Southern Florida Project for Flood Control and Other Purposes (project), first authorized by Congress in 1948, is a multi-purpose project providing flood control; water supply for agricultural, municipal, and industrial use; prevention of saltwater intrusion; water supply for the Everglades National Park, and protection of fish and wildlife resources. Its primary system components include approximately 1,000 miles each of canals and levees, 150 water control structures, and 16 major pump stations. The project was the culmination of earlier U.S. Army Corps of Engineers

(Corps) efforts in south Florida, principally for flood protection.

Initial flood control efforts by the Corps were in response to the hurricanes of 1926 and 1928. In 1926, a hurricane which struck Miami and Lake Okeechobee was responsible for 200 deaths and caused widespread damage and financial losses. Two years later, the 1928 hurricane created massive flooding south of Lake Okeechobee, drowning more than 2,000 people in and around Moore Haven and causing substantial property losses. In 1929 the Florida Legislature created the Okeechobee Flood Control District to serve as local sponsor for flood control projects undertaken by the Corps. A Corps plan was developed for floodway channels, control gates, and major levees, including the Herbert Hoover Dike around the shore of Lake Okeechobee; construction began in 1930.

An extended dry period from 1931 to 1945 resulted in lowered water levels, saltwater intrusion in municipal wells, and widespread muck fires. Ironically, many of the adverse effects of the droughts were exacerbated by earlier drainage and flood control efforts. At this time, greater recognition was given to the relationship between Lake Okeechobee and the water resources of the entire region, the unintended effects of drainage and flood control, and the need for water conservation measures. In 1947, 100 inches of rain fell in south Florida, ending the extended dry period. In a 25-day period that year, two major hurricanes hit southeastern Florida, resulting in 90 percent of the area being flooded and causing \$59 million in property losses.

After the sequential experiences of extreme flooding and extreme drought, coupled with increasing saltwater intrusion and growing concerns regarding water supply, the need for more comprehensive water management strategies became apparent. A flood control plan was completed by the Corps in December 1947. In February 1948, the Governor approved the plan on behalf of the state. The initial phase of the project was authorized by the Flood Control Act of June 30, 1948, for the purposes of flood control, water level control, water conservation, prevention of saltwater intrusion, and preservation of fish and wildlife. The 1949 Legislature created the Central and Southern Florida Flood Control District, predecessor to the South Florida Water Management District (SFWMD), to serve as the local sponsor for the project.

Subsequent modifications have been made to the project, including adding measures to increase storage and conservation of water, improve water distribution, and

provide flood control for Martin County. Recreation has been added as an additional project purpose. In addition, specific modifications have been made to increase water deliveries to the Everglades National Park and to provide for ecosystem restoration of the Kissimmee River. Nevertheless, the unintended result of the project has been severe, adverse environmental impacts on the South Florida ecosystem.

The Corps and the SFWMD have identified the following major concerns:

Too Much Water Is Sent to the Sea. The Project was designed to send excess rainwater to sea to keep people and farms dry. Unfortunately, the Project works too well. Nearly 1.7 billion gallons a day are sent to the Atlantic Ocean or the Gulf of Mexico - wasting water needed for the ecosystem and regional water supplies.

Estuaries Often Suffer. Flood protection is provided by sending fresh water to the sea through estuaries such as the St. Lucie and Caloosahatchee. Too much, or too little, fresh water damages the estuaries' delicate balance between salt and fresh water. This can do great harm to seagrasses and other aquatic plants and the fish and animal life which live there.

Lake Okeechobee Is Treated Like a Reservoir. Lake Okeechobee has many masters. It is often managed as if it were a reservoir - at high levels to supply water to agricultural and urban users, and at low levels for flood water storage. Regulated water levels that are either consistently too high or too low damage the ecology of the lake and its shoreline.

The Everglades Is Not Receiving the Historic Timing and Flow of Water. Water is the lifeblood of the Everglades. Historically, a shallow sheet of fresh water flowed slowly over the wetlands to coastal bays and estuaries. Today, discharges to the Everglades are often too much, or too little, and frequently at the wrong times of the year. An over-abundance or scarcity of water affects plants and wildlife accustomed to the Everglades' historic range of water flows, levels and seasons. In addition, canals and highways that criss-cross the Everglades have interrupted its historic overland sheet flow.

Florida Bay Lacks Fresh Water. Florida Bay is a shallow estuary at the southern end of Everglades National Park. The Bay often experiences excessively high concentrations of salt water because not enough fresh water reaches it from natural overland sheet flow.

Visible effects include a loss of seagrasses, and a reduction in juvenile shellfish and game fish populations that are so important to the economy.

Water Quality Has Deteriorated. Water quality throughout south Florida has deteriorated over the past fifty years. More than one-half of the wetlands that act as natural filters and retention areas are gone. Some untreated urban and agricultural storm water is sent directly to natural areas and estuaries. Too much, or too little, water is often sent to estuaries. Too many nutrients are entering the Everglades, with an overabundance of cattails a visible sign of the results.

Urban and Agricultural Water Supplies Are Dwindling. Historically, most rainwater soaked into the ground in the region's vast wetlands. As south Florida developed, the canal network worked too effectively and routed too much water off the land to reduce flood damages. The result is that not enough water is stored for all uses. Water shortages in dry years are frequent, and will become more severe without any changes to the water management system.

Maintaining Flood Protection. Florida is low-lying, flat, and wet. Today, the Project provides protection from floods on a regional basis for south Florida, supported by many locally operated canal networks.

The Corps and the SFWMD report that, taken together, these conditions seriously threaten the natural and human environment of south Florida. The natural system continues to deteriorate. The population requires more fresh water for urban and agricultural uses. The current level of flood protection is in jeopardy as more people move into the region. Today, south Florida is not on a sustainable course for the future.

The 1992 U.S. Congress authorized the Central and Southern Florida Project Comprehensive Review Study (Restudy), resulting in a comprehensive plan for the restoration, protection, and preservation of the water resources of central and southern Florida, including the Everglades. In presenting the plan to the U.S. Congress, the Secretary of the Army reported that:

“The Comprehensive Plan achieves the restoration of more natural flows of water, including sheetflow, improved water quality, and more natural hydro periods in the south Florida ecosystem. Improvements to native flora and fauna, including threatened and endangered species, will occur as a result of the

restoration of hydrologic conditions. This plan was designed to enlarge the region's supply of fresh water and to improve how water is delivered to the natural system. The recommended plan includes the following structural and operational changes to the existing C&SF Project: 181,250 acres of surface water storage reservoirs with a capacity to store 1,543,270 acre-feet of water; Water Preserve Areas consisting of multipurpose water management areas in Palm Beach, Broward, and Miami-Dade Counties between the urban areas and the eastern Everglades; 300 aquifer storage and recovery (ASR) wells around Lake Okeechobee, in the Water Preserve Areas, and in the Caloosahatchee Basin capable of pumping as much as 1.6 billion gallons a day; 35,600 acres of treatment wetlands, known as Stormwater Treatment Areas (STAs); removing more than 240 miles of project canals and internal levees within the Everglades; storing water in two converted 11,000 acre limestone quarries in the Lake Belt region of northern Miami-Dade County; reuse of 220 million gallons a day of wastewater; and pilot projects. In addition, several studies are recommended to investigate additional improvements needed to support restoration, protection, and preservation of the south Florida ecosystem.”

In July, 1999, a report was presented to the U.S. Congress with a request for approval of the plan and funding for six pilot projects and ten initial project components, including assessment and monitoring, in the amount of \$1,197,918,000. As local sponsor, the SFWMD must pay 50 percent of the costs to implement the plan. Over a period of approximately 39 years, the plan is expected to cost at least \$8.2 billion to implement and, when complete, require \$172 million annually for operation and maintenance. Spread over the first 20 years of the project, expenditures will average \$400 million annually, with the SFWMD's share being \$200 million annually.

The \$200 million average annual cost, however, is not sufficient for the SFWMD's needs for the period of 2002-2005. The SFWMD is required to acquire all necessary real estate for the Restudy and these needs must be met early in the project's life. Needed acquisitions alone are estimated to average over \$289 million annually during 2002-2005. Several actions must occur before any project components are constructed. First, Congress must specifically authorize project components in the Water Resources Development Act

(adopted in even-numbered years) prior to any additional action. At its discretion, Congress may authorize one or more project components. Once a project component is authorized, a detailed design and environmental impact statement must be completed; in addition, the SFWMD and the Corps must enter into a Project Cooperation Agreement (PAC) for the design, construction, and operation of any authorized project components. Once the PCA is executed and prior to initiation of construction, Congress must specifically appropriate funds for the authorized project components.

(Some of the information presented above was excerpted from a 1998 interim project report by staff of the Joint Legislative Committee on Everglades Oversight entitled "A Review of the Restudy of the Central and Southern Florida Project for Flood Control and Other Purposes.")

Should the Restudy be authorized as proposed, the SFWMD would not be able to pay its share of the costs with its present financial resources. For the fiscal year ending September 30, 1998, the SFWMD reported revenues of \$404.7 million and expenditures of \$279.6 million. Realizing its potential need for substantially increased revenues, the SFWMD contracted with the Government Services Group, Inc. (GSG) and the Nabors, Giblin, and Nickerson (NGN) law firm for a report identifying possible new revenue sources, entitled "Funding the Central and Southern Florida Comprehensive Review Study (C&SF Restudy) for the South Florida Water Management District" (NGN/GSG report) which was completed in January 1999.

The 1999 Legislature considered, but did not enact, CS/SB 2156 by Senator Saunders, which would have provided funding for Everglades restoration of up to \$100 million a year over a ten year period from bonds backed by documentary stamp tax proceeds.

This interim project is in response to the anticipated need for additional restudy funding.

METHODOLOGY

Staff reviewed the extensive materials that have been produced by the SFWMD and the Corps of Engineers, the district's "Financial Capabilities Statement and Funding Plan," and the district's recent consultant report that analyzes potential approaches for meeting funding needs for implementing the Restudy. Staff, together with staff of the Fiscal Resources and Fiscal Policy

Committees, also met with SFWMD officials to discuss funding problems and strategies.

FINDINGS

From the outset it must be understood that the Restudy is more a concept than a plan. The various project components may or may not function as anticipated; should they not, alternatives may require the expenditure of funds in currently unknown amounts. Activities vital to the success of the project at this time, particularly ASR, may prove to be unfeasible; should that occur the need to store huge amounts of water would require reservoirs of large capacity and expense. Even though national leaders have indicated support for funding, there is no certainty at this time that the U.S. Congress will fund, in a timely manner, any project components or pilot projects. Because the Restudy is conceptual, costs and the timing of activities may well have to be revised in the future. As an example, the Restudy contemplates the creation of 181,250 acres of surface water reservoirs, but in most instances the location of the reservoirs has yet to be determined. In such circumstances, the actual cost of acquiring needed lands may vary substantially from current estimates.

As an example of the uncertainty of costs, the Restudy submitted to Congress in July was estimated to cost approximately \$7.8 billion; however this amount failed to include necessary monitoring and assessment expenditures expected to increase the total cost to \$8.2 billion. Other uncertainties that could have major impacts on current estimates are the issue of how much already-acquired lands will be credited toward the local share; whether the costs of maintenance and operation will be shared and to what degree; and whether the costs of planning, engineering, and design will be allowed as part of an in-kind match.

As local sponsor, the SFWMD is required to submit a "Financial Capability Statement and Financing Plan" to the Corps demonstrating its financial capability to meet its obligations and indicating how it expects to fund its share. The SFWMD has submitted its report to the Corps' satisfaction. The plan included several scenarios in which a combination of funding sources indicated an ability to provide the local share of the costs of the initial projects, pilot projects, and monitoring until 2012. These sources included credits for lands already purchased, Florida Forever revenues, ad valorem proceeds, and cost sharing/special fees and assessments. One scenario would yield approximately \$124,868,000, the other \$129,645,000. Since the plan was submitted to the

Corps in March 1999, however, new information has been developed - particularly relating to land acquisition needs - that make some of the conclusions in the report outdated.

Ad Valorem Taxes

The NGN/GSG Report was completed in January 1999 and includes an analysis of potential funding sources for the Restudy. At the outset, a review of the SFWMD’s historic and current revenues and expenditures indicates that no more than \$25 million in discretionary funds could be made available annually for the Restudy. The SFWMD currently levies 0.697 mills, which, if increased to the statutory cap of 0.8 mills would yield approximately \$33.5 million in additional funds. If the Legislature were to authorize the SFWMD to levy the constitutional limit of 1.0 mills, an additional \$67 million could be raised annually. These additional ad valorem revenues would still leave approximately \$100 million annually to be produced to meet the \$200 million annualized Restudy funding needs.

Alternate Funding Sources

The NGN/GSG Report identified the following non-ad valorem funding sources:

- C Land Acquisition Funding Alternatives
 - Lease purchase agreements paid in annual installments from ad valorem revenues
 - Revenue bonds issued by the SFWMD funded by a dedicated state tax revenue
 - Bonds issued by the SFWMD funded from a non-ad valorem tax source.
 - Bonds issued by the SFWMD funded from ad valorem revenues, with the consent of the electorate
 - Certificates of participation

- C Parcel Property Taxes. Requiring legislative authorization, such taxes could be used to fund the project components providing flood control, maintaining the integrity of shallow wells from salt water intrusion, and providing drainage for specific areas.

- C General Tax Distribution. Requiring legislative action, state taxes could fund components providing a statewide purpose.
 - Dedication of documentary stamp tax revenues; five cents of the tax on deeds and five cents of the tax on mortgages and stocks would produce approximately \$98.5 million annually. If bonded, the taxes would produce approximately \$1.325 billion.

- Dedication of sales tax revenues; approximately one-eighth of one percent of the sales tax would produce approximately \$250 million annually. If bonded, that amount could produce approximately \$3.375 billion.

- C Water Supply Fees. Requiring legislative action, such fees could fund components enhancing agricultural or public water supply.
 - Annual consumptive use fees could be imposed at varying rates for classifications of water users and volume of use.
 - Irrigation withdrawal fees could be imposed at varying rates for classifications of users and volume of use.

- C Public Utility Fees.
 - Create a public water supply authority. Pursuant to s. 373.1961(1)(g) and (h), F.S., a water management district may acquire and construct water production and transmission facilities and issue revenue bonds for such purposes. Pursuant to s. 373.1961(1)(i), F.S., a water management district can contract with others to finance such facilities.
 - Create a wastewater reuse facility. Under this concept, the SFWMD could join in the creation of a regional wastewater reuse authority. Fees could be charged for disposal of wastewater effluent and for use of wastewater for irrigation.

The NGN/GSG Report also noted that a number of project components have the potential for significant cost sharing with other entities due to positive impacts and commonality of interests.

SFWMD Restudy Funding Proposal

After considering information from the NGN/GSG Report, and other information, SFWMD staff has proposed the following funding sources to reach the annualized costs of \$200 million for 20 years to meet Florida’s cost sharing requirements for the Restudy:

Florida Forever Funding	\$ 25,000,000
Millage increase to 0.8 legal limit (50% of new funds)	16,750,000

Millage increase to 1.0 constitutional limit	67,000,000
Existing ad valorem revenue	21,600,000
Local participation	10,000,000
State of Florida funding (source to be determined)	59,650,000
TOTAL	\$200,000,000

Florida Forever Funding \$ 25,000,000
 Key to this proposal, however, is the nearly \$84 million to be provided by significant ad valorem increases; such increases do not appear likely at this time.

RECOMMENDATIONS

Proponents of the Restudy have expressed concern that failure to support the project with significant state funding could result in the U.S. Congress failing to fund, or fully fund its share of the Restudy costs. The enactment of CS/SB 1672, which clarified the SFWMD’s and the Department of Environmental Protection’s roles in the Restudy, and the failure to enact CS/SB 2156, which would have provided \$100 million annually for Everglades restoration, were viewed by some as indications that the State of Florida is not an enthusiastic partner in the Restudy. Those voicing such concerns fear that available federal funding may be allocated to other federal projects without a demonstration of the state’s readiness to participate in Restudy funding. Conversely, the SFWMD has reported that it can fund its share of the Restudy through FY 2000 with existing resources, although any new funding could be held at interest to maximize the SFWMD’s land acquisition abilities in future years. It may be desirable for the Legislature to establish a long-range funding mechanism to supplement the financial capabilities of the SFWMD for implementing the Restudy, to avoid a misunderstanding in the U.S. Congress and misimpressions about Florida’s support for the Restudy.

The funding proposal is based on the following assumptions and details:

- C Of the approximately \$36.75 million annual Florida Forever funding for the SFWMD, \$25 million would be designated for Restudy projects.
- C The revenue associated with the millage increase to the .8 legal limit represents 50% of the revenue generated.
- C The millage increase to the 1.0 millage constitutional maximum will require legislative approval.
- C The \$10 million local participation is an estimate.
- C The \$21.6 million ad valorem funding is identified in the FY 2000 budget.
- C The remaining \$59.65 million State of Florida contribution represents the proposed SFWMD funding request.

COMMITTEE(S) INVOLVED IN REPORT *(Contact first committee for more information.)*

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MEMBER OVERSIGHT

Senators Jack Latvala and Burt Saunders