

**SECTION 10**

**DISTRICT ENGINEER'S RECOMMENDATION**

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## 10.0 DISTRICT ENGINEER'S RECOMMENDATION

The Broward County Water Preserve Areas Project will provide a seepage management buffer in combination with above-ground storage reservoirs (including pump stations and water control structures) and associated conveyance is a cost-effective solution to achieving system-wide benefits in the south Florida ecosystem. The seepage management buffer would reduce seepage losses from Water Conservation Areas (WCA) 3A and 3B and provide short hydroperiod wetlands habitat. The above-ground storage reservoirs would eliminate the need to discharge water from the C-11 Basin (through the S-9 pump station) into WCA 3A by storing it in the C-9 and C-11 impoundments. In addition, the plan achieves the benefits of the Project as previously developed for the Comprehensive Everglades Restoration Plan (CERP).

This Project is integral for achieving the system-wide ecosystem restoration and other water-related goals and objectives. Fish and wildlife habitat benefits of the Project include reestablishment of natural hydropatterns within existing natural areas, and improvement of water quality in the Everglades. The Project will produce an aggregated total of 543,781 average annual habitat units for all Everglades ecosystem attributes including the ridge and slough landscape, tree islands, and the Everglades snail kite (a Federally-listed endangered species that inhabits the Everglades ecosystem). Further, this Project is a critical building block upon which implementation of other CERP projects will be able to fully achieve ecosystem restoration objectives in Everglades National Park and Biscayne National Park.

The Broward County Water Preserve Areas Project includes the Water Conservation Areas 3A/3B Levee Seepage Management Project, the C-11 Impoundment and Stormwater Treatment Area Project and the C-9 Impoundment and Stormwater Treatment Area Project, which were initially authorized CERP components pursuant to Section 601(b)(2)(C) of WRDA 2000, Public Law 106-541. The benefits of these components are interdependent and have been analyzed as such. Because these components are mutually dependent and similarly the benefits are interdependent, I am recommending they be authorized as a single project known as the Broward County Water Preserve Areas (BCWPA) Project.

I find that the BCWPA Project, located in western Broward County, is an integral part of CERP. The BCWPA Recommended Plan features two reservoir impoundments with a maximum normal pool storage depth of 4.3 feet: (1) C-11 Impoundment at 1,068 acres of aboveground surface area storage with two mitigation areas totaling 488 acres and (2) C-9 Impoundment at 1,641 acres of aboveground surface area storage with two mitigation areas totaling 349 acres. Both impoundments include individual inflow pump stations, discharge

structures, emergency overflow spillways, and seepage control canals with associated structures. The impoundments may provide opportunities to increase flood damage reduction capabilities through operational changes to the C&SF Project and local drainage systems. However, these opportunities are considered incidental and are not claimed as benefits. Additionally, the impoundments may provide limited water quality improvements in the C-11 and C-9 canals. The BCWPA Recommended Plan also features 4,633-acre wetland areas within the WCA 3A/3B SMA, which provide capability to manage seepage from WCA 3A and 3B and functions as a natural habitat buffer between the larger WCA and urban development occurring to the east.

Therefore, I recommend that the BCWPA Project as described in the section of the report entitled "The Selected Plan" be authorized with such modifications thereof as in the discretion of the Chief of Engineers, may be advisable, for construction. The total estimated first cost for the BCWPA Project is \$746,980,000 (October 2006 price level). The total first cost for the BCWPA project includes recreation features totaling \$1,930,000. The estimated total annual cost of operation, maintenance, repair, rehabilitation and replacement (OMRR&R) of the ecosystem restoration elements is \$5,790,000 with an estimated Federal annual cost of \$2,895,000 and an estimated non-Federal cost of \$2,895,000 and OMRR&R of the recreation elements of \$190,000 which is 100% non-Federal.

I also recommend that the Water Conservation Areas 3A/3B Levee Seepage Management Project, the C-11 Impoundment and Stormwater Treatment Area Project, and the C-9 Impoundment and Stormwater Treatment Area Project which were authorized under Section 601(b)(2)(C)(iv-vi) of WRDA 2000, at costs of \$100,335,000 (\$136,520,000 Oct 2006 price levels), \$124,837,000 (\$156,520,000 Oct 2006 price levels), and \$89,146,000 (\$114,290,000 Oct 2006 price levels) respectively, be deauthorized as separate projects and included as features in the recommended plan for the Broward County Water Preserve Areas.

The above recommendations are made with the provision that the non-Federal sponsor and the Secretary of the Army shall enter into a binding agreement defining the terms and conditions of cooperation for implementing the Project, and that the non-Federal sponsor agrees to perform the following items of local cooperation:

a) Provide 50 percent of total project costs consistent with the provisions of Section 601(e) of the Water Resources Development Act of 2000 including authority to perform design and construction of project features consistent with Federal law and regulation.

- b) Provide all lands, easements, and rights-of-way, including suitable borrow and dredged or excavated material disposal areas, and perform or assure the performance of all relocations determined necessary for the construction, operation, and maintenance of the Project.
- c) Provide or pay to the Government the cost of providing all retaining dikes, waste weirs, bulkheads, and embankments, including all monitoring features and stilling basins, that may be required at any dredged or excavated material disposal areas required for the construction, operation, and maintenance of the Project.
- d) Give the Government a right to enter, at reasonable times and in a reasonable manner, upon land that the non-Federal sponsor owns or controls for access to the Project for the purpose of inspection, and, if necessary, for the purpose of completing, operating, maintaining, repairing, replacing, or rehabilitating the Project.
- e) Assume responsibility for OMRR&R of the Project or completed functional portions of the Project, including mitigation features, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and specific directions prescribed in the OMRR&R manuals and any subsequent amendments thereto. Cost sharing for OMRR&R will be in accordance with Section 601 of WRDA 2000:

“(e) COST SHARING -

(4) OPERATION AND MAINTENANCE - Notwithstanding section 528(e)(3) of the Water Resources Development Act of 1996 (110 Stat. 3770), the non-Federal sponsor shall be responsible for 50 percent of the cost of operation, maintenance, repair, replacements and rehabilitation activities authorized under this section....”

The non-Federal sponsor is responsible for 100 percent of the OMRR&R recreation costs.

- f) Unless otherwise provided for in the statutory authorization for this Project, comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended, and Section 103 of the WRDA of 1986, Public Law 99-662, as amended which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the non-Federal sponsor has entered into a written agreement to furnish its required cooperation for the Project or separable element.
- g) Hold and save the Government free from all damages arising from the construction, operation, maintenance, repair, replacement, and rehabilitation of

the Project and any project-related betterments, except for damages due to the fault or negligence of the Government or the Government's contractors.

h) Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the Project to the extent and in such detail as will properly reflect total project costs.

i) Perform, or cause to be performed, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 9601-9675, that may exist in, on, or under lands, easements or rights-of-way necessary for the construction, operation, and maintenance of the Project; except that the non-Federal sponsor shall not perform such investigations on lands, easements, or rights-of-way that the Government determines to be subject to the navigation servitude without prior specific written direction by the Government.

j) Assume complete financial responsibility for all necessary cleanup and response costs of any CERCLA regulated materials located in, on or under lands, easements, or right-of-ways that the Government determines necessary for the construction, operation, or maintenance.

k) As between the Government and the non-Federal sponsor, the non-Federal sponsor shall be considered the operator of the Project for the purposes of CERCLA liability. To the maximum extent practicable, the non-Federal sponsor shall operate, maintain, repair, replace, and rehabilitate the Project in a manner that will not cause liability to arise under CERCLA.

l) Prevent obstructions of or encroachments on the Project (including prescribing and enforcing regulations to prevent such obstruction or encroachments) which might reduce ecosystem restoration benefits, hinder operation and maintenance, or interfere with the Project's proper function, such that as any new developments on project lands or the addition of facilities which would degrade the benefits of the Project.

m) Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended by the title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Public Law 100-17), and Uniform Regulations contained in 49 CFR part 24, in acquiring lands, easements, and rights-of-way, and performing relocations for construction, operation and maintenance of the Project, and inform all affected persons of applicable benefits, policies, and procedures in connection with said act.

n) Comply with all applicable Federal and State laws and regulations, including Section 601 of the Civil Rights Act of 1964, Public Law 88-352, and Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulation 600-7, entitled, "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army," and all applicable federal labor standards and requirements including, but not limited to, 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (revising, codifying and enacting without substantive change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a *et seq.*), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 *et seq.*) and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c)).

o) Comply with Section 106 of the National Historic Preservation Act in completion of all consultation with the Florida State Historic Preservation Officer and as necessary the Advisory Council on Historic Preservation prior to construction as part of the Pre-construction Engineering Design phase of the Project.

p) Provide 50 percent of that portion of total cultural resource preservation mitigation and data recovery costs attributable to the Project that are in excess of one percent of the total amount authorized to be appropriated for the Project.

q) Do not use Federal funds to meet the non-Federal sponsor's share of total project costs unless the Federal granting agency verifies in writing that the expenditure of such funds is expressly authorized and in accordance with Section 601(e) of WRDA 2000.

I recommend that credit for value of lands, easements, and rights-of-way required for the Project shall be as follows:

a) If the lands, easements and rights-of-way were acquired prior to the execution of the Project Cooperation Agreement, the creditable value shall be their purchase price, subject to a determination of reasonableness, together with their reasonable and necessary incidental costs of acquisition.

b) The value of lands, easements, or rights-of-way acquired by the non-Federal sponsor after the effective date of the Project Cooperation Agreement executed for this Project shall be the fair market value of such real property interests at the time the interests are acquired, together with the reasonable and necessary incidental costs of acquisition.

Section 601(e)(5)(B) of the WRDA of 2000 authorizes the Secretary of the Army to provide credit to the Non-Federal Sponsor for work completed by it during the period of construction pursuant to a project cooperation agreement and a

determination by the Secretary that the work is integral to the CERP. As part of its initiative for early implementation of certain CERP projects known as the "Acceler8 Program", the Non-Federal Sponsor has stated that it may construct portions of the BCWPA Project consistent with this report, in advance of Congressional authorization and the signing of a project cooperation agreement. The Non-Federal Sponsor is exploring alternative project delivery methods to expedite implementation of the BCWPA Project through the Acceler8 Program. Such delivery methods may include public-private partnerships in which the Non-Federal Sponsor contracts with a private or not-for-profit entity for services that may include designing, building, operating or financing these components. I believe that it would be in the public interest for this Project to be implemented expeditiously due to the early benefits to the surrounding habitat, as well as hydrologic benefits to Federal lands and estuaries in other portions of the south Florida ecosystem. Therefore, I recommend that should the Non-Federal Sponsor construct portions of the BCWPA Project prior to the execution of a project cooperation agreement for this Project, the Non-Federal Sponsor be credited for such construction costs at the time the project cooperation agreement for the BCWPA Project is executed. Such credit would be applied toward the Non-Federal Sponsor's share of the costs associated with the implementation of the CERP as authorized by Section 601(e)(5)(C) of WRDA 2000, shall not include cash reimbursements, and shall be subject to: a) the authorization of the BCWPA Project by law; b) a determination by the Secretary of the Army that the activities are integral to the CERP restoration project; c) a certification by the District Engineer that the costs are reasonable, allowable, necessary, auditable, and allocable; and d) a certification by the District Engineer that the activities have been implemented in accordance with U.S. Army Corps of Engineers design and construction standards and applicable Federal and State laws.

The recommendations contained herein reflect the information available at this time and current Departmental policies governing formulation of individual projects. They do not reflect program and budgeting priorities inherent in the formulation of a national Civil Works construction program nor the perspective of higher review levels within the Executive Branch. Consequently, the recommendations may be modified before they are transmitted to the Congress as proposals for authorization and implementation funding. However, prior to transmittal to the Congress, the Sponsor, the State, interested Federal agencies, and other parties will be advised of any modifications and will be afforded an opportunity to comment further.

A handwritten signature in black ink, appearing to read "Paul L. Grosskruger", written over a horizontal line.

**Paul L. Grosskruger**  
**Colonel, Corps of Engineers**  
**District Engineer**

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