

**SUPPLEMENTAL DRAFT
ENVIRONMENTAL IMPACT STATEMENT**

**INTERIM OPERATIONAL PLAN (IOP)
FOR PROTECTION OF THE CAPE SABLE SEASIDE
SPARROW**

**EVERGLADES NATIONAL PARK
MIAMI-DADE COUNTY, FLORIDA**

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**U.S. Army Corps of Engineers
Jacksonville District**

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Abstract: This Supplemental Draft Environmental Impact Statement (DEIS) incorporates the previous structural and operational modifications (ISOPs) to the Central and Southern Florida (C&SF) Project that were implemented in 1999, 2000, and early 2001 to protect the Cape Sable seaside sparrow, and discusses their environmental effects. These were emergency actions taken in response to the U.S. Fish and Wildlife Service's (FWS) February 1999 Biological Opinion (B.O.) under provisions of the Endangered Species Act, which recommended changes in water management practices to prevent jeopardy to the continued existence of the species. These actions were followed in February 2001 by the issuance of a DEIS on an Interim Operational Plan (IOP) of water management for the C&SF Project to provide protection for the sparrow. Subsequently, the FWS made several recommendations in their Planning Aid Letter and Coordination Act Report for improving the alternatives. At the suggestion of the President's Council on Environmental Quality (CEQ), the Corps engaged the services of the U.S. Institute for Environmental Conflict Resolution (IECR) to facilitate the development of an improved plan to address the FWS' concerns. As a result of this process, a consensus agreement with the FWS, Everglades National Park, and the South Florida Water Management District has been reached on a new Alternative 7. This Supplemental DEIS describes and evaluates Alternative 7 in comparison with the six alternatives previously addressed in the DEIS. In addition to some revisions in the system operations, Alternative 7 includes a second seepage reservoir for Pump Station S-332B, the removal of the southern four miles of Levee 67 Extension and canal, and extending 30 feet of S-333 spillway apron. Alternative 7 is now the preliminary recommended alternative. It provides protection for the sparrow consistent with FWS' recommendations in the B.O., while continuing to meet the agricultural and residential flood protection and water supply requirements authorized under the C&SF Project. This Supplemental DEIS also provides greater background on the emergency sparrow protection actions authorized by CEQ beginning in 1999, and describes how they have been integrated with the IOP planning. All information in the February 2001 DEIS is incorporated herein by reference.

Send Your Comments to the
District Engineer by **Nov. 26, 2001**

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EXECUTIVE SUMMARY

Background. On 19 February 1999, the FWS issued a Final Biological Opinion (B.O.) under provisions of the Endangered Species Act of 1973, as amended, for the Modified Waters Deliveries (MWD) to Everglades National Park, Project, Test 7 of the Experimental Water Deliveries and C-111 Project, which affects structures and canals of the Central and Southern Florida Project in southern Dade County. The B.O. concluded that continuation of Test 7, Phase I operations would cause adverse modification of Cape Sable Seaside Sparrow (CSSS) critical habitat and would jeopardize the continued existence of the CSSS. The B.O. presented a Reasonable and Prudent Alternative to the then existing operations that would avoid jeopardizing the CSSS. The RPA recommended that the following hydrological conditions be met for protection of the CSSS: 1) A minimum of 60 consecutive days of water levels at or below 6.0 feet NGVD at NP 205 between March 1 and July 15; 2) Ensure that 30%, 45%, and 60% of required regulatory releases crossing Tamiami Trail enter ENP east of L-67 extension in 2000, 2001, and 2002, respectively, or produce hydroperiods and water levels in the vicinity of subpopulations C, E, and F that meet or exceed those produced by the 30% , 45% , and 60% targets; and 3) Produce hydroperiods and water levels in the vicinity subpopulations C, E, and F that equal or exceed conditions that would be produced by implementing the exact provisions of Test 7, Phase II operations (USACE 1995).

Emergency deviations from Test 7 were authorized in 1998, 1999, 2000, and 2001 by CEQ to allow the Corps to conduct water control operations to protect the CSSS (USACE 1999b; USACE 1999c; USACE 2000). These Interim Operational and Structural Plans (ISOP) enabled the Corps to maintain water levels, particularly in the western CSSS populations, which would maximize breeding seasons for the sparrow.

During implementation of the ISOP, the U.S. Army Corps of Engineers (Corps) received confirmation from the FWS that producing the hydrologic equivalent of the 30, 45, and 60% conditions, as opposed to the actual release percentages, would also meet the FWS RPA conditions until the implementation of MWD. The proposed actions under this Interim Operational Plan (IOP) will allow the Corps to meet or provide the hydrologic equivalent of the FWS RPA conditions, while managing the system for purposes authorized under the C&SF Project.

Alternatives. Representatives from the various agencies evaluated a number of options that had potential as solutions in satisfying the project purpose by using 95 Base conditions and the ISOP operations as a base. These options included changes in operational criteria for existing structures throughout the region that could influence water levels within the various CSSS subpopulations. Two interagency modeling meetings were held to discuss potential options for meeting the criteria stated in the FWS B.O. and to evaluate modeling runs produced by the Corps prior to the meetings. Changes in the operation of various structures were proposed during the meetings and in subsequent correspondence, and appropriate model runs were produced. The modeling runs were posted on the Jacksonville District, Corps of Engineers Website as each was produced. The interagency review team members were

informed as the model runs were posted, and comments and suggestions were used to modify the potential alternative plans. The alternative models were compared to the 1995 Base conditions, which represents conditions under normal C&SF operations with Test 7, Phase I operations in the ENP/South Dade Conveyance System (SDCS) prior to emergency deviations.

Six alternative plans were previously developed and analyzed in the February 2001 Draft EIS. Since that time, CEQ IECR has facilitated an interagency team from the Corps, FWS, SFWMD, and ENP to formulate a consensus alternative that met the criteria in the B.O. while providing for maximum protection of the resource concerns of the interested parties. The plan, Alternative 7, consists of two different modes of water management operation for SDCS and a structural modification of L-67 extension levee. The first mode is "No WCA-3A regulatory releases to SDCS" operation in which L-31N canal will be maintained at Test 7 Phase I level when there are no WCA-3A regulatory releases. Citing a concern that maintaining L-31N canal at ISOP level would impact Everglades National Park resources in NESRS, a "No WCA-3A regulatory releases to SDCS" operation was proposed that essentially reverts back to Test 7 Phase I canal level when no regulatory releases are routed through S-333 and S-334 to SDCS. The Corps along with SFWMD agree to incorporate this operation as part of Alternative 7.

The second mode of operations is "WCA-3A regulatory releases to SDCS" operation in which L-31N canal will be lowered to minimize potential flood impacts in SDCS and at the same time, provide necessary downstream gradient to move WCA-3A regulatory releases through S-333 and S-334. The purpose of routing of regulatory releases from WCA-3A to SDCS with lower canal stage in L-31N is to provide sufficient water to be delivered via S-332B to the habitats of sparrow sub-populations E and F and at the same time, minimize potential flooding impacts to 8.5 SMA and agricultural areas adjacent to L-31N canal.

The Preferred Alternative includes an additional 240 acre retention basin at the S-332B structure, increasing capacity from 160 acres of retention to 400 acres, and operations of this area, intended to re-hydrate adjacent CSSS habitat inside the Park, would be modified to avoid pumping to overflow except under unusual and uncommon circumstances.

Environmental Consequences of the Preferred Alternative. The preferred alternative (Alternative 7) would affect hydrology of Northeast Shark River Slough (NESRS), western SRS, and WCA 3A and 3B. The hydrology of WCA 2A and 2B would be affected, but only to the same degree as the No Action Alternative. Hydrological effects (better CSSS breeding conditions) would be beneficial in NESRS and WSRS as recommended in the FWS B.O. Minor adverse effects due to raised water levels could occur in the vicinity of tree islands in the southern portions of WCA 3A and 3B, but water levels of comparable height and duration have been shown to have negligible impacts on tree island vegetation. The preferred alternative would benefit Taylor Slough hydrology.

Impacts to vegetation under the preferred alternative would be similar to those of the No Action Alternative. Increased ponding depths and hydroperiod in NESRS would provide the desired consequence of approaching natural hydrologic conditions more closely, excluding

exotic nuisance species and encouraging natural wetland species. A reduction in annual flooding duration in WSRS would also be beneficial to native vegetative species. Increased flood duration could lead to loss of some wetland vegetation in WCA 2A and 3A as well as upland vegetation in the southern portion of the areas, but it is not likely. Construction of the S-332B seepage basin would impact Florida panther habitat, but the size of the impact and the quality of the habitat are both minimal.

Under the recommended alternative no overflows would occur, except under extremely limited conditions, at the S-332B structure. Therefore, no introduction of waters containing undesirable nutrient levels into the Park would occur. Construction of the additional seepage basin, and its operation under the modified operational plan in conjunction with the existing detention basin, will greatly reduce the potential for overflow in the region.

Areas of Controversy and Unresolved Issues.

Few issues remain unresolved with various commenting agencies and other non-governmental groups regarding the proposed project. Potential impacts to tree islands have been minimized, as have potential water quality impacts due to releases entering the Everglades National Park. Flooding impacts to residential and agricultural lands would not likely occur with the preferred alternative.

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LIST OF ACRONYMS

C-x	Canal
C&SF	Central and South Florida
CEQ	Council on Environmental Quality
cfs	Cubic Feet per Second
CSSS	Cape Sable Seaside Sparrow
DEIS	Draft Environmental Impact Statement
DERM	Department of Environmental Resources Management
EA	Environmental Assessment
EAA	Everglades Agricultural Area
EIS	Environmental Impact Statement
ENP	Everglades National Park
ESA	Endangered Species Act
FDACS	Florida Department of Agriculture and Consumer Services
FDEP	Florida Department of Environmental Protection
FFWCC	Florida Fish and Wildlife Conservation Commission
FONSI	Finding of No Significant Impact
G-x	Gaging Station or Culvert Structure
GDM	General Design Memorandum
HTRW	Hazardous, Toxic, and Radioactive Waste
IECR	Institute for Environmental Conflict Resolution
IOP	Interim Operational Plan
ISOP	Interim Structural and Operational Plan
L-x	Levee
LEC	Lower East Coast
LOSA	Lake Okeechobee Service Area
MWD	Modified Water Deliveries to Everglades National Park
NEPA	National Environmental Policy Act
NGVD	National Geodetic Vertical Datum
NOI	Notice of Intent
NPS	National Park Service
NESRS	Northeast Shark River Slough
PL	Public Law
S-x	Pump Station, Spillway, or Culvert
SDCS	ENP/South Dade Conveyance System
SFWMD	South Florida Water Management District
SMA	Square Mile Area
SRS	Shark River Slough
SSM	Supply Side Management
USACE	U.S. Army Corps of Engineers
FWS	U.S. Fish and Wildlife Service
FWS RPA	U.S. Fish and Wildlife Service Reasonable and Prudent Alternative
FWS B.O.	U.S. Fish and Wildlife Service Biological Opinion
WCA	Water Conservation Area

