

November 2004

CENTRAL AND SOUTHERN FLORIDA PROJECT

COMPREHENSIVE EVERGLADES  
RESTORATION PLAN



Programmatic Regulations

Draft Master Implementation Sequencing Plan



U.S. Army Corps of Engineers  
Jacksonville District



South Florida Water  
Management District

---

**TABLE OF CONTENTS**

<b>1.0</b>	<b>INTRODUCTION.....</b>	<b>1</b>
<b>2.0</b>	<b>GOALS AND PURPOSES OF THE PLAN.....</b>	<b>2</b>
<b>3.0</b>	<b>INTEGRATED FRAMEWORK FOR ASSURING THE GOALS AND PURPOSES OF THE PLAN ARE ACHIEVED.....</b>	<b>3</b>
<b>4.0</b>	<b>MASTER IMPLEMENTATION SEQUENCING PLAN DEVELOPMENT AND APPROVAL PROCESS.....</b>	<b>3</b>
<b>5.0</b>	<b>PURPOSE OF THE MASTER IMPLEMENTATION SEQUENCING PLAN .....</b>	<b>4</b>
<b>6.0</b>	<b>PROCESS USED TO DEVELOP THE MASTER IMPLEMENTATION SEQUENCING PLAN.....</b>	<b>4</b>
6.1	PHASE 1 DEVELOPMENT PROCESS .....	5
6.1.1	<i>Technical Constraints Analysis.....</i>	5
6.1.2	<i>Technical Constraints Analysis Recommendations and Phase 1 Analysis.....</i>	7
6.2	PHASE 2 DEVELOPMENT PROCESS .....	7
6.1.3	<i>SFWMD Acceler8 Initiative.....</i>	8
6.1.4	<i>MISP Phase 2 Evaluation with SFWMD Acceler8 Initiative.....</i>	9
<b>7.0</b>	<b>MISP FINDINGS .....</b>	<b>9</b>
<b>APPENDIX A: EXCERPT FROM THE PROGRAMMATIC REGULATIONS .</b>		<b>A-1</b>
<b>APPENDIX B: COMPARISON OF CONSTRUCTION COMPLETION DATES BY BAND.....</b>		<b>B-1</b>
<b>APPENDIX C: PROJECT DOCUMENTATION SHEETS .....</b>		<b>C-1</b>
<b>APPENDIX D: REFERENCES AND LIST OF ACRONYMS AND ABBREVIATIONS.....</b>		<b>D-1</b>
	LIST OF ACRONYMS AND ABBREVIATIONS.....	D-2

## **1.0 INTRODUCTION**

The Comprehensive Everglades Restoration Plan (CERP or the Plan) provides connectivity between diverse and significant habitats of the South Florida ecosystem, including the Everglades, which encompass 18,000 square miles from Orlando to the Florida Reef Tract. The Everglades are a World Heritage Site, an International Biosphere Preserve, and a Wetland of International Importance. The Everglades and the South Florida ecosystem are affected by competing demands for recreation, development and natural and commercial resources, and include some 68 Federally listed threatened and endangered plants and animals.

First authorized by Congress in 1948, the Central and Southern Florida (C&SF) Project expanded the existing network of canals, levees, water storage areas, and water control structures. The project objectives included flood control, regional water supply, prevention of saltwater intrusion, preservation of fish and wildlife, recreation, and navigation. In fulfilling these objectives, the project has had unintended adverse effects on the natural environment that constitutes the Everglades and South Florida ecosystem. As a result, in 1996, the United States Army Corps of Engineers (USACE) was directed to develop a comprehensive plan to restore, preserve, and protect the South Florida ecosystem while providing for the water-related needs of the region. The resulting plan submitted to Congress on July 1, 1999 is called CERP and consists of structural and operational modifications to the C&SF Project.

CERP was approved as a framework for the restoration of the natural system as Section 601 of the Water Resources Development Act of 2000 (WRDA 2000). The Plan consists of 68 components 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. The Plan's components will be implemented over a 35-year period. Together these components are expected to deliver benefits to improve the ecological functioning of over 2.4 million acres of the South Florida ecosystem, improve urban and agricultural water supply, improve deliveries to coastal estuaries, and improve regional water quality conditions, while maintaining the existing levels of flood protection.

Section 601(h)(3) of WRDA 2000, required the Secretary of the Army, with the concurrence of the Secretary of the Interior and the Governor of Florida, and after notice and opportunity for public comment, to promulgate programmatic regulations to ensure that the goals and purposes of the Plan are achieved and to establish the processes necessary for implementing the Plan. The final programmatic regulations became effective on December 12, 2003 as Title 33, Part 385 of the Code of Federal Regulations.

The programmatic regulations call for a variety of tools and processes to be developed. Among the items called for is the Master Implementation Sequencing Plan (MISP).

Included within Section 10 of the "Final Integrated Feasibility Report and Programmatic Environmental Impact Statement" dated April 1, 1999 was the sequencing plan for the implementation of the Comprehensive Everglades Restoration Plan (CERP or the Plan).

Section 10 described the project implementation process and the schedules developed to implement the recommended Plan. Subsequent to the completion of the “Final Integrated Feasibility Report and Programmatic Environmental Impact Statement”, the Implementation Plan was first updated in July 2001 and was known as the Master Implementation Schedule (MIS 1.0). MIS 1.0 updated the Implementation Plan and documented the status of CERP at that time.

This MISP builds on previous efforts and incorporates new information, implementation experience to date and changes in legislation. Some of the new information includes the requirements in WRDA 2000 and the programmatic regulations as well as the effects of the streamlining contained in the State’s Acceler8 initiative. These items will make the implementation of CERP more efficient, while staying true to the logic relationships of the MISP and the partnership between the South Florida Water Management District (SFWMD) and the United States Army Corps of Engineers (USACE). By its very nature, the MISP is a snapshot in time, taking into account the best information available at the time it was prepared. As the implementation of CERP moves forward, schedules for all of the projects will be updated and implementation timetables may change. While the MISP is a useful tool to get an overall idea of how CERP will be implemented over time, specific project teams should be contacted if detailed information about a particular project is desired.

## **2.0 GOALS AND PURPOSES OF THE PLAN**

As stated in Section 601(h) of WRDA 2000, “the overarching objective of the Plan is the restoration, preservation, and protection of the South Florida ecosystem while providing for other water-related needs of the region, including flood protection and water supply.” As submitted to Congress, the Plan contains 68 major components that anticipated the creation of approximately 217,000 acres of reservoirs and wetland-based water treatment areas, wastewater reuse plants, seepage management, and the removal of levees and canals in natural areas. These components vastly increase storage and water supply for the natural system, as well as for urban and agricultural needs, while continuing to fulfill the original objectives of the existing Central and Southern Florida Project. The Plan will restore more natural flows of water, including sheetflow; improve water quality; and establish more natural hydroperiods in the South Florida ecosystem. Improvements to fish and wildlife habitat, including those that benefit threatened and endangered species, are expected to occur as a result of the restoration of hydrologic conditions. This will promote the recovery of native flora and fauna, including threatened and endangered species.

The specific goal of the MISP is the proper grouping and sequencing of the plan components to enable achievement of the goals and objectives of the plan consistent with the intent of the programmatic regulations.

### **3.0 INTEGRATED FRAMEWORK FOR ASSURING THE GOALS AND PURPOSES OF THE PLAN ARE ACHIEVED**

Section 601(h) of WRDA 2000 and the programmatic regulations establish an integrated framework of tools, processes, and an enforcement mechanism for ensuring that the goals and purposes of the Plan are achieved. This framework includes tools for planning, implementation, and evaluation; a process for developing these tools in an open public process, with input from other Federal, State, and local agencies; and an enforcement mechanism to ensure that the requirements of the statute are carried out. Among the tools called for in the regulations is the MISP.

The programmatic regulations also establish the processes for developing these tools. Consistent with section 601(h), the programmatic regulations were developed after notice and opportunity for public comment, with the concurrence of the Secretary of the Interior and the Governor, and in consultation with the Seminole Tribe of Florida, the Miccosukee Tribe of Indians of Florida, the Administrator of the Environmental Protection Agency, the Secretary of Commerce, the Florida Department of Environmental Protection, and other Federal, State, and local agencies.

### **4.0 MASTER IMPLEMENTATION SEQUENCING PLAN DEVELOPMENT AND APPROVAL PROCESS**

Section 385.1 of the programmatic regulations requires the Secretary of the Army to ensure that the public understands the linkage between the processes, tools, and enforcement mechanism and can monitor the effectiveness of this integrated framework in assuring that the goals and purposes of the Plan are achieved by:

- (i) Providing for public notice and comment in the development of planning, implementation, and evaluation tools;
- (ii) Providing notice of final action on planning, evaluation, and implementation tools;
- (iii) Making available to the public on a web site or by other appropriate means final, and where appropriate draft, copies of all planning, evaluation, and implementation tools; and
- (iv) Explaining through the programmatic regulations and by other appropriate means the process for developing the tools, the linkage between the process, tools, and enforcement mechanism, and the means by which these elements constitute an integrated framework for assuring that the goals and purposes of the Plan are achieved.

Section 385.30 of the programmatic regulations describes the special processes for the development of the MISP. The development process for the MISP was initiated prior to the effective date of the programmatic regulations in order to layout a strategy for effectively and efficiently developing the technical work products and to elevate issues for resolution within the prescribed time frame. The programmatic regulations require that the USACE and the South Florida Water Management District (SFWMD) will, in

consultation with the Department of the Interior, the Environmental Protection Agency, the Department of Commerce, the Miccosukee Tribe of Indians of Florida, the Seminole Tribe of Florida, the Florida Department of Environmental Protection, and other Federal, State, and local agencies, develop the MISP.

The USACE and the SFWMD began the development process by inviting all the governmental entities that would be consulting on the documents to provide input during the development of the MISP. An initial public meeting was held at the Okeehchee Nature Center in West Palm Beach, Florida to invite the public to participate in the process and present the strategy for developing the MISP. Information about the work of the teams (meeting summaries and initial work products) was posted on the CERP website ([www.evergladesplan.org](http://www.evergladesplan.org)). Throughout the yearlong development process briefings were conducted for the SFWMD Water Resources Advisory Commission and the South Florida Ecosystem Restoration Task Force.

## **5.0 PURPOSE OF THE MASTER IMPLEMENTATION SEQUENCING PLAN**

The purpose of the MISP is to identify the framework for restoration of the South Florida ecosystem. The programmatic regulations define the MISP as a plan:

“...that includes the sequencing and scheduling for implementation of all of the projects of the Plan, including pilot projects and operational elements, based on the best scientific, technical, funding, contracting, and other information available.. Projects shall be sequenced and scheduled to maximize the achievement of the goals and purposes of the Plan at the earliest possible time and in the most cost-effective way, consistent with the requirement that each project be justified on a next-added increment basis, including the achievement of the interim goals established pursuant to §385.38 and the interim targets established pursuant §385.39, consistent with §385.36 and §385.37(b), and to the extent practical given funding, engineering, and other constraints. The sequencing and scheduling of projects shall be based on considering factors, including, but not limited to:

- (i) Technical dependencies and constraints;
- (ii) Benefits to be provided by the project;
- (iii) Availability of lands required for the project; and
- (iv) Avoiding elimination or transfers of existing legal sources of water until an alternate source of comparable quantity and quality is available, in accordance with §385.36.”

## **6.0 PROCESS USED TO DEVELOP THE MASTER IMPLEMENTATION SEQUENCING PLAN**

A two (2) phased approach was used to develop the MISP. Phase 1 consisted of the development of a Technical Constraints Analysis (TCA) which included an analysis of

component packaging, identification of benefits, project sequencing and task duration. The outputs of the TCA were then evaluated further by resource leveling. Further information on Phase 1 development and the TCA is provided in the following sections.

Modeling of the Phase 1 effort at five (5) year increments was originally envisioned for the Phase 2 effort; however, these simulations were not available in time for this effort. Once the simulations become available, the MISP team will coordinate with RECOVER to conduct an appropriate review of the MISP. Phase 2 consisted of presenting the output of Phase 1 into Bands for public and stakeholder review and comment as well as taking into account factors that will affect the sequencing such as the State's Acceler8 initiative. The purpose of Bands is to provide clear priorities and allow focusing of resource and agency expertise. A focused and refined approach is necessary to successfully implement the CERP program.

## **6.1 Phase 1 Development Process**

### **6.1.1 Technical Constraints Analysis**

Phase 1 initiated with the development of a Technical Constraints Analysis (TCA). The TCA includes an analysis of component packaging, identification of benefits, project sequencing and task duration and the sorting of projects into five-year implementation bands. Further information on the development of the TCA is provided in the following sections.

#### **6.1.1.1 Component Packaging Review**

Component Packaging is the grouping of one or more of the 68 CERP components defined in the Plan under one Project Implementation Report (PIR). The PIR may then be subdivided into more than one phase for efficient construction implementation.

Component Packaging also consisted of updating components to take into account the most recent available information such as recent changes to the components that make up the Indian River Lagoon – South Project. The MISP team evaluated the MIS 1.0 (2001 Sequence) component packaging and evaluated it versus the additional requirements of WRDA 2000 and the programmatic regulations based on the best available information at the time. These additional requirements consisted of:

- Next Added Increment: Individual projects shall be formulated, evaluated, and justified based on their ability to contribute to the goals and purposes of the Plan and on their ability to provide benefits that justify costs on a next-added increment basis. If a component cannot be justified on a next-added increment basis it may be combined with another component(s) to make it justified. A summary of changes to each project and sequencing descriptions are located in Appendix C.

- **Savings Clause:** Reviewing schedule and sequencing impacts related to application of the savings clause as contained in the WRDA 2000 (Section 601(h)(5)(A)), and as further described in the programmatic regulations (Section 385.36), is critical to the MISP. The programmatic regulations stipulate that Project Implementation Reports (PIRs) shall include analyses to determine if existing legal sources of water are to be eliminated or transferred as a result of project implementation. If it is determined that such an elimination or transfer will occur, a new source of water of equal quantity and quality must be available to replace it. With respect to flood control, it is intended that implementation of the Plan will not result in significant adverse impacts to any person with an existing, legally recognized right to a level of protection against flooding. While a detailed, quantitative analysis of the Savings Clause was not available for the MISP, the MISP team utilized the best available information to evaluate if a violation was likely to occur based on the sequencing.

#### **6.1.1.2 Identification of Benefits**

Because many projects have not yet reached the point in development for quantifying benefits, it was determined that a general description of anticipated benefits such as those found in the “Final Integrated Feasibility Report and Programmatic Environmental Impact Statement”, would be adequate at this time. However, more robust descriptions of benefits were included if existent.

#### **6.1.1.3 Project Sequencing Review**

Project Sequencing is the review of technical relationships of CERP projects (that consist of components). Project sequencing was also based on maximizing restoration benefits. Initially authorized projects and pilot projects were given the highest priority. These technical relationships included relationship such as:

- Pilot projects must be completed prior to the PIR being initiated
- Certain PIR’s must be completed prior to other PIR’s so as not to violate the savings clause.

#### **6.1.1.4 Task Duration Review**

Due to completion of the “Final Integrated Feasibility Report and Programmatic Environmental Impact Statement” and promulgation of WRDA 2000 and the programmatic regulations, PIR’s must meet additional requirements to be complete and acceptable. These requirements, along with experience gained from preparing two PIR’s, resulted in a modification to the time and resources needed to complete a PIR. The MIS 1.0 schedules for the components were then updated to reflect the most recent schedule information.

## **6.1.2 Technical Constraints Analysis Recommendations and Phase 1 Analysis**

The completion of the Component Packaging, Project Sequencing and Identification of Benefits culminated in the TCA. This analysis was then used as the starting point for the resource leveling.

### **6.1.2.1 Resource Leveling Review**

Upon completion of the TCA technical review, attention was focused on the resource needs associated with implementing CERP.

Representatives of the MISP team met to develop options for project execution within five year “Bands”. During the Phase 1 (TCA) analysis it appeared that the majority of the projects in CERP were being initiated during the first five year window or “Band” extending from 2005 until 2010. A resource leveling exercise was initiated to identify potential adjustments in the execution of projects that could result in an improved long-term flow of work (from an execution standpoint). Adjustments were based on technical constraints associated with project dependencies (logic ties) and resource constraints.

The MISP team first identified priority projects that should be retained, if at all possible, in the first five-year band. Priority was given to initially authorized projects, pilot projects and other projects that will provide significant, immediate benefits. In general, the team considered the contribution of projects to the goals of CERP, technical dependencies between projects and the ability of USACE and SFWMD to execute projects based on available resources.

The team reviewed projects from a planning perspective that included three phases: PIR, Plans and Specifications (P&S), and Construction. Project Management Plan (PMP) development was considered part of the PIR phase and Design was considered part of P&S. The group reviewed projects on a year-by-year basis, making adjustments until resource needs were in line with anticipated implementation capacity.

## **6.2 Phase 2 Development Process**

Phase I of the MISP process concluded with the delivery of the MISP for coordination with partner entities. It was originally envisioned that Phase 2 of the MISP development would include simulations of the MISP at 5-year increments and an analysis of the performance of the system during each increment using the South Florida Water Management Model (SFWMM). At the time of this report, those simulations are not available for inclusion in Phase 2. The MISP team will work with RECOVER to perform an appropriate analysis of the MISP when simulations become available.

Phase 2 development consisted of presenting the output of phase 1 into bands for public and stakeholder review and comment as well as taking into account factors that will affect the sequencing such as the State’s Acceler8 initiative.

### 6.1.3 SFWMD Acceler8 Initiative

Subsequent to the completion of MISP-Phase 1, the SFWMD initiated an accelerated schedule for several components of CERP (sometimes referred to as “Acceler8”). These components are:

**TABLE 1**  
**SFWMD ACCELER8 AND COMPREHENSIVE PLAN COMPONENTS**

<b>Proposed Accelerated (Acceler8) Projects</b>	<b>Comprehensive Plan Components</b>
C-44 Reservoir	C-44 Storage Reservoir (IRL)
Picayune Strand Restoration	Southern Golden Gate Estates Hydrologic Restoration
C-43 Reservoir	C-43 Storage Reservoir
EAA Storage Reservoir	EAA Storage Reservoir, Part 1
Biscayne Bay Coastal Wetlands, Phase 1	Biscayne Bay Coastal Wetlands (Acceler8 will implement a portion of this component)
C-111 Spreader Canal	C-111 Spreader Canal
Water Preserve Areas	Acme Basin B Discharge
	Site 1 Impoundment
	C-9 Impoundment
	C-11 Impoundment
	WCA 3A/3B Levee Seepage Management

*Note: One Acceler8 project does not represent a CERP component so it was not included in this table.*

SFWMD will undertake design and construction of the Acceler8 projects. The detailed design will be initiated and fully coordinated with the PIR during the standard PIR process. The Acceler8 process will implement these projects more efficiently, but it does not violate any of the project specific assumptions and relationships that were defined in Phase 1 of the MISP development. The Acceler8 projects will achieve the same goals and objectives defined for CERP, but with the funding stream provided by the SFWMD, those goals will be achieved more expeditiously than would be possible under a standard implementation process.

#### 6.1.3.1 Funding for Acceler8 Projects

The Design and Construction of the Acceler8 projects will be fully funded by the South Florida Water Management District. Due to the nature of the funding stream available for these projects and the need to complete the land acquisition necessary for the project, funding may be limited to support the implementation, including land acquisition, of non-Acceler8 projects. The priority for SFWMD funds will be the implementation of the Acceler8 projects (including any remaining land acquisition) and land acquisition for other priority projects in keeping with the needs identified in the MISP. The SFWMD will continue to work with the USACE to the greatest extent possible in the

implementation of all of CERP, but it is likely the USACE will shoulder the majority of the implementation costs of the non-Acceler8 projects.

#### **6.1.3.2 Affects of the SFWMD Acceler8 Initiative**

The SFWMD's accelerated implementation is in agreement with the priorities identified in the Plan and the MISP-Phase 1 analysis. The schedules and linkages of the components will both accelerate the implementation of CERP and the realization of benefits that will be identified in the PIR's.

The initial MISP-Phase 1 recommendations were based on numerous considerations, including resource availability. The commitment of SFWMD is to provide funding for both the design and construction of the Acceler8 components while providing minimal funding for those respective PIR's and programmatic activities. This proposal will reduce the demand on Federal funds and resources that were targeted for design and construction of the Acceler8 projects. This approach allows those funds and resources to be utilized elsewhere, including non-Acceler8 projects and required monitoring. The anticipated result is a general acceleration of project implementation and CERP benefits.

#### **6.1.4 MISP Phase 2 Evaluation with SFWMD Acceler8 Initiative**

After evaluation of the resources made available by the State's actions, the USACE and SFWMD determined that additional CERP components could be accelerated by streamlining the implementation process as identified in 6.2.1, given a few constraints:

- 1) Utilization of logic ties from the MISP-Phase 1 schedule to determine the next CERP component to be initiated
- 2) Assume that all Lands, Easements, Rights-of-Way, Relocations and Disposal (LERRDs) would be in place, with the understanding that acquisition remains a SFWMD responsibility and may be limited by the Acceler8 effort
- 3) USACE would fully fund PIR's, design and construction where SFWMD was the local sponsor, in accordance with the cost share requirements

### **7.0 MISP FINDINGS**

Based on this evaluation, it was determined that the implementation of CERP components could be expedited by a number of years. The completion of CERP would still remain the same, as the last constructed components (North Lake Belt and Central Lake Belt) are dependent on the availability of lands. This expedited implementation would also mean that benefits to the South Florida system would be realized faster.

A comparison of the original schedule contained in Section 10 of the Final Integrated Feasibility Report and Programmatic Environmental Impact Statement, versus MISP-Phase 1 completion versus MISP streamlined is included in Appendix B.

As previously stated, by its very nature, the MISP is a snapshot in time, taking into account the best information available at the time it was prepared. As the implementation of CERP moves forward, schedules for all of the projects will be updated and implementation timetables may change. While the MISP is a useful tool to get an overall idea of how CERP will be implemented over time, specific project teams should be contacted if detailed information about a particular project is desired.

**APPENDIX A: EXCERPT FROM THE PROGRAMMATIC REGULATIONS**

### §385.30 Master Implementation Sequencing Plan.

(a) Not later than December 13, 2004, the Corps of Engineers and the South Florida Water Management District shall, in consultation with the Department of the Interior, the Environmental Protection Agency, the Department of Commerce, the Seminole Tribe of Florida, the Miccosukee Tribe of Indians of Florida, the Florida Department of Environmental Protection, and other Federal, State, and local agencies, develop a Master Implementation Sequencing Plan that includes the sequencing and scheduling for implementation of all of the projects of the Plan, including pilot projects and operational elements, based on the best scientific, technical, funding, contracting, and other information available. The Corps of Engineers and the South Florida Water Management District shall also consult with the South Florida Ecosystem Restoration Task Force in preparing the Master Implementation Sequencing Plan.

(1) Projects shall be sequenced and scheduled to maximize the achievement of the goals and purposes of the Plan at the earliest possible time and in the most cost-effective way, consistent with the requirement that each project be justified on a next-added increment basis, including the achievement of the interim goals established pursuant to §385.38 and the interim targets established pursuant §385.39, consistent with §385.36 and §385.37(b), and to the extent practical given funding, engineering, and other constraints. The sequencing and scheduling of projects shall be based on considering factors, including, but not limited to:

- (i) Technical dependencies and constraints;
- (ii) Benefits to be provided by the project;
- (iii) Availability of lands required for the project; and
- (iv) Avoiding elimination or transfers of existing legal sources of

water until an alternate source of comparable quantity and quality is available, in accordance with §385.36.

(2) The Master Implementation Sequencing Plan shall include appropriate discussion of the logic, constraints, and other parameters used in developing the sequencing and scheduling of projects.

(3) In accordance with §385.18, the Corps of Engineers and the South Florida Water Management District shall provide opportunities for the public to review and comment on the Master Implementation Sequencing Plan.

(b) Whenever necessary to ensure that the goals and purposes of the Plan are achieved, but at least every five years, the Corps of Engineers and the South Florida Water Management District shall, in consultation with the Department of the Interior, the Environmental Protection Agency, the Department of Commerce, the Seminole Tribe of Florida, the Miccosukee Tribe of Indians of Florida, the Florida Department of Environmental Protection, and other Federal, State, and local agencies, review the Master Implementation Sequencing Plan.

(1) The Master Implementation Sequencing Plan may be revised as appropriate, consistent with the goals and purposes of the Plan, and consistent with §385.36 and §385.37(b), to incorporate new information including, but not limited to:

- (i) Updated schedules from Project Management Plans;
- (ii) Information obtained from pilot projects;
- (iii) Updated funding information;

(iv) Approved revisions to the Plan;  
(v) Congressional or other authorization or direction;  
(vi) Information resulting from the adaptive management program, including new information on costs and benefits; or

(vii) Information regarding progress towards achieving the interim goals established pursuant to §385.38 and the interim targets established pursuant to §385.39.

(2) Proposed revisions to the Master Implementation Sequencing Plan shall be analyzed by RECOVER for effects on achieving the goals and purposes of the Plan and the interim goals and targets.

(3) The revised Master Implementation Sequencing Plan shall include information about the reasons for the changes to the sequencing and scheduling of individual projects.

(4) In accordance with §385.18, the Corps of Engineers and the South Florida Water Management District shall provide opportunities for the public to review and comment on revisions to the Master Implementation Sequencing Plan.

**APPENDIX B: COMPARISON OF CONSTRUCTION COMPLETION DATES  
BY BAND**

Component/ Project Name	Construction Completion Dates			
	Restudy (April 1999)	MISP Phase 1	MISP Streamlined (current)	
Caloosahatchee (C-43) River ASR Pilot	Oct-02	Sep-06	2006	<b>Band 1</b> (2005-2010)
Hillsboro ASR Pilot Project	Oct-02	Dec-06	2006	
Melaleuca Eradication and Other Exotic Plants	Sep-11	Nov-13	2007	
Strazzulla Wetlands	Oct-07	Apr-10	2007	
Winsberg Farm Wetlands Restoration	Dec-05	Jul-14	2008	
L-31N Seepage Management Pilot	Oct-02	Jul-08	2008	
Lake Okechobee ASR Pilot	Dec-01	Sep-08	2008	
Biscayne Bay Coastal Wetlands (Phase 1)	May-18	May-11	2008	
Picayune Strand (Southern Golden Gate Estates) Hydrologic Restoration	Jun-05	2009	2008	
Indian River Lagoon - South				
- C-44 Reservoir*	Jun-07	Oct-09	2009	
- C-23/24 STA		May-16	2009	
- C-23/24 North	May-09	Mar-17	2009	
- C-23/24 South		Mar-17	2009	
Broward County WPA				
- C-9 Impoundment*	Sep-07	Jul-11	2009	
- C-11 Impoundment*	Sep-08	Jul-11	2009	
- WCA 3A-3B Levee Seepage Management*	Sep-08	Jul-10	2008	
Acme Basin B Discharge	Sep-06	Jul-09	2007	
Site 1 Impoundment*	Sep-07	Dec-09	2009	
C-111 Spreader Canal	Jul-08	Dec-10	2008	
EAA Storage Reservoir				
- Part 1, Phase 1*	Sep-09	Dec-09	2009	
Lake Okeechobee Watershed				
- Taylor Creek/ Nubbin Slough*	Jan-09	Sep-11	2009	
WCA 3 Decompartilization and Sheetflow Enhancement				
- Eastern Tamiami Trail*	Jan-10	Dec-09	2009	
Modify Rotenberger Wildlife Management Area Operation Plan		Jul-09	2009	
Lakes Park Restoration	Jun-04	Dec-14	2009	
C-43 Basin Storage Reservoir	Mar-12	Band 2	2010	

Gray shading = Construction by SFWMD  
 \* = Initially Authorized Project

Component/ Project Name	Restudy (April 1999)	MISP Phase 1	MISP Streamlined (current)	<b>Band 2 (2010-2015)</b>
Indian River Lagoon - South				
- C25 Reservoir and Northfork/Southfork Basin	May-10	Band 7	Band 2	
EAA Storage Reservoir				
- Part 1, Phase 2*			Band 2	
North Palm Beach County - Part 1				
- Lake Worth Lagoon Restoration	Mar-11	Band 2	Band 2	
- Pal-Mar/Corbett Hydropattern Restoration		Band 2	Band 2	
- C-17 Backpumping	Oct-08	Band 3	Band 2	
- C-51 Backpumping and Treatment	Oct-08	Band 3	Band 2	
- L-8 Basin	Sep-11	Band 3	Band 2	
Florida Keys Tidal Restoration	Aug-05	Band 3	Band 2	
Lake Okeechobee Watershed				
- Tributary Sediment Dredging	Sep-05	Band 2	Band 2	
- Water Quality Treatment Facilities	Sep-10	Band 2	Band 2	
- North of Lake Okeechobee Storage	Sep-15	Band 2	Band 2	
Henderson Creek/ Belle Meade Restoration	Dec-05	Band 3	Band 2	
Modify Holey Land Wildlife Management Area Operation Plan		Band 2	Band 2	
C-4 Eastern Structure	Jul-05	Band 2	Band 2	
Everglades Natinal Park Seepage Management				
- S-356 Structure	Oct-07	Band 2	Band 2	
- Seepage Management	Oct-10	Band 2	Band 2	
Biscayne Bay Coastal Wetlands (Phase 2)			Band 2	
WPA Conveyance				
- North Lake Belt Storage Area (Turnpike Deliveries)		Band 2	Band 2	
Broward Secondary Canal System	Jun-09	Band 3	Band 2	

Gray shading = Construction by SFWMD

\* = Initially Authorized Project

Component/ Project Name	Restudy (April 1999)	MISP Phase 1	MISP Streamlined (current)	
<b>Flows to Northwest and Central WCA 3A</b>				<b>Band 3</b> (2015-2020)
- G-404 Pump Station Modifications	Mar-09	Band 3	Band 3	
- Flows to NW and Central WCA 3A	Apr-09	Band 3	Band 3	
<b>EAA Storage Reservoir</b>				
- Part 2	Dec-15	Band 3	Band 3	
<b>North Palm Beach County - Part 1</b>				
- C-51 & Southern L-8 Reservoir	Sep-14	Band 3	Band 3	
<b>WPA Conveyance</b>				
- Dade-Broward Levee and Canal	Sep-08	Band 3	Band 3	
<b>Palm Beach County Agricultural Reserve Reservoir - Part 1</b>	Aug-13	Band 3	Band 3	
<b>Palm Beach County Agricultural Reserve ASR - Part 2</b>		Band 4	Band 3	
<b>Wastewater Reuse Pilot</b>				
- South Miami Dade Reuse Pilot	Sep-05	Band 3	Band 3	
<b>WCA 3 Decompartilization and Sheetflow Enhancement</b>				
- Miami Canal		Band 3	Band 3	
- Canal and Levee Modifications in WCA 3		Band 3	Band 3	
- Additional S-345 Structures	Jan-09	Band 3	Band 3	
- WCA 3A & 3B Flows to CLB	Feb-16	Band 3	Band 3	
- North New River Improvements*	Jan-09	Band 3	Band 3	
- WCA 3 Decomp Part 2	Jan-19	Band 3	Band 3	
<b>Everglades National Park Seepage Management</b>				
- Bird Drive Basin	Dec-13	Band 3	Band 3	
<b>Lake Belt In-Ground Reservoir Technology Pilot Project</b>	Dec-05	Band 3	Band 3	
<b>Flows From CLB to WCA 3B</b>	Feb-17	Band 3	Band 3	
<b>Big Cypress/ L-28 Interceptor</b>	Sep-16	Band 3	Band 3	
<b>North Palm Beach County - Part 2</b>				
- L-8 Basin ASR		Band 3	Band 3	
- C-51 Regional ASR	Sep-13	Band 4	Band 3	
<b>Caloosahatchee Backpumping with STA</b>	Sep-15	Band 4	Band 3	
<b>Loxahatchee National Wildlife Refuge Internal Canal Structures</b>	Jul-03	Band 4	Band 3	
<b>Lake Okeechobee ASR</b>				
- Lake Okeechobee ASR - Part 1	Jun-20	Band 4	Band 3	

Gray shading = Construction by SFWMD

\* = Initially Authorized Project

Component/ Project Name	Restudy (April 1999)	MISP Phase 1	MISP Streamlined (current)	
Seminole Tribe Water Conservation Plan	Jun-08	Band 4	Band 4	<b>Band 4</b> (2020-2025)
Indian River Lagoon - South				
- Natural Areas		Band 5	Band 4	
- Muck Remediation		Band 6	Band 4	
Restoration of Pineland & Hardwood in C-111 Basin	Mar-06	Band 4	Band 4	
South Miami-Dade County Reuse	Jun-20	Band 4	Band 4	
West Miami-Dade County Reuse	Jun-20	Band 4	Band 4	
Lake Okeechobee ASR				
- Lake Okeechobee ASR - Part 2		Band 5	Band 4	
Hillsboro ASR	Oct-14	Band 4	Band 4	
WCA 2B Flows to Everglades National Park				
- WCA 2B Flows to CLB (L-30 Improvements)		Band 4	Band 4	
- WCA 2B Flows to CLB		Band 5	Band 4	
Lake Okeechobee ASR				
- Lake Okeechobee ASR - Part 3		Band 5	Band 5	
North Lake Belt Storage Area	Feb-21	Band 5	Band 5	
Central Lake Belt Storage Area	Feb-21	Band 5	Band 5	<b>Band 7</b> (2035-2040)
North Lake Belt Storage Area	Jun-36	Band 7	Band 7	
Central Lake Belt Storage Area	Dec-36	Band 7	Band 7	

Gray shading = Construction by SFWMD

\* = Initially Authorized Project

**APPENDIX C: PROJECT DOCUMENTATION SHEETS**

<b>Project Name and WBS</b>
Lake Okeechobee Watershed (001)
<b>Band (designation based on construction completion date)</b>
Taylor Creek/Nubbin Slough - Band 1 (1Jan 2005 - 1 Jan 2010); All other components - Band 2 (1 Jan 2010 - 1 Jan 2015)
<b>Project Purpose</b>
To reduce phosphorus loading to Lake Okeechobee; attenuate peak flows from the watershed; provide more natural water level fluctuations in the lake; reduce regulatory releases to the estuaries; and restore wetland habitat.
<b>Restudy Components</b>
(1) North of Lake Okeechobee Storage Reservoir - A (2) Taylor Creek/Nubbin Slough Storage & Treatment Area - W (initially authorized) (3) Lake Okeechobee Watershed Water Quality Treatment Facilities - OPE (4) Lake Okeechobee Tributary Sediment Dredging - OPE (5) Lake Istokpoga Regulation Schedule - OPE
<b>Major Elements</b>
(1) A 17,500 acre reservoir in the lower Kissimmee Basin. (2) A 5,000 acre reservoir and a 5,000 acre STA in the Taylor Creek/Nubbin Slough Basin. (3) Smaller Reservoir-Assisted Stormwater Treatment Areas (RASTAs) and restoration of isolated wetlands. (4) Removal of 150 tons of phosphorus from 10 miles of primary tributary canals.
<b>Benefits</b>
(1) Improve water levels in Lake Okeechobee to improve the quality of the lake's natural resources. (2) Reduce flood releases to the St. Lucie and Caloosahatchee estuaries that reduce salinity levels and harm sea grasses and other aquatic resources. (3) Reduce phosphorus loads to Lake Okeechobee to prevent harmful algal blooms. (4) Increase the quality and quantity of wetland habitat in the Okeechobee watershed.
<b>Predecessors</b>
N/A
<b>Successors</b>
N/A
<b>Related Projects</b>
Lake Okeechobee ASR Pilot (032) Lake Okeechobee ASR (003)
<b>Other Notes</b>
Taylor Creek/Nubbin Slough (W) was an initially authorized project in the Water Resource Development Act (WRDA) 2000.  Lake Istokpoga was formerly WBS 002. In order to increase benefits and efficiencies for both projects, Lake Istokpoga was incorporated into Lake Okeechobee Watershed project.
<b>Information Sources</b>
Yellow Book (April 1999); Project Manager; Planning Technical Lead

<b>Project Name and WBS</b>
Lake Okeechobee Aquifer Storage and Recovery (ASR) (003)
<b>Band (designation based on construction completion date)</b>
Phase 1 - Band 3 (1 Jan 2015 - 1 Jan 2020); Phase 2 - Band 4 (1 Jan 2020 - 1 Jan 2025), Phase 3 - Band 5 (1 Jan 2025 - 1 Jan 2030)
<b>Project Purpose</b>
To: 1) provide additional regional storage while reducing both evaporation losses and the amount of land removed from current land use (e.g. agriculture) that would normally be associated with construction and operation of above-ground storage reservoirs; 2) increase Lake Okeechobee's water storage capability to better meet regional water supply demands for agriculture, Lower East Coast urban areas and the Everglades; 3) manage a portion of regulatory releases from Lake Okeechobee primarily to improve Everglades hydropatterns and to meet supplemental water supply demands of the Lower East Coast; 4) reduce harmful regulatory discharges to the St. Lucie and Caloosahatchee Estuaries and 5) maintain and enhance the existing level of flood protection.
<b>Restudy Components</b>
Lake Okeechobee ASR - GG
<b>Major Elements</b>
(1) Series of aquifer storage and recovery wells adjacent to Lake Okeechobee with a total capacity of one billion gallons per day.  (2) Pre- and post- water quality treatment facilities.
<b>Benefits</b>
(1) Regional storage. (2) Reduce demand on Lake Okeechobee. (3) Reduce damaging deliveries to the St. Lucie and Caloosahatchee Estuaries. (4) Flood protection.
<b>Predecessors</b>
Lake Okeechobee ASR Pilot (032)  ASR Regional Study (044)  Predecessors defined at 10 Dec 03 MISP brainstorming session.
<b>Successors</b>
N/A
<b>Related Projects</b>
Lake Okeechobee Watershed (001)
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
C-43 Basin Storage Reservoir - Part 1 (004)
<b>Band (designation based on construction completion date)</b>
Band 1 (1 Jan 2005 - 1 Jan 2010)
<b>Project Purpose</b>
To capture C-43 Basin runoff and releases from Lake Okeechobee and slowly release the water to ensure a more natural, consistent flow to the Caloosahatchee Estuary.
<b>Restudy Components</b>
C-43 Basin Storage Reservoir Part 1 - D P1
<b>Major Elements</b>
(1) A 160,000 acre-feet above-ground storage reservoir.
<b>Benefits</b>
(1) Environmental water supply deliveries to the Caloosahatchee Estuary. (2) Water quality improvement, including salinity and nutrient reduction. (3) Flood protection.
<b>Predecessors</b>
N/A
<b>Successors</b>
C-43 Aquifer Storage and Recovery (ASR) Part 2 (005)  Caloosahatchee Backpumping with Stormwater Treatment (006)
<b>Related Projects</b>
N/A
<b>Other Notes</b>
This project has been identified as an Acceler8 project.
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
C-43 Basin Aquifer Storage and Recovery (ASR) - Part 2 (005)
<b>Band (designation based on construction completion date)</b>
Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Restudy Components</b>
C-43 Basin ASR Part 2 - D P2
<b>Major Elements</b>
(1) Aquifer storage and recovery wells with a total capacity of approximately 220 million gallons per day. (2) Pre- and post- water quality treatment facilities.
<b>Benefits</b>
(1) Water supply. (2) Flood attenuation. (3) Water quality improvements. (4) Reduce salinity and nutrient impacts of runoff to the estuary. (5) Provide environmental water supply deliveries to the Caloosahatchee Estuary.
<b>Predecessors</b>
C-43 Basin Storage Reservoir - Part 1 (004) Caloosahatchee (C-43) River ASR Pilot (033) ASR Regional Study (044) PIR (prior to PIR)
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Caloosahatchee Back Pumping with Stormwater Treatment (006)
<b>Band (designation based on construction completion date)</b>
Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Project Purpose</b>
To capture excess C-43 Basin runoff, which will be used to augment regional system water supply.
<b>Restudy Components</b>
Caloosahatchee Back Pumping with Stormwater Treatment - DDD
<b>Major Elements</b>
(1) Pump stations. (2) Stormwater treatment area with a total capacity of approximately 20,000 acre-feet.
<b>Benefits</b>
(1) 20,000 acre-feet of storage. (2) Stormwater treatment.
<b>Predecessors</b>
C-43 Basin Storage Reservoir (004) plans and specifications
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
<b>Information Sources</b>
Yellow Book (April 1999)

Project Name and WBS
Indian River Lagoon - South (007)
Band (designation based on construction completion date)
C-44 - Band 1 (1 Jan 2005 - 1 Jan 2010); C-23/24 - Band 1 (1 Jan 2010 - 1 Jan 2015); C-25 and N Fork Floodplain- Band 2 (1 Jan 2010 - 1 Jan 2015); Natural Area, Muck Rem - Band 4 (1 Jan 2020 - 1 Jan 2025)
Restudy Components
(1) C-44 Basin Storage Reservoir - B (initially authorized) (2) C-23/C-24 Storage Reservoirs - UU P1 (3) C-25/Northfork and Southfork Storage Reservoirs - UU P2
Major Elements
(1) C-44 Basin (C-44 Reservoir, C-44 West Stormwater Treatment Area, C-44 East Stormwater Treatment Area, and Palmer Complex – Natural Storage and WQ Area) (2) C-23/C-24 Basin (C-23/24 North Reservoir, C-23/24 South Reservoir, C-23/24 Stormwater Treatment Area, C-23/24 Stormwater Treatment Area and Canal, Allapattah Complex Natural Storage and WQ Area, and Cypress Creek/Trail Ridge Complex – Natural Storage and WQ Area) (3) C-25 & Northfork & Southfork Basin (C-25 Reservoir, C-25 Stormwater Treatment Area, and Northfork Natural Floodplain Restoration)
Benefits
(1) 90,000 acres of natural areas restored including 53,665 acres of wetlands (2) 90 acres of artificial substrate created for submerged aquatic vegetation (3) 5,500,000 cubic yards of harmful muck removed (4) 122 metric tons of phosphorus load reduction, (41% of 2050 base load) (5) 475 metric tons of nitrogen load reduction, (26% of 2050 base load) (6) 2,650 acres of benthic habitat created in St. Lucie River and Estuary (7) 889 acres of oyster habitat restored (8) 922 acres of submerged aquatic vegetation restored (9) Improvement to agricultural production (\$6,100,000 annually)
Predecessors
N/A
Successors
Related Projects
N/A
Other Notes
C-44 Basin Storage Reservoir (B) was an initially authorized project in the Water Resource Development Act (WRDA) 2000.  This project (C-44) has been identified as Acceler8 project.
Information Sources
C&SF Project, Indian River Lagoon South Feasibility Study (August 2002); Indian River Lagoon - South final PIR

<b>Project Name and WBS</b>
Everglades Agricultural Area (EAA) Storage Reservoirs - Phase 1 (008)
<b>Band (designation based on construction completion date)</b>
Band 1 (1 Jan 2005 - 1 Jan 2010); Part 2 - Band 2 (1 Jan 2010 - 1 Jan 2015)
<b>Project Purpose</b>
To provide for storage of regulatory releases from Lake Okeechobee, environmental deliveries of water to the Water Conservation Areas (WCAs), irrigation requirements in the EAA, and increased flood protection within the EAA. Flows to the Everglades Protection Area will be delivered through STAs.
<b>Restudy Components</b>
(1) Everglades Agricultural Storage Reservoirs - G P1
<b>Major Elements</b>
(1) Above-ground storage reservoir capacity of 240,000 acre-feet. (2) Conveyance capacity increases for the Miami, North New River, and Bolles and Cross canals.
<b>Benefits</b>
(1) Improved timing of environmental deliveries to the Water Conservation Areas. (2) Reduce regulatory releases from Lake Okeechobee to the estuaries.
<b>Predecessors</b>
STA 3/4 construction - defined as a predecessor to G P1 construction.
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
Everglades Agricultural Area Storage Reservoirs - Phase 1 (G P1) was an initially authorized project in the Water Resource Development Act (WRDA) 2000. Combined with EAA Phase 2 (009)  Components of this project have been identified as Acceler8 project.
<b>Information Sources</b>
Yellow Book (April 1999); Project Manager; Planning Technical Lead

<b>Project Name and WBS</b>
Everglades Agricultural Area Storage Reservoirs - Phase 2 (009)
<b>Band (designation based on construction completion date)</b>
Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Project Purpose</b>
To further improve the timing of environmental deliveries to the Water Conservation Areas, including reducing damaging flood releases from the Everglades Agricultural Area to the Water Conservation Areas and reducing Lake Okeechobee regulatory releases to the estuaries.
<b>Restudy Components</b>
Everglades Agricultural Area Storage Reservoirs Phase 2 - G P2
<b>Major Elements</b>
Above-ground reservoir with a total storage capacity of approximately 120,000 acre-feet located in the Everglades Agricultural Area in western Palm Beach County.
<b>Benefits</b>
(1) Improved timing of environmental deliveries to the Water Conservation Areas. (2) Reduce regulatory releases from Lake Okeechobee to the estuaries.
<b>Predecessors</b>
N/A
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
Combined with EAA Phase 1 (008).
<b>Information Sources</b>
Yellow Book (April 1999); Project Manager; Planning Technical Lead

<b>Project Name and WBS</b>
Big Cypress/L-28 Interceptor Modifications (010)
<b>Band (designation based on construction completion date)</b>
Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Project Purpose</b>
To reestablish sheetflow from the West Feeder Canal across the Big Cypress Reservation and into the Big Cypress National Preserve, maintain flood protection on Seminole Tribal lands, and ensure that inflows to the North and West Feeder Canals meet applicable water quality standards.
<b>Restudy Components</b>
Big Cypress L-28 Modifications - CCC
<b>Major Elements</b>
(1) L-28 Interceptor Canal (2) S-190 (3) Other water control structures, pumps, and STAs
<b>Benefits</b>
(1) Total storage capacity of 7,600 acre-feet. (2) Reestablish sheetflow and rehydrate areas of Big Cypress Preserve. (3) Water quality improvements. (4) Flood Protection
<b>Predecessors</b>
Seminole Tribe Big Cypress Water Conservation Plan (096) Flow to NW and Central WCA 3A (011) Seminole Big Cypress (487)
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Flow to NW and Central WCA 3A (011)
<b>Band (designation based on construction completion date)</b>
Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Restudy Components</b>
(1) G-404 Pump Station - II (2) Flows to NW & Central WCA-3A - RR
<b>Major Elements</b>
(1) Relocation and modifications to pump stations (increase capacity of G-404 pump station and increase capacity and relocate S-140 pump station). (2) Development of a spreader canal system.
<b>Benefits</b>
(1) Additional flows to the northwest corner and west central portions of WCA 3A. (2) A spreader canal system at S-140 will reestablish sheetflow to the west central portion of WCA 3A.
<b>Predecessors</b>
STA 3/4 (before construction of G-404).
<b>Successors</b>
Big Cypress/L-28 Interceptor Modifications (010). session.
<b>Related Projects</b>
WCA 3 Decomp and Sheetflow Enhancement (012).
<b>Other Notes</b>
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
WCA 3 Decomp and Sheetflow Enhancement - Part 1 - <i>Canals and Levees Modifications</i> (012)
<b>Band (designation based on construction completion date)</b>
East Tamiami Trail - Band 1 (1 Jan 2005 - 1 Jan 2010); QQ P1, QQ P2, SS, AA, ZZ - Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Restudy Components</b>
(1) WCA 3 Decompartmentalization Phase 1 - QQ P1 (initially authorized) (2) North New River Improvements - SS (initially authorized) (3) Additional S-345 Structures - AA (4) Water Conservation Area 3B Seepage Reduction (L-30 Seepage)
<b>Major Elements</b>
(1) Fill canals. (2) Modifications or removal of levees, canals and water control structures in WCA 3A and 3B.
<b>Benefits</b>
(1) Restore wetland quantity and quality. (2) Restore ridge and slough, marl prairie, and rocky glades landscapes quantity and quality. (3) Restore tree island habitat quantity and quality. (4) Restore habitat quantity and quality for native vegetation and wildlife. (5) Restore fish and wildlife connectivity across barriers. (6) Promote recreation that is consistent with ecosystem restoration.
<b>Predecessors</b>
STA 3/4 and STA 5/6 (before construction of North New River). The Long Term Conceptual Plan. Modified Water Deliveries to Everglades National Park (686).
<b>Successors</b>
North Lake Belt Storage Area (025) WCA 2B Flows to ENP (048) WPA Conveyance (049)
<b>Related Projects</b>
WCA 2B Flows to ENP (048) WPA Conveyance (049) Flow to NW & Central WCA (011)
<b>Other Notes</b>
Components QQ P1 and SS were initially authorized projects in the Water Resource Development Act (WRDA) 2000. Combined with Decomp - Part 2 (013) and Decomp - Part 1 (Tamiami Trail) (984) PDT should examine the Long Term Conceptual Plan (possibly a predecessor). North New River Improvements must be implemented first. <u>14 January 2004 Meeting:</u> Add WCA 3A/3B Flows to CLB (047) to Decomp. <u>Other:</u> L-30 not in Yellow Book. It was added to the project in March 2003 as a mitigation feature to compensate for increased seepage losses due to anticipated higher flows through WCA 3B associated with potential levee modifications. In the Yellow Book, 012 and 984 were combined.
<b>Information Sources</b>
Yellow Book (April 1999); Planning Technical Lead

<b>Project Name and WBS</b>
Loxahatchee National Wildlife Refuge (LNWR) Internal Canal Structures (014)
<b>Band (designation based on construction completion date)</b>
Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Project Purpose</b>
To improve the timing and location of water depths within the LNWR.
<b>Restudy Components</b>
LNWR Internal Canal Structures - KK
<b>Major Elements</b>
Two water control structures in the northern ends of the perimeter canals encircling the LNWR (Water Conservation Area 1) located in Palm Beach County.
<b>Benefits</b>
Improved timing and volume of water deliveries to the LNWR.
<b>Predecessors</b>
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
Construction link to STA 1E Enhancements was removed.
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Modify Holey Land Wildlife Management Area Operation Plan (015)
<b>Band (designation based on construction completion date)</b>
Band 2 (1 Jan 2010 - 1 Jan 2015)
<b>Restudy Components</b>
Modify Holey Land Wildlife Management Area Operation Plan - DD
<b>Major Elements</b>
This project consists of a modification to the current operating plan for Holey Land Wildlife Management Area to implement rain-driven operations for this area.
<b>Benefits</b>
Restore natural areas.
<b>Predecessors</b>
STA 3/4.
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Modify Rotenberger Wildlife Management Area Operation Plan (016)
<b>Band (designation based on construction completion date)</b>
Band 1 (1 Jan 2005 - 1 Jan 2010)
<b>Project Purpose</b>
To improve the timing and location of water depths within the Rotenberger Wildlife Management Area.
<b>Restudy Components</b>
Modify Rotenberger Wildlife Management Area Operation Plan - EE
<b>Major Elements</b>
This project consists of a modification to the current operating plan for Rotenberger Wildlife Management Area to implement rain-driven operations for this area.
<b>Benefits</b>
Restore natural areas.
<b>Predecessors</b>
STA 3/4 and 5/6 construction - defined as predecessors by project manager
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999) and Project Manager

<b>Project Name and WBS</b>
North Palm Beach County - Part 1 (017)
<b>Band (designation based on construction completion date)</b>
Palmar, LWL, K P1, X, Y - Band 2 (1 Jan 2010 - 1 Jan 2015); GGG - Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Project Purpose</b>
To increase water supplies to the Grassy Waters Preserve and Loxahatchee Slough, provide flows to enhance hydro-periods in the Loxahatchee Slough, increase base flows to the Northwest Fork of the Loxahatchee River and reduce high discharges to the Lake Worth Lagoon.
<b>Restudy Components</b>
(1) Palmar and Corbett Wildlife Area Hydropattern Restoration - OPE (2) L-8 Basin - K P1 (3) C-51 & Southern L-8 Reservoir - GGG (4) Lake Worth Lagoon Restoration - OPE (5) C-17 Backpumping and Treatment - X (6) C-51 Backpumping and Treatment - Y
<b>Major Elements</b>
(1) <i>Pal-Mar and J.W. Corbett Wildlife Management Area (WMA) Hydropattern Restoration</i> . Water control structures, canal modifications and the acquisition of 3,000 acres. (2) <i>L-8 Basin Modifications</i> . Modifications to the L-8 Basin including pumps, water control structures, and canal improvements. (3) <i>C-51 and L-8 Reservoir</i> . A combination of above-ground and in-ground reservoirs. (4) <i>Lake Worth Lagoon Restoration</i> . Removal and trapping of sediments within the C-51 Canal and sediment removal or trapping within an area downstream of the C-51 Canal and the Lake Worth Lagoon. (5) <i>C-17 Pumping and Treatment</i> . Pumping facilities and a stormwater treatment area with a total capacity of 2,200 acre-feet located in northeastern Palm Beach County. (6) <i>C-51 Pumping and Treatment</i> . Pumping facilities and a stormwater treatment area with a storage capacity of 2,400 acre-feet located in Palm Beach County.
<b>Benefits</b>
(1) Provide hydrologic connections between the Corbett WMA and the Moss property, the C-18 Canal, the Indian Trail Improvement District, and the L-8 borrow canal. (2) Increase water supply availability and flood protection for north Palm Beach County areas. (2) Water quality improvements. (4) Reestablishment of sea grasses and benthic communities in the Lake Worth Lagoon. (5) Increase water supplies to the Grassy Waters Preserve and Loxahatchee Slough.
<b>Predecessors</b>
N/A
<b>Successors</b>
North Palm Beach County Part 2 (018)
<b>Related Projects</b>
Acme Basin B Discharge (038) Palm Beach Aggregate Palm Beach County Agriculture Reserve Reservoir Part 1 (020)
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
North Palm Beach County - Part 2 (018)
<b>Band (designation based on construction completion date)</b>
K P2, LL - Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Project Purpose</b>
<p><i>C-51 Regional Groundwater Aquifer Storage and Recovery</i> - To capture and store excess flows from the C-51 Canal, currently discharged to the Lake Worth Lagoon, for later use during dry periods.</p> <p><i>L-8 Basin ASR</i> - To increase water supply availability and moderate water level within the West Palm Beach Water Catchment Area. It will also provide flows to enhance hydroperiods in the Loxahatchee Slough; increase base flows to the Northwest Fork of the Loxahatchee River, and reduce high discharges to the Lake Worth Lagoon.</p>
<b>Restudy Components</b>
<p>(1) C-51 Regional Groundwater ASR - LL</p> <p>(2) L-8 Basin ASR - K P2</p>
<b>Major Elements</b>
<p>(1) <i>C-51 Regional Groundwater Aquifer Storage and Recovery</i> - includes a series of ASR wells with a total capacity of 170 million gallons per day, associated pre- and post- water quality treatment to be constructed along the C-51 Canal, and canals that can receive water from the C-51 Canal.</p> <p>(2) <i>L-8 Basin ASR</i> - includes ASR wells with a total capacity of 50 million gallons per day and associated pre- and post- water quality treatment to be constructed within the L-8 Basin or along the City of West Palm Beach water supply conveyance and storage system or a combination of both.</p>
<b>Benefits</b>
<p>(1) Maintain canal stages in the C-51 during the dry-season.</p> <p>(2) Water storage.</p> <p>(3) Moderate water level within the West Palm Beach Water Catchment Area.</p> <p>(4) Enhance hydroperiods in the Loxahatchee Slough; increase base flows to the Northwest Fork of the Loxahatchee River, and reduce high discharges to the Lake Worth Lagoon.</p>
<b>Predecessors</b>
<p>North Palm Beach County - Part 1 (017)</p> <p>Hillsboro ASR Pilot (034)</p> <p>ASR Regional Study (044)</p> <p>Palm Beach County Agriculture Reserve Reservoir - Part 1 (020)</p>
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Palm Beach County (PBC) Agriculture Reserve Reservoir - Part 1 (020)
<b>Band (designation based on construction completion date)</b>
Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Project Purpose</b>
To supplement water supply deliveries for central and southern Palm Beach County by capturing and storing excess water currently discharged to the Lake Worth Lagoon. These supplemental deliveries will reduce demands on Lake Okeechobee and the Loxahatchee National Wildlife Area.
<b>Restudy Components</b>
Palm Beach County (PBC) Agriculture Reserve Reservoir - Part 1 (V V P1)
<b>Major Elements</b>
Above-ground reservoir with a total storage capacity of approximately 20,000 acre-feet located in the western portion of the Palm Beach County Agricultural Reserve.
<b>Benefits</b>
(1) Reduce damaging freshwater flows to Lake Worth Lagoon. (2) Reduce demands on Lake Okeechobee and the Loxahatchee National Wildlife Refuge. (3) Water quality improvement.
<b>Predecessors</b>
N/A
<b>Successors</b>
North Palm Beach County - Part 2 (018) Palm Beach County Agriculture Reserve ASR - Part 2 (021)
<b>Related Projects</b>
N/A
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
PBC Agriculture Reserve Aquifer Storage and Recovery (ASR) - Part 2 (021)
<b>Band (designation based on construction completion date)</b>
Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Project Purpose</b>
To supplement water supplies for central and southern Palm Beach County by capturing and storing excess water currently discharged to the Lake Worth Lagoon.
<b>Restudy Components</b>
PBC Agriculture Reserve ASR - Part 2 (V V P2)
<b>Major Elements</b>
(1) Above-ground reservoir (2) ASR wells with a capacity of 75 mgd/day; pre and post-water quality treatment
<b>Benefits</b>
(1) Reduction of demands on Lake Okeechobee and Loxahatchee National Wildlife Area. (2) Water quality improvements in downstream receiving waters. (3) Total storage capacity of 20,000 acre-feet.
<b>Predecessors</b>
Hillsboro ASR Pilot (034) ASR Regional Study (044) PBC Agriculture Reserve Reservoir - Part 1 (020)
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Hillsboro Aquifer Storage and Recovery (ASR) - Part 2 (022)
<b>Band (designation based on construction completion date)</b>
Band 4 (1 Jan 2020 - 1 Jan 2025)
<b>Project Purpose</b>
To supplement water deliveries to the Hillsboro Canal during dry periods thereby reducing demands on Lake Okeechobee and the Loxahatchee National Wildlife Refuge.
<b>Restudy Components</b>
Hillsboro Aquifer Storage and Recovery (ASR) - Part 2 (M P2)
<b>Major Elements</b>
(1) ASR wells (2) Pre and post-water quality treatment
<b>Benefits</b>
(1) Reduction in demands on Lake Okeechobee and Loxahatchee National Wildlife Refuge. (2) Water quality improvements.
<b>Predecessors</b>
Hillsboro ASR Pilot (034) ASR Regional Study (044) Site 1 Impoundment (040)
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Flows to Eastern Water Conservation Area (023)
<b>Band (designation based on construction completion date)</b>
Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Project Purpose</b>
To attenuate high stages in Water Conservation Areas 2 and 3 and transport this excess water to Central Lake Belt Storage Area where it will be stored to meet downstream demands in Water Conservation Area 3B.
<b>Restudy Components</b>
Flow to Eastern Water Conservation Area 3B (EEE)
<b>Major Elements</b>
(1) Pumps (2) Water Control Structures (3) Canals and Conveyance Improvements
<b>Benefits</b>
Water deliveries to Water Conservation Area 3B.
<b>Predecessors</b>
Central Lake Belt Storage Area (026).
<b>Successors</b>
N/A
<b>Related Projects</b>
WCA 3A/3B Flows to Central Lake Belt (047).
<b>Other Notes</b>
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Broward County Secondary Canal System (024)
<b>Band (designation based on construction completion date)</b>
Band 2 (1 Jan 2010 - 1 Jan 2015)
<b>Project Purpose</b>
To reduce water shortages by recharging local wellfields and stabilizing the saltwater interface. Excess water in the basins will be pumped into the coastal canal systems to maintain canal stages at optimum levels. When basin water is not sufficient to maintain canal stages, the canals will be maintained from other construction features such as the Site 1 Impoundment and the North Lake Belt Storage Area and then from Lake Okeechobee and the Water Conservation Areas.
<b>Restudy Components</b>
Broward County Secondary Canal System (CC)
<b>Major Elements</b>
(1) Water control structures (2) Pumps (3) Canal improvements in the C-9, C-12, and C-13 Canal Basins and east basin of the North New River Canal.
<b>Benefits</b>
(1) Improved timing and distribution of water in Broward County. (2) Groundwater recharge.
<b>Predecessors</b>
Site 1 Impoundment (040). Broward County WPA (045).
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
North Lake Belt Storage Area (025)
<b>Band (designation based on construction completion date)</b>
Phase 1 - Band 5 (1 Jan 2025 - 1 Jan 2030); Phase 2 - Band 7 (1 Jan 2035 - 1 Jan 2040)
<b>Project Purpose</b>
To capture and store a portion of the stormwater runoff from the C-6, western C-11, and C-9 basins. The stored water will be used to maintain stages during the dry season in the C-9, C-6, C-7, C-4, and C-2 canals and to provide water deliveries to Biscayne Bay to aid in meeting salinity targets.
<b>Restudy Components</b>
North Lake Belt Storage Area (XX)
<b>Major Elements</b>
(1) Canals (2) Pumps (3) Water control structures (4) In-ground 90,000 acre-feet storage reservoir (5) Subterranean seepage barrier
<b>Benefits</b>
Environmental water deliveries to Biscayne Bay.
<b>Predecessors</b>
Broward County WPA (045) North New River Improvements (012/984) Lake Belt In-Ground Reservoir Technology Pilot (035) Completion milestone for Lakebelt Mining/Lands Available
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Central Lake Belt Storage Area (026)
<b>Band (designation based on construction completion date)</b>
Phase 1 - Band 5 (1 Jan 2025 - 1 Jan 2030); Phase 2 - Band 7 (1 Jan 2035 - 1 Jan 2040)
<b>Project Purpose</b>
To store excess water from Water Conservation Areas 2 and 3 and provide environmental water supply deliveries to Northeast Shark River Slough, WCA 3B, and Biscayne Bay.
<b>Restudy Components</b>
Central Lake Belt Storage Area (S)
<b>Major Elements</b>
(1) Pumps (2) Water control structures (3) 640-acre STA (4) Above-ground and in-ground storage reservoirs (190,000 acre-feet) (5) Subterranean seepage barrier
<b>Benefits</b>
(1) Environmental water deliveries to Northeast Shark River Slough, WCA 3B, and Biscayne Bay. (2) Water quality improvements.
<b>Predecessors</b>
WCA 2B Flows to ENP (048) Lake Belt In-Ground Reservoir Technology Pilot (035) Completion milestone for Lakebelt Mining/Lands Available
<b>Successors</b>
Flows to Eastern Water Conservation Area (023).
<b>Related Projects</b>
N/A
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Everglades National Park Seepage Management (027)
<b>Band (designation based on construction completion date)</b>
Seepage Management - Band 2 (1 Jan 2010 - 1 Jan 2015); S-356 - Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Project Purpose</b>
To improve water deliveries to Northeast Shark River Slough and restore wetland hydropatterns in Everglades National Park by reducing levee and groundwater seepage and increasing sheetflow.
<b>Restudy Components</b>
(1) L-31N Improvements for Seepage Management (V) (2) S-356 Structures (FF)
<b>Major Elements</b>
(1) L-31North (2) S-357 (relocation)
<b>Benefits</b>
(1) Restore wetland hydropatterns in Everglades National Park. (2) Improved water quality. (3) Reestablishment of sheetflow. (4) Improve water deliveries to Northeast Shark River Slough.
<b>Predecessors</b>
<b>Successors</b>
N/A
<b>Related Projects</b>
Biscayne Bay Coastal Wetlands (028) Wastewater Reuse Technology Pilot (037)
<b>Other Notes</b>
It will be combined with Bird Drive Recharge Area (043).
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Biscayne Bay Coastal Wetlands (028)
<b>Band (designation based on construction completion date)</b>
Part 1 - Band 1 (1 Jan 2005 - 1 Jan 2010); Part 2 - Band 2 (1 Jan 2010 - 1 Jan 2015)
<b>Restudy Components</b>
Biscayne Bay Coastal Wetlands (FFF), Other Project Element (OPE)
<b>Major Elements</b>
(1) Pump stations (2) Spreader swales (3) STAs (4) Flowways (5) Levees (6) Culverts (7) Backfilling canals
<b>Benefits</b>
(1) Restored overland flow. (2) Reduce groundwater seepage. (3) Restoration or enhancement of freshwater wetlands, tidal wetlands and nearshore bay habitat. (4) Creation of conditions for reestablishment of oyster and oyster reef community. (5) Reduction of freshwater discharges.
<b>Predecessors</b>
N/A
<b>Successors</b>
N/A
<b>Related Projects</b>
C-111 Spreader Canal (029) Wastewater Reuse Technology Pilot (037) Everglades National Park Seepage Management (027)
<b>Other Notes</b>
The current recommendation is to divide the project into two parts. Part 1 includes Black Creek and Deering Estates, and work will continue. Part 2 includes the other three features outlined in the Restudy. Part 1 has been identified as an Acceler8 project.
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
C-111 Spreader Canal (029)
<b>Band (designation based on construction completion date)</b>
Band 1 (1 Jan 2005 - 1 Jan 2010)
<b>Project Purpose</b>
To reestablish sheet flow and hydrologic connectivity between natural areas in the Southern Glades and Model Lands of South Dade County resulting in improved hydropatterns and a sustainable ecosystem, reduce wet season deliveries in C-111, and decrease flood risk in South Miami-Dade.
<b>Restudy Components</b>
C-111N Spreader Canal - WW
<b>Major Elements</b>
<ol style="list-style-type: none"> <li>(1) 3,200-acre stormwater treatment area.</li> <li>(2) Enlarging pump station S-332E from 50 cfs to 500 cfs.</li> <li>(3) Extending the originally proposed spreader canal to the Model Lands east of Card Sound Road.</li> <li>(4) Installing culverts under U.S. Highway 1 and Card Sound Road.</li> <li>(5) Backfilling C-111 below C-111N to S-197.</li> <li>(6) Removing S-18C and S-197.</li> <li>(7) Backfilling C-110.</li> </ol>
<b>Benefits</b>
<ol style="list-style-type: none"> <li>(1) Stormwater treatment.</li> <li>(2) Reestablishment of sheet flow and hydrologic connectivity in natural areas.</li> </ol>
<b>Predecessors</b>
N/A
<b>Successors</b>
N/A
<b>Related Projects</b>
C-111 (South Dade) (507) CSOP (6861)
<b>Other Notes</b>
C-111N Spreader Canal (WW) was an initially authorized project in the Water Resource Development Act (WRDA) 2000.  Project has been identified as Acceler8 project.
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Southern Golden Gate Estates Hydrologic Restoration (030)
<b>Band (designation based on construction completion date)</b>
Band 1 (1 Jan 2005 - 1 Jan 2010)
<b>Project Purpose</b>
To restore and enhance the wetlands in Golden Gate Estates and in adjacent public lands by reducing over-drainage, improve water quality in coastal estuaries by moderating large salinity fluctuations, and protection of eastern Golden Gate well field by improving groundwater recharge.
<b>Restudy Components</b>
Other Project Element (OPE)
<b>Major Elements</b>
(1) Spreader channels (2) Canal plugs (3) Road and tram removal (4) Pump Stations
<b>Benefits</b>
(1) Improved health and productivity of downstream estuaries. (2) Restoration of habitat for fish and wildlife.
<b>Predecessors</b>
N/A
<b>Successors</b>
N/A
<b>Related Projects</b>
Critical Project - W. Tamiami Trail Culverts (484)
<b>Other Notes</b>
The project has been identified as an Acceler8 project.
<b>Information Sources</b>
Yellow Book (April 1999), Approved Project Management Plan (March 2001)

<b>Project Name and WBS</b>
Florida Keys Tidal Restoration (031)
<b>Band (designation based on construction completion date)</b>
Band 2 (1 Jan 2010 - 1 Jan 2015)
<b>Project Purpose</b>
To restore the tidal connection that was eliminated in the early 1900's and restore circulation to surface waters that have been impeded to improve water quality, benthic floral and faunal communities, larval distribution of recreational and commercial species, and improve the overall hydrology of Florida Bay.
<b>Restudy Components</b>
Other Project Element (OPE)
<b>Major Elements</b>
(1) Bridges (2) Culverts
<b>Benefits</b>
(1) Improved water quality. (2) Restore benthic floral and faunal communities and larval distribution of recreational and commercial species. (3) Improve local hydrology of Florida Bay.
<b>Predecessors</b>
N/A
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Lake Okeechobee ASR Pilot (032)
<b>Band (designation based on construction completion date)</b>
Band 1 (1 Jan 2005 - 1 Jan 2010)
<b>Project Purpose</b>
To design, construct, test, and operate small-scale ASR facilities to reduce uncertainties associated with ASR technology as proposed in the CERP. The small-scale ASR facilities will also be designed and tested to determine the feasibility and evaluate technical and regulatory uncertainties, as well as optimum design, of a facility prior to embarking upon full-scale implementation of the ASR facilities at the Lake Okeechobee sites and other sites in south Florida.
<b>Restudy Components</b>
Lake Okeechobee ASR Pilot Project - GG
<b>Major Elements</b>
(1) Three ASR systems (at three geographically dispersed areas - Kissimmee, Moorehaven, Port Mayaca). (2) One of these sites will be a three-well cluster to evaluate how multiple ASR systems interact with each other. (3) Each system will include: water intake, treatment system, ancillary facilities, ASR well, water discharge, monitoring wells.
<b>Benefits</b>
Refer to benefits of full-scale project.
<b>Predecessors</b>
N/A. The Lake Okeechobee ASR is a pilot project.
<b>Successors</b>
Lake Okeechobee ASR (003).
<b>Related Projects</b>
ASR Regional Study (044) - defined as related project at 10 Dec 2003 MISP brainstorming session. Hillsboro ASR Pilot (034) - defined as related project by Planning Technical Lead Caloosahatchee (C-43) River ASR Pilot (033) - defined as related project by Planning Technical Lead
<b>Other Notes</b>
Pilot project authorized in the Water Resource Development Act (WRDA) 2000.  Information from the monitoring of the ASR Pilots will be used during the preparation of the ASR Regional Study
<b>Information Sources</b>
Yellow Book (April 1999); Planning Technical Lead

<b>Project Name and WBS</b>
Caloosahatchee (C-43) River ASR Pilot (033)
<b>Band (designation based on construction completion date)</b>
Band 1 (1 Jan 2005 - 1 Jan 2010)
<b>Project Purpose</b>
To design, construct, test, and operate small-scale ASR facilities to reduce uncertainties associated with ASR technology as proposed in the CERP. The small-scale ASR facilities will also be designed and tested to determine the feasibility and evaluate technical and regulatory uncertainties, as well as optimum design, of a facility prior to embarking upon full-scale implementation of the ASR facility at the Caloosahatchee site and other sites in south Florida.
<b>Restudy Components</b>
Caloosahatchee River ASR Pilot Project - D
<b>Major Elements</b>
One ASR system at Berry Groves that will include water intake, treatment system, ancillary facilities, ASR well, and water discharge. Also included are monitoring wells.
<b>Benefits</b>
Refer to benefits of full-scale project.
<b>Predecessors</b>
N/A. Caloosahatchee River ASR is a pilot project.
<b>Successors</b>
C-43 Basin ASR - Part 2 (005) - defined as successor at 10 Dec 2003 MISP brainstorming session.
<b>Related Projects</b>
ASR Regional Study (044) - defined as related project at 10 Dec 2003 MISP brainstorming session. Lake Okeechobee ASR Pilot (032) - defined as related project by Planning Technical Lead Hillsboro ASR Pilot (034) - defined as related project by Planning Technical Lead
<b>Other Notes</b>
Pilot project authorized in the Water Resource Development Act (WRDA) 2000.  Information from the monitoring of the ASR Pilots will be used during the preparation of the ASR Regional Study.  The project has been identified as an Acceler8 project.
<b>Information Sources</b>
Yellow Book (April 1999); Planning Technical Lead

<b>Project Name and WBS</b>
Hillsboro ASR Pilot (034)
<b>Band (designation based on construction completion date)</b>
Band 1 (1 Jan 2005 - 1 Jan 2010)
<b>Project Purpose</b>
To design, construct, test, and operate small-scale ASR facilities to reduce uncertainties associated with ASR technology as proposed in the CERP. The small-scale ASR facilities will also be designed and tested to determine the feasibility and evaluate technical and regulatory uncertainties, as well as optimum design, of a facility prior to embarking upon full-scale implementation of the ASR facility at the Hillsboro site and other sites in south Florida.
<b>Restudy Components</b>
Hillsboro ASR Pilot Project - M
<b>Major Elements</b>
One ASR system at the Hillsboro (Site 1) Impoundment that will include water intake, treatment system, ancillary facilities, ASR well, and water discharge. Also included are monitoring wells.
<b>Benefits</b>
Refer to benefits of full-scale project.
<b>Predecessors</b>
N/A. The Hillsboro ASR is a pilot project.
<b>Successors</b>
North Palm Beach County - Part 2 (018) Palm Beach County Agriculture Reserve ASR - Part 2 (021) Hillsboro ASR - Part 2 (022)
<b>Related Projects</b>
ASR Regional Study (044). Lake Okeechobee ASR Pilot (032). Caloosahatchee (C-43) River ASR Pilot (033).
<b>Other Notes</b>
Pilot project authorized in the Water Resource Development Act (WRDA) 2000.  Information from the monitoring of the ASR Pilots will be used during the preparation of the ASR Regional Study.
<b>Information Sources</b>
Yellow Book (April 1999); Planning Technical Lead

<b>Project Name and WBS</b>
Lake Belt In-Ground Reservoir Technology Pilot (035)
<b>Band (designation based on construction completion date)</b>
Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Project Purpose</b>
To determine whether the two full-scale Lake Belt Storage Area CERP components can be successfully constructed and operated to supply environmental and water supply deliveries. The in-ground reservoir pilot project should determine if the barrier technology can prevent adverse impacts by installing a barrier around an existing smaller rock mined area with similar geology to the full-scale in-ground reservoir site.
<b>Restudy Components</b>
Lake Belt In-Ground Reservoir Pilot Project (no component designation)
<b>Major Elements</b>
(1) A geologic investigation. (2) Pilot reservoir siting. (3) Possible construction of varying impermeable barrier types. (4) Construction of the pilot scale in-ground reservoir. (5) Water quality monitoring program.
<b>Benefits</b>
Refer to benefits of full-scale project.
<b>Predecessors</b>
N/A. The Lake Belt In-Ground Reservoir is a pilot project.
<b>Successors</b>
North Lake Belt Storage Area (025) Central Lake Belt Storage (026)
<b>Related Projects</b>
L-31N Seepage Management Pilot Project (036) Lakebelt Mining / Lands Available North Palm Beach County - Part 1 (017) L-8/C-51 Basin Reservoir (GGG) Broward County WPA (045) C-9 Impoundment {R}
<b>Other Notes</b>
Pilot project authorized in the Water Resource Development Act (WRDA) 2000.
<b>Information Sources</b>
Yellow Book (April 1999); Planning Technical Lead

<b>Project Name and WBS</b>
L-31N Seepage Management Pilot (036)
<b>Band (designation based on construction completion date)</b>
Band 1 (1 Jan 2005 - 1 Jan 2010)
<b>Project Purpose</b>
To provide seepage control measures to significantly reduce subsurface and thru-levee seepage into the canal from Everglades National Park (ENP).
<b>Restudy Components</b>
L-31N Seepage Management Pilot Project - V
<b>Major Elements</b>
Technologies to be tested have been narrowed to: sheet pile walls, overlapping pile wall, seepage recovery wells or trenches, seepage infiltration trenches, or system operations.
<b>Benefits</b>
Refer to benefits of full-scale project.
<b>Predecessors</b>
N/A. The L-31N Seepage Management is a pilot project.
<b>Successors</b>
<b>Related Projects</b>
N/A
<b>Other Notes</b>
Pilot project authorized in the Water Resource Development Act (WRDA) 2000.
<b>Information Sources</b>
Yellow Book (April 1999); Planning Technical Lead

<b>Project Name and WBS</b>
Wastewater Reuse Technology Pilot (037)
<b>Band (designation based on construction completion date)</b>
Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Project Purpose</b>
To determine levels of treatment and technologies needed to discharge reclaimed water into natural areas, determine the ecological effects of using superior, advanced treated reclaimed water and determine parameters/constituents of concern. The purpose of the pilot treatment facility is to determine the ecological effects of using reclaimed water to replace and augment freshwater flow to Biscayne Bay and to determine the level of treatment required to prevent degradation of estuarine and freshwater wetlands and Biscayne Bay.
<b>Restudy Components</b>
Wastewater Reuse Technology Pilot Project - HH, BB
<b>Major Elements</b>
(1) Assessment of the effects of using reclaimed water on freshwater or estuarine wetlands. (2) Design, construction, operation, and monitoring of a pilot plant in South Miami-Dade facility to produce reclaimed water to discharge to freshwater wetlands and Biscayne Bay.
<b>Benefits</b>
Refer to benefits of full-scale project.
<b>Predecessors</b>
N/A. The Wastewater Reuse is a pilot project.
<b>Successors</b>
West Miami-Dade Reuse (097) South Miami-Dade Reuse (098)
<b>Related Projects</b>
N/A
<b>Other Notes</b>
Pilot project authorized in the Water Resource Development Act (WRDA) 2000.
<b>Information Sources</b>
Yellow Book (April 1999); Planning Technical Lead

<b>Project Name and WBS</b>
Acme Basin B Discharge (038)
<b>Band (designation based on construction completion date)</b>
Band 1 (1 Jan 2005 - 1 Jan 2010)
<b>Restudy Components</b>
Other Project Element (OPE)
<b>Major Elements</b>
(1) Constructed natural area to provide flood attenuation, increase spatial extent of natural areas and passive recreation. (2) Potential canal improvements and structural features.
<b>Benefits</b>
(1) Provide water deliveries to the Everglades system. (2) Reduce water lost to tide.
<b>Predecessors</b>
STA 1-E construction before operation of Acme Basin B Discharge.
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
Project has been identified as Acceler8 project.
<b>Information Sources</b>
Yellow Book (April 1999) and Project Manager

<b>Project Name and WBS</b>
Strazzulla Wetlands (039)
<b>Band (designation based on construction completion date)</b>
Band 1 (1 Jan 2005 - 1 Jan 2010)
<b>Project Purpose</b>
To provide a hydrological and ecological connection to the Loxahatchee National Wildlife Refuge and expand the spatial extent of protected natural areas. This land will act as a buffer between higher water stages to the west and lands to the east that must be drained. This increase in spatial extent will provide vital habitat connectivity for species that require large unfragmented tracts of land for survival. It also contains the only remaining cypress habitat in the eastern Everglades and one of the few remaining sawgrass marshes adjacent to the coastal ridge.
<b>Restudy Components</b>
Other Project Element (OPE)
<b>Major Elements</b>
(1) Water control structures. (2) Acquisition of 3,335 acres located in Palm Beach County.
<b>Benefits</b>
(1) Expanded spatial extent of natural areas. (2) Wildlife habitat connectivity.
<b>Predecessors</b>
N/A
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Site 1 Impoundment (040)
<b>Band (designation based on construction completion date)</b>
Band 1 (1 Jan 2005 - 1 Jan 2010)
<b>Project Purpose</b>
To store water that is currently discharged from Lake Okeechobee, Loxahatchee National Wildlife Refuge, and Water Conservation Area 2A to tide via the Hillsboro Canal, thereby reducing water supply demands on those areas. This would make more water available in Lake Okeechobee, Loxahatchee National Wildlife Refuge, and Water Conservation Area 2A to meet ecological needs in the natural system.
<b>Restudy Components</b>
Site 1 Impoundment - M P1
<b>Major Elements</b>
(1) Aboveground impoundment with a total storage capacity of approximately 13,280 acre-feet. (2) Pump station, levees, internal structures (culverts and weirs), seepage collection canal, and canal conveyance improvement in Hillsboro Canal.
<b>Benefits</b>
(1) Ecosystem: Improve hydroperiods, hydropatterns, and water quality conditions in Loxahatchee National Wildlife Refuge and WCA 2A; and, improve salinity and water quality conditions in the estuarine area in the vicinity of the mouth of the Hillsboro Canal (2) Economic: Reduce the frequency and duration of water shortages in Lower East Coast Service Area 1. (3) Some measure of additional flood protection may be provided.
<b>Predecessors</b>
N/A
<b>Successors</b>
Hillsboro Aquifer Storage and Recovery (ASR) - Part 2 (022) Broward County Secondary Canal System (024)
<b>Related Projects</b>
Hillsboro ASR Pilot (034).
<b>Other Notes</b>
Site 1 Impoundment (M P1) was an initially authorized project in the Water Resource Development Act (WRDA) 2000. The project has been identified as an Acceler8 project.
<b>Information Sources</b>
Yellow Book (April 1999); Pre-conference materials, Feasibility Scoping Meeting (21 Nov 2003); Feasibility Scoping Meeting Memorandum for Record (10 Feb 2004); Planning Technical Lead

<b>Project Name and WBS</b>
Bird Drive Recharge Area (043)
<b>Band (designation based on construction completion date)</b>
Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Project Purpose</b>
To recharge groundwater and reduce seepage from the Everglades National Park buffer areas by increasing water table elevations east of Krome Avenue. The facility will also provide C-4 flood peak attenuation and water supply deliveries to the South Dade Conveyance System and Northeast Shark River Slough.
<b>Restudy Components</b>
Bird Drive Recharge Area (U)
<b>Major Elements</b>
(1) Pumps (2) Water control structures (3) Canals (4) Above-ground recharge area
<b>Benefits</b>
(1) Total storage capacity of 11,500 acre-feet in western Miami Dade County. (2) Seepage Control (3) Spatial Extent (4) Flood Control (5) Water Supply
<b>Predecessors</b>
L-31N Seepage Management Pilot Project (036) was established as a predecessor to the PIR.
<b>Successors</b>
N/A
<b>Related Projects</b>
West Miami-Dade County Reuse (097).
<b>Other Notes</b>
It will be combined with Everglades National Park Seepage Management (027).
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Aquifer Storage and Recovery (ASR) Regional Study (044)
<b>Band (designation based on construction completion date)</b>
N/A
<b>Project Purpose</b>
To address regional and technical issues associated with the CERP ASR Program beyond the scope and budget of the ASR Pilot Projects.
<b>Restudy Components</b>
N/A
<b>Major Elements</b>
(1) Inventory (2) Field Data Collection (3) Laboratory Analysis (4) Groundwater and Surface Water Modeling (5) Water Quality Monitoring
<b>Benefits</b>
(1) Provide information for ASR pilots and ASR full-scale projects. (see full-scale benefits)
<b>Predecessors</b>
Information from the monitoring of the ASR Pilots will be used during the preparation of the ASR Regional Study.
<b>Successors</b>
Lake Okeechobee Aquifer Storage & Recovery (003) C-43 Basin Aquifer Storage & Recovery - Part 2 (005) Palm Beach County Agriculture Reserve ASR - Part 2 (021) Hillsboro ASR - Part 2 (022) PIRs for the above projects will be tied to the completion of the ASR Regional Study.
<b>Related Projects</b>
Lake Okeechobee ASR Pilot (032) Caloosahatchee (C-43) ASR Pilot (033) Hillsboro ASR Pilot (034)
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Broward County WPA (045)
<b>Band (designation based on construction completion date)</b>
Band 1 (1 Jan 2005 - 1 Jan 2010)
<b>Project Purpose</b>
To reduce seepage from the WCA 3A/3B Seepage Management Area; provide groundwater recharge; provide adequate water supply to urban areas; and prevent saltwater intrusion. The WCA 3A/3B Levee Seepage Management system will focus on seepage reduction by allowing higher water levels in the L-33 and L-37 borrow canals.
<b>Restudy Components</b>
(1) Western C-11 Impoundment - Q (initially authorized) (2) C-9 Stormwater Treatment Area and Impoundment - R (initially authorized) (3) WCA 3A & 3B Seepage Management - O (initially authorized)
<b>Major Elements</b>
(1) Western C-11 Impoundment (2) C-9 Stormwater Treatment Area and Impoundment
<b>Benefits</b>
(1) Seepage reduction in WCA 3A/3B. (2) Provide water to natural system (groundwater recharge, water supply, prevention of saltwater intrusion).
<b>Predecessors</b>
N/A
<b>Successors</b>
North Lake Belt Storage Area (025) - defined as successor at 10 Dec 2003 MISP brainstorming session.  It was recommended to link C-11 and C-9 plans and specifications to the WPA Conveyance (049) PIR.
<b>Related Projects</b>
N/A
<b>Other Notes</b>
Components Q, R, and O were initially authorized projects in the Water Resource Development Act (WRDA) 2000.  The project has been identified as an Acceler8 project.
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
C-4 Structure (046)
<b>Band (designation based on construction completion date)</b>
Band 2 (1 Jan 2010 - 1 Jan 2015)
<b>Project Purpose</b>
To restore wetland hydroperiod and recharge to Miami-Dade County's Northwest wellfield.
<b>Restudy Components</b>
C-4 Structure ( T )
<b>Major Elements</b>
Two water control structures located in the C-4 Canal in Miami-Dade County.
<b>Benefits</b>
(1) Wetland hydroperiod restoration. (2) Provides recharge to downstream wellfields.
<b>Predecessors</b>
WCA 3 Decomp and Sheetflow Enhancement (12/984).
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
Will have the Miami-Dade Regional Canals Study explore whether it can/should be combined.
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
WCA 3A/3B Flows to CLB (047)
<b>Band (designation based on construction completion date)</b>
Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Project Purpose</b>
To divert excess water above the target depths from Water Conservation Area (WCA) 3A/3B to the Central Lake Belt Storage Area or Shark River Slough (on an interim basis) via C-500A and C-500B canals (improved L-37 and L-33 borrow canals, respectively). Excess water will be diverted via modified structures at S-9 and S-31.
<b>Restudy Components</b>
WCA 3A/3B Flows to Central Lake Belt (ZZ)
<b>Major Elements</b>
(1) Pumps (2) Water Control Structures (3) Canals and Conveyance Improvements
<b>Benefits</b>
Environmental water deliveries to Northeast Shark River Slough.
<b>Predecessors</b>
WCA 3 Decomp and Sheetflow Enhancement (12/984) was combined with Decomp.
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
Combined project with WCA 3 Decompartmentalization and Sheetflow Enhancement.
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
WCA 2B Flows to Everglades National Park (ENP) (048)
<b>Band (designation based on construction completion date)</b>
Band 4 (1 Jan 2020 - 1 Jan 2025)
<b>Project Purpose</b>
To attenuate high stages in Water Conservation Area (WCA) 2B and divert excess water primarily to Northeast Shark River Slough and eventually to Central Lake Belt Storage Area via pump station, culverts, canals such as L-33, L-35 and L-37 and conveyance features. A part of this component consists of the improvements to L-37 and L-33 borrow canals (renamed C-500A and C-500B, respectively) to enable excess flow.
<b>Restudy Components</b>
(1) WCA 2B Flows to CLB (YY) (2) Central Lake Belt Storage Area (S P1) aka "L-30 Upgrade"
<b>Major Elements</b>
(1) Pumps (2) Water Control Structures (3) Canals and Conveyance Improvements
<b>Benefits</b>
Environmental water deliveries to Northeast Shark River Slough.
<b>Predecessors</b>
WCA 3 Decomp and Sheetflow Enhancement (12/984) defined as predecessor.
<b>Successors</b>
Central Lake Belt Storage Area (026).
<b>Related Projects</b>
N/A
<b>Other Notes</b>
Project delayed until FY05.
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
WPA Conveyance (049)
<b>Band (designation based on construction completion date)</b>
XX P1 - Band 2 (1 Jan 2010 - 1 Jan 2015); BB - Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Project Purpose</b>
To convey regional water supply deliveries from Lake Okeechobee to the C-6, C-7, C-4 and C-2 canals and the South Dade Conveyance System. This feature will 1) reduce seepage to the east from the Pennsuco wetlands and southern WCA 3B; 2) improve hydro periods in the Pennsuco Wetlands; 3) provide recharge to the Miami-Dade County's Northwest Wellfield and; 4) convey regional water supply deliveries south to Miami-Dade County.
<b>Restudy Components</b>
(1) Dade-Broward Levee Canal (BB) (2) North Lake Belt Storage Area (XX P1) aka "Turnpike Deliveries"
<b>Major Elements</b>
(1) Water control structures. (2) Modifications to the Dade-Broward Levee and associated conveyance system.
<b>Benefits</b>
(1) Reduce seepage from Pennsuco wetlands and southern Water Conservation Area (WCA) 3B. (2) Improve hydroperiods. (3) Provide groundwater recharge.
<b>Predecessors</b>
Linked Broward County WPA (045) C-11 and C-9 plans and specifications to the PIR.
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Micosukee Water Management Plan (090)
<b>Band (designation based on construction completion date)</b>
N/A
<b>Project Purpose</b>
To provide water storage capacity and water quality enhancement for tribal reservation waters that discharge from tribal lands downstream into the Everglades Protection Area.
<b>Restudy Components</b>
Other Project Elements (OPE)
<b>Major Elements</b>
(1) 900-acre wetland retention/detention area on Alligator Alley Reservation, including: (2) Pump station (3) Levees (4) Trenches (5) Culverts
<b>Benefits</b>
(1) Improved timing and location of water depths in the Loxahatchee National Wildlife Refuge. (2) Improve Water Quality.
<b>Predecessors</b>
N/A
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
The project completion date should be updated (10 Dec 2003 MISP brainstorming session).
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Winsberg Farm Wetlands Restoration (091)
<b>Band (designation based on construction completion date)</b>
Band 1 (1 Jan 2005 - 1 Jan 2010)
<b>Project Purpose</b>
To create 140 acres of wetlands, using water from the Palm Beach County Southern Region Water Reclamation Facility, in the vicinity of the Wakodahatchee Wetland in southern Palm Beach County.
<b>Restudy Components</b>
Winsberg Farm Wetlands Restoration - OPE
<b>Major Elements</b>
140 acres of created wetlands.
<b>Benefits</b>
(1) Restoration of natural areas. (2) Reduce/eliminate deep well injection at water reclamation facility.
<b>Predecessors</b>
N/A
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Restoration of Pineland and Hardwood Hammocks in C-111 Basin (092)
<b>Band (designation based on construction completion date)</b>
Band 4 (1 Jan 2020 - 1 Jan 2025)
<b>Project Purpose</b>
To restore hammocks to a portion of the Frog Pond as part of the C-111 project to restore the Taylor Slough portion of the Everglades, provide some water quality treatment for runoff passing through the hammocks, and demonstrate techniques required to re-establish native conifer and hardwood forests on land that has been rock plowed.
<b>Restudy Components</b>
Other Project Element (OPE)
<b>Major Elements</b>
(1) Restoration of slash pine and hardwood hammock species on a 200-foot wide strip on each side of two miles of SR 9336 from the C-111 Canal to the L-31W Borrow Canal. (2) Establishment of 2 one-acre hammocks.
<b>Benefits</b>
(1) Restoration of hammocks in C-111 Basin as part of Taylor Slough restoration. (2) Water quality treatment.
<b>Predecessors</b>
N/A
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Henderson Creek/Belle Meade Restoration (093)
<b>Band (designation based on construction completion date)</b>
Band 3 (1 Jan 2015 - 1 Jan 2020)
<b>Project Purpose</b>
To restore historic sheetflow to Henderson Creek Estuary, treat stormwater, improve water quality and increase habitat value and wetland functions.
<b>Restudy Components</b>
Other Project Element (OPE)
<b>Major Elements</b>
(1) 10-acre stormwater lake/marsh filtering system (2) Culverts (3) Swale (4) Spreader system (5) Road removal
<b>Benefits</b>
(1) Restoration of critical nursery habitat for shellfish and finfish. (2) Assurance of long-term protection for uplands and wetlands. (3) Improved timing, duration, and volume of freshwater inflow. (4) Enhancement of estuarine habitats.
<b>Predecessors</b>
N/A
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (1999)

<b>Project Name and WBS</b>
Lakes Park Restoration (094)
<b>Band (designation based on construction completion date)</b>
Band 1 (1 Jan 2005 - 1 Jan 2010)
<b>Project Purpose</b>
To improve surface water runoff quality by creating a meandering flowway with shallow littoral zones and removing aquatic and upland exotic infestation, while allowing public access into upland areas of improved native habitat.
<b>Restudy Components</b>
Other Project Element (OPE)
<b>Major Elements</b>
(1) 40-acre marsh/flowway
<b>Benefits</b>
(1) Creation of a 40-acre marsh/flowway. (2) Removal of exotic vegetation. (3) Planting of native vegetation on 11 acres of uplands and 9 acres of littoral zone. (4) Improved water quality for surface water runoff.
<b>Predecessors</b>
N/A
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Melaleuca Eradication and Other Exotic Plants (095)
<b>Band (designation based on construction completion date)</b>
N/A
<b>Project Purpose</b>
To control Melaleuca and other invasive exotic plant species in south Florida.
<b>Restudy Components</b>
Other Project Element (OPE)
<b>Major Elements</b>
(1) Mass rearing and controlled release of approved biological control organisms for release at multiple sites in the south Florida ecosystem. (2) Preparation of a report to further identify the overall problem with exotic invasive plants and provide a recommendation regarding further Federal involvement.
<b>Benefits</b>
Reduction of Melaleuca and other invasive exotic plant species in south Florida.
<b>Predecessors</b>
N/A
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
The Melaleuca Eradication PIR will begin in 2012; however, the PDT will finalize the Project Management Plan (PMP) prior to stopping the current work effort.
<b>Information Sources</b>
Yellow Book (April 1999) and Project Manager

<b>Project Name and WBS</b>
Seminole Tribe Big Cypress Reservation Water Conservation Plan (096)
<b>Band (designation based on construction completion date)</b>
Band 4 (1 Jan 2020 - 1 Jan 2025)
<b>Project Purpose</b>
To improve the quality of water and runoff from phosphorous-generating agricultural sources within the Seminole Tribe Reservation.
<b>Restudy Components</b>
Other Project Element (OPE)
<b>Major Elements</b>
(1) Conveyance systems (2) Canal bypass structures (3) Irrigation storage cells (4) Water resource areas
<b>Benefits</b>
(1) Reduce flood damage. (2) Promote water conservation. (3) Achieve environmental restoration on the Reservation, Big Cypress Preserve, and Everglades Protection Area. (4) Reduction of phosphorus levels to 50ppb.
<b>Predecessors</b>
Seminole Big Cypress (487).
<b>Successors</b>
Big Cypress/L-28 Interceptor Modifications (010).
<b>Related Projects</b>
N/A
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (1999)

<b>Project Name and WBS</b>
West Miami-Dade County Reuse (097)
<b>Band (designation based on construction completion date)</b>
Band 4 (1 Jan 2020 - 1 Jan 2025)
<b>Project Purpose</b>
To produce superior, advanced treatment of wastewater for Bird Drive Recharge Area, South Dade Conveyance System, and Northeast Shark River Slough.
<b>Restudy Components</b>
West Dade Reuse (HHH)
<b>Major Elements</b>
Treatment plant expansion
<b>Benefits</b>
(1) Increase environmental water deliveries to the Northeast Shark River Slough. (2) Provide additional water to the South Dade Conveyance System. (3) Groundwater recharge.
<b>Predecessors</b>
Wastewater Reuse Technology Pilot (037).
<b>Successors</b>
N/A
<b>Related Projects</b>
Bird Drive Recharge Area (043).
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
South Miami-Dade County Reuse (098)
<b>Band (designation based on construction completion date)</b>
Band 4 (1 Jan 2020 - 1 Jan 2025)
<b>Project Purpose</b>
To provide additional water supply to the South Biscayne Bay and Coastal Wetlands
<b>Restudy Components</b>
South Dade County Reuse (BBB)
<b>Major Elements</b>
Addition of pre-treatment and membrane treatment system to the existing secondary treatment system.
<b>Benefits</b>
Additional water supply to South Biscayne Bay and the coastal wetlands.
<b>Predecessors</b>
Wastewater Reuse Technology Pilot (037).
<b>Successors</b>
N/A
<b>Related Projects</b>
Biscayne Bay Coastal Wetlands (028).
<b>Other Notes</b>
None
<b>Information Sources</b>
Yellow Book (April 1999)

<b>Project Name and WBS</b>
Southwest Florida Feasibility Study (516)
<b>Band (designation based on construction completion date)</b>
N/A
<b>Project Purpose</b>
To provide formulation for the related Everglades areas in the southwestern portion of the ecosystem that were not specifically addressed in the Yellow Book, which includes a comprehensive study of Lee, Collier, and parts of Hendry, Glades, Charlotte, and Monroe Counties.
<b>Restudy Components</b>
Southwest Florida Feasibility Study (no component designation)
<b>Major Elements</b>
Integrated Feasibility Report and National Environmental Policy Act (NEPA) document.
<b>Benefits</b>
The feasibility study will develop alternative plans to address the following: (1) Quality, quantity and timing of water deliveries to the Caloosahatchee Estuary. (2) Management of urban and agricultural water supply. (3) Protection of water resources. (4) Protection of fish and wildlife and associated habitat. (5) Management of wetland and associated upland ecosystems
<b>Predecessors</b>
N/A
<b>Successors</b>
N/A
<b>Related Projects</b>
C-43 Basin Storage Reservoir - Part 1 (004) and other CERP projects and Critical Projects located in the lower west coast region.
<b>Other Notes</b>
None
<b>Information Sources</b>
Approved Project Management Plan (January 2002)

<b>Project Name and WBS</b>
WCA 3 Decomp and Sheetflow Enhancement - Part 1 - <i>East Tamiami Trail</i> (984)
<b>Band (designation based on construction completion date)</b>
Band 1 (1 Jan 2005 - 1 Jan 2010)
<b>Project Purpose</b>
To reestablish the ecological and hydrologic connection of Water Conservation Area (WCA) 3A with WCA-3B and Everglades National Park (ENP). It will provide more natural sheetflow and hydroperiod for both WCA-3 and ENP by developing and implementing a plan to raise and bridge portions of Tamiami Trail.
<b>Restudy Components</b>
WCA 3 Decomartmentalization Phase 1 - QQ P1
<b>Major Elements</b>
Modifications of the 10.7 mile stretch of Tamiami Trail between S334 and S333.
<b>Benefits</b>
<ul style="list-style-type: none"> <li>(1) Restore wetland quantity and quality.</li> <li>(2) Restore ridge and slough, marl prairie, and rocky glades landscapes quantity and quality.</li> <li>(3) Restore tree island habitat quantity and quality.</li> <li>(4) Restore habitat quantity and quality for native vegetation and wildlife.</li> <li>(5) Restore fish and wildlife connectivity across barriers.</li> <li>(6) Promote recreation that is consistent with ecosystem restoration.</li> </ul>
<b>Predecessors</b>
Modified Water Deliveries to Everglades National Park (686).
<b>Successors</b>
N/A
<b>Related Projects</b>
N/A
<b>Other Notes</b>
<p>Combined with WCA 3 Decomp - Part 1 <i>Canals &amp; Levees</i> (012) and Decomp - Part 2 (013) - decision at 10 Dec 2003 MISP brainstorming session.</p> <p><i>Justification: (Planning Issue) The project functions overlap such that there is a with and without project condition as it relates to the evaluation procedures defined in the Programmatic Regulations. One project cannot be held constant to formulate and evaluate the other independently. A concern may be a delay in implementing the East Tamiami Trail Project.</i></p>
<b>Information Sources</b>
Yellow Book (April 1999); Planning Technical Lead

<b>Project Name and WBS</b>
Comprehensive Integrated Water Quality Feasibility Study (1004)
<b>Band (designation based on construction completion date)</b>
N/A
<b>Project Purpose</b>
To develop a comprehensive system-wide plan to achieve and sustain improved water quality for ecosystem restoration in South Florida by identifying links between water quality and ecosystem functions, identifying degraded water bodies and quantifying types and sources of pollution, developing targets for reducing pollution, inventorying and evaluating a suite of structural and other measures capable of improving water quality, integrating planned and existing water quality restoration and management programs with projects of the Everglades restoration plan and with other Federal, State, tribal and local programs and projects, recommending additional programs and projects needed to implement the CIWQ plan, and identifying appropriate funding sources.
<b>Restudy Components</b>
Comprehensive Integrated Water Quality Feasibility Study (no component designation)
<b>Major Elements</b>
Integrated Feasibility Report and National Environmental Policy Act (NEPA) document.
<b>Benefits</b>
Improved water quality for ecosystem restoration in South Florida.
<b>Predecessors</b>
N/A
<b>Successors</b>
N/A
<b>Related Projects</b>
The Comprehensive Integrated Water Quality Feasibility Study will interface with all CERP-related projects.
<b>Other Notes</b>
<b>Information Sources</b>
Yellow Book (April 1999), <a href="http://www.evergladesplan.org">www.evergladesplan.org</a>

<b>Project Name and WBS</b>
Master Recreation Plan (9008)
<b>Band (designation based on construction completion date)</b>
N/A
<b>Project Purpose</b>
To take a system-wide approach to identify, evaluate, and address the impacts of CERP implementation on existing recreational use within the South Florida Ecosystem and to identify and evaluate potential new recreation, public use and public educational opportunities. Included in the plan is the identification of additional public use and recreational opportunities to compensate for public use facilities that may be lost as a result of CERP implementation.
<b>Restudy Components</b>
N/A
<b>Major Elements</b>
Master Recreation Plan document.
<b>Benefits</b>
(1) Guidelines for recreation planning, needs and impact assessments, and integration into the CERP Project Implementation Report (PIR) process. (2) Measures to assess change in recreational opportunities.
<b>Predecessors</b>
N/A
<b>Successors</b>
N/A
<b>Related Projects</b>
The CERP Master Recreation Plan (MRP) will interface with all CERP-related projects.
<b>Other Notes</b>
Not included in MISP.
<b>Information Sources</b>
<a href="http://www.evergladesplan.org">www.evergladesplan.org</a>

**APPENDIX D: REFERENCES AND LIST OF ACRONYMS AND  
ABBREVIATIONS**

Following is a list of references used to prepare the MISP:

1. *Central and South Florida (C&SF) Project Comprehensive Review Study Integrated Feasibility Report and Programmatic Environmental Impact Statement*. April 1999.
2. 33 CFR Part 385, Programmatic Regulations for the Comprehensive Everglades Restoration Plan.

### **List of Acronyms and Abbreviations**

ASR	Aquifer Storage and Recovery
BBCW	Biscayne Bay Coastal Wetlands
BNP	Biscayne National Park
C&SF	Central and South Florida
CERP	Comprehensive Everglades Restoration Plan
CFR	Code of Federal Regulations
CLB	Central Lake Belt
DCT	Design Coordination Team
EAA	Everglades Agricultural Area
ENP	Everglades National Park
EPA	U.S. Environmental Protection Agency
FDEP	Florida Department of Environmental Protection
FWC	Florida Fish and Wildlife Conservation Commission
HQ	U.S. Army Corps of Engineers Headquarters
ICU	Initial CERP Update
IG/IT	Interim Goals and Interim Targets
IRL-S	Indian River Lagoon - South
LNWR	Loxahatchee National Wildlife Refuge
LOW	Lake Okeechobee Watershed
MIS 1.0	Master Implementation Schedule (update), July 2001
MISP	Master Implementation Sequencing Plan
MPMP	Master Program Management Plan
NEPA	National Environmental Policy Act
PBC	Palm Beach County
PCA	Project Cooperation Agreement
PIR	Project Implementation Report
PMP	Project Management Plan
P&S	Plans and Specifications
RECOVER	Restoration Coordination and Verification
SFWMD	South Florida Water Management District
STA	Stormwater Treatment Area
TCA	Technical Constraints Analysis
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WCA	Water Conservation Area

WPA	Water Preserve Area
WRAC	Water Resources Advisory Committee
WRDA	Water Resources Development Act