

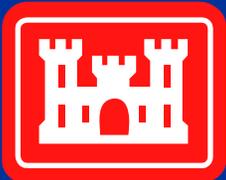
Civil Works Review Board Briefing

Caloosahatchee River (C-43) West Basin Storage Reservoir

Comprehensive
Everglades Restoration
Plan

Final Project
Implementation Report
(PIR) &

Environmental Impact
Statement (EIS)



One Team - Relevant, Ready, Responsive, Reliable



Briefing Purpose

Provide overview

- CERP
- Caloosahatchee River (C-43) West Basin Storage Reservoir Project

Obtain CWRB approval

- Proceed with release of Final Report for State and Agency review

Present next steps in approval process

Answer questions/comments

CERP OVERVIEW

Caloosahatchee River (C-43) West Basin Storage Reservoir

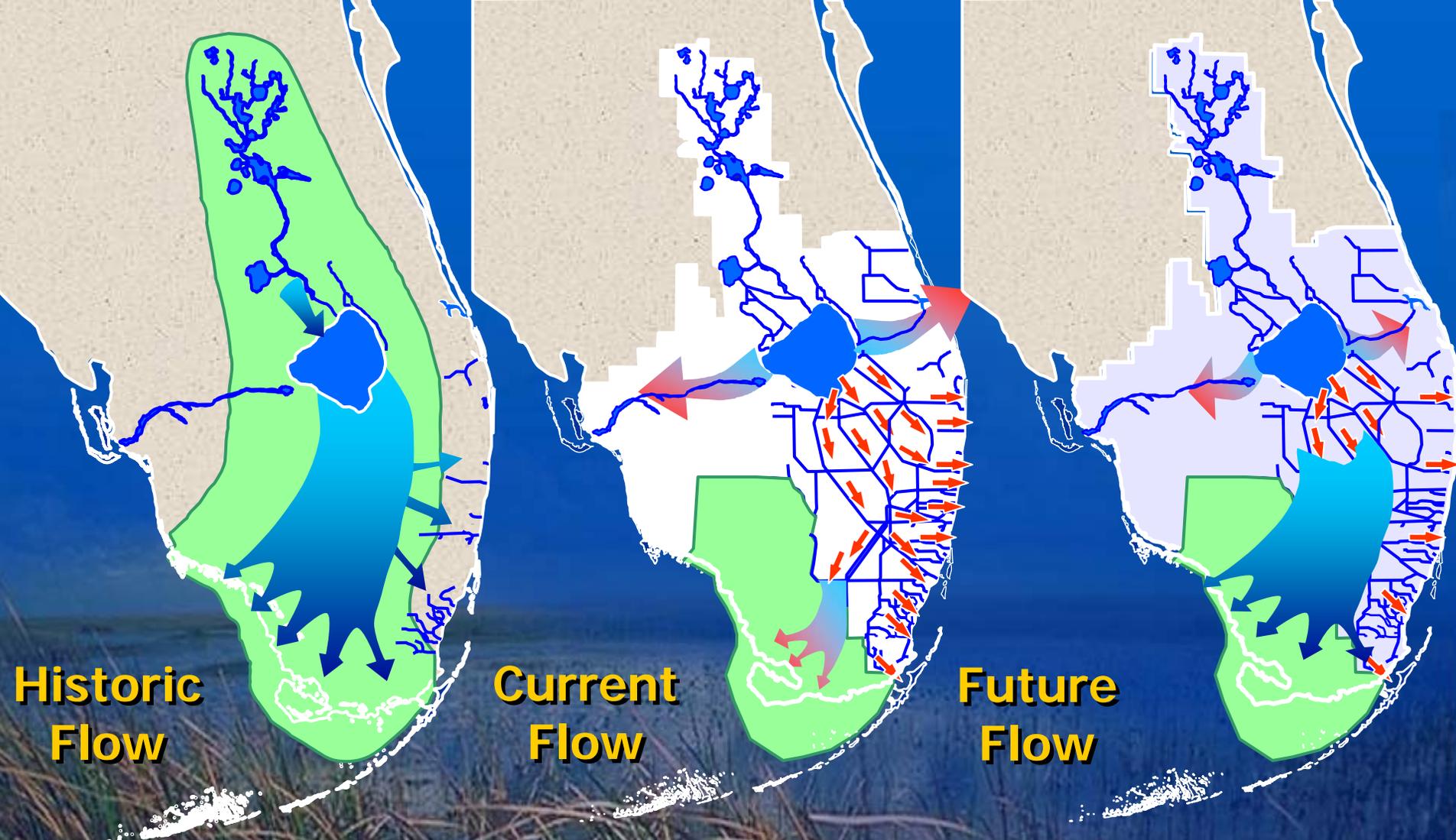
What is the Comprehensive Everglades Restoration Plan (CERP)?

CERP is a program providing for the restoration, preservation and protection of the south Florida ecosystem while providing for other water-related needs of the region.

68 components tied together with a programmatic umbrella:

- Surface Storage
- Aquifer Storage and Recovery
- Stormwater Treatment Areas
- Wastewater Reuse
- Seepage Management
- Decompartmentalization
- Operational Modifications





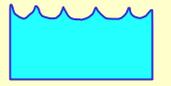
**Historic
Flow**

**Current
Flow**

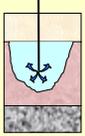
**Future
Flow**

The CERP Goal

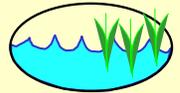
68 CERP Components



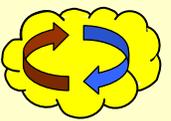
Surface Water Storage
Reservoirs – 180,000
acres



Aquifer Storage
& Recovery – 330
wells



Stormwater Treatment
Areas (STAs) – 36,000
acres



Reuse Wastewater – 2
Regional plants



Seepage Management



Removing Barriers
to Sheetflow – 240 miles

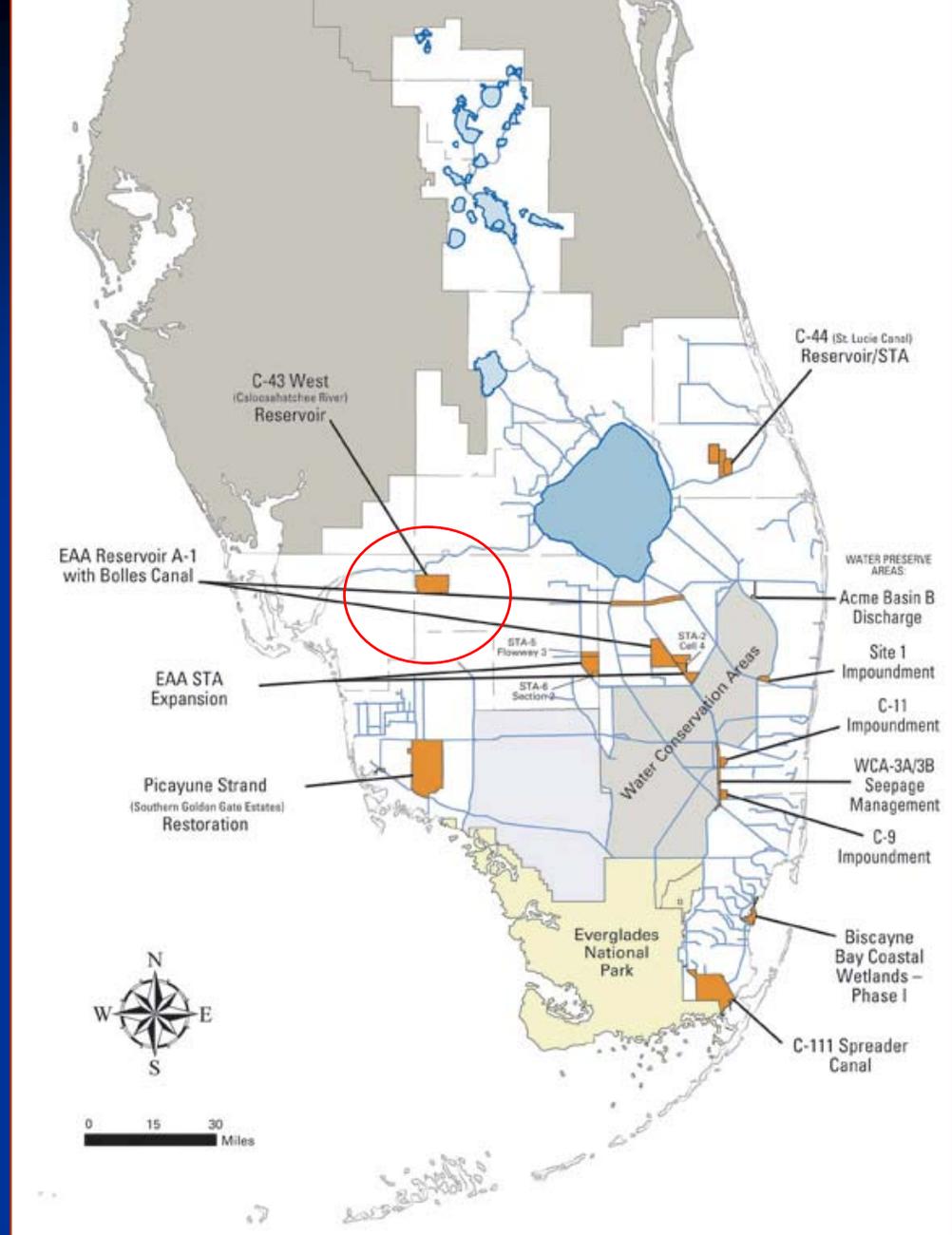


Operational Changes -
Rainfall Based Deliveries

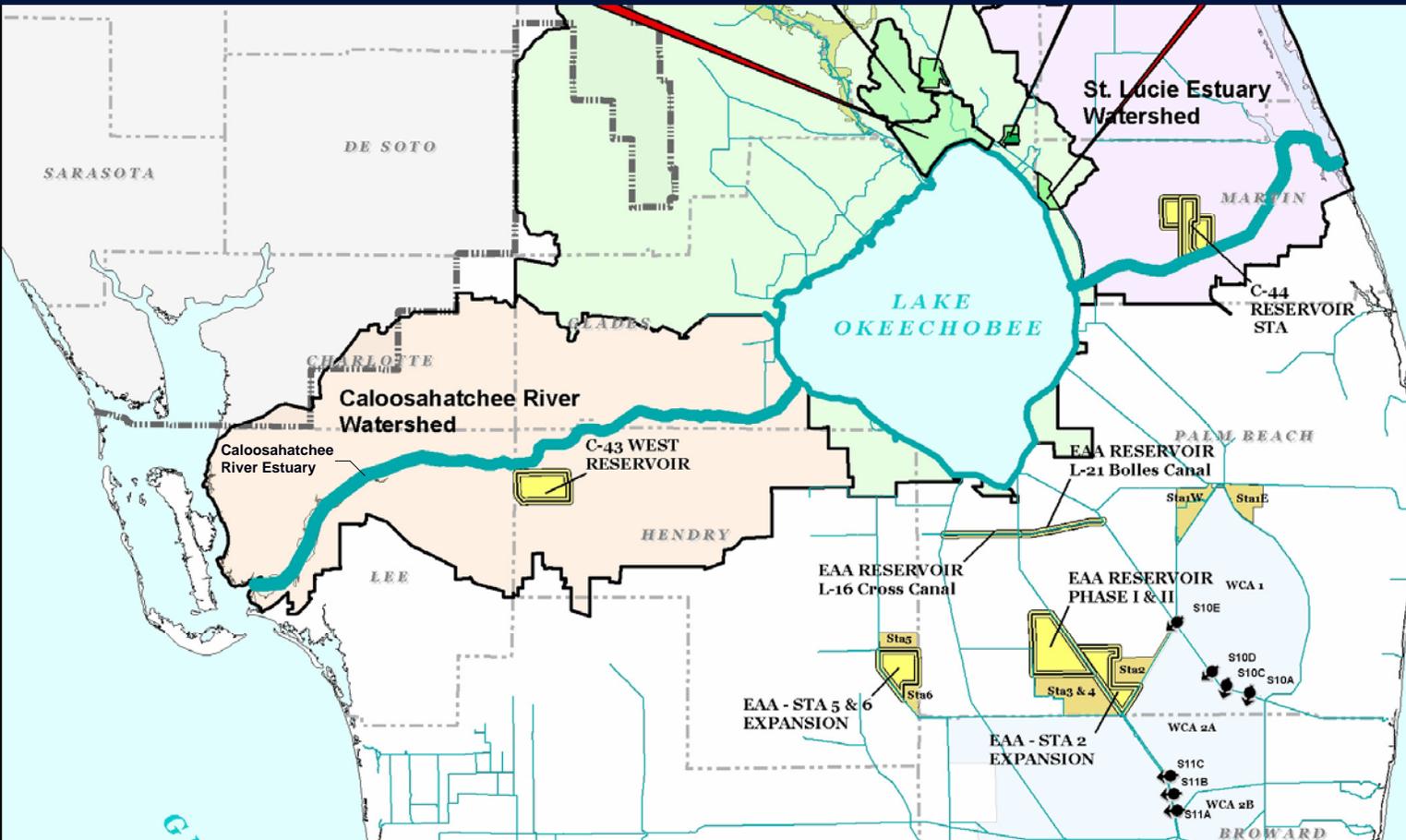


Acceler8

- State program to accelerate funding, design and construction of CERP components and provide ecosystem benefits sooner
- Acceler8 design evaluated in PIRs
- C-43 West Reservoir Acceler8 project
 - Land purchased with DOI and State funds
 - Design 60% complete
 - 2008 construction start date
 - Requires Section 404 permit from USACE for construction



Why CRWBSR NOW?



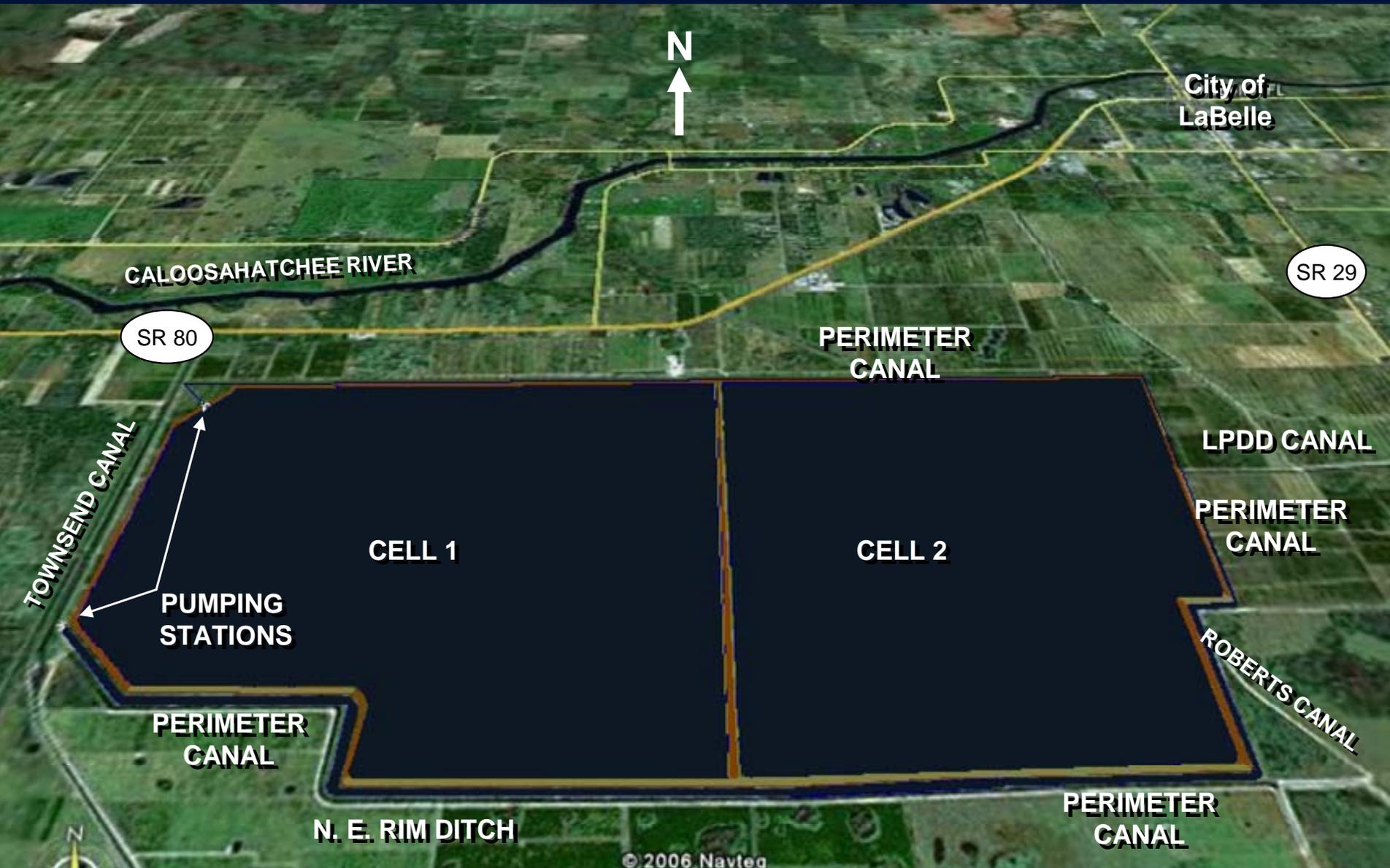
- Provides much-needed water storage and immediate relief to Estuary
- Reduces Caloosahatchee basin demands on Lake Okeechobee
- Provides 13% of the total 1.3 million ac-ft of reservoir storage in the CERP
- One of the ACCELER8 projects

Caloosahatchee River (C-43) West Basin Storage Reservoir

OVERVIEW OF RECOMMENDED PLAN

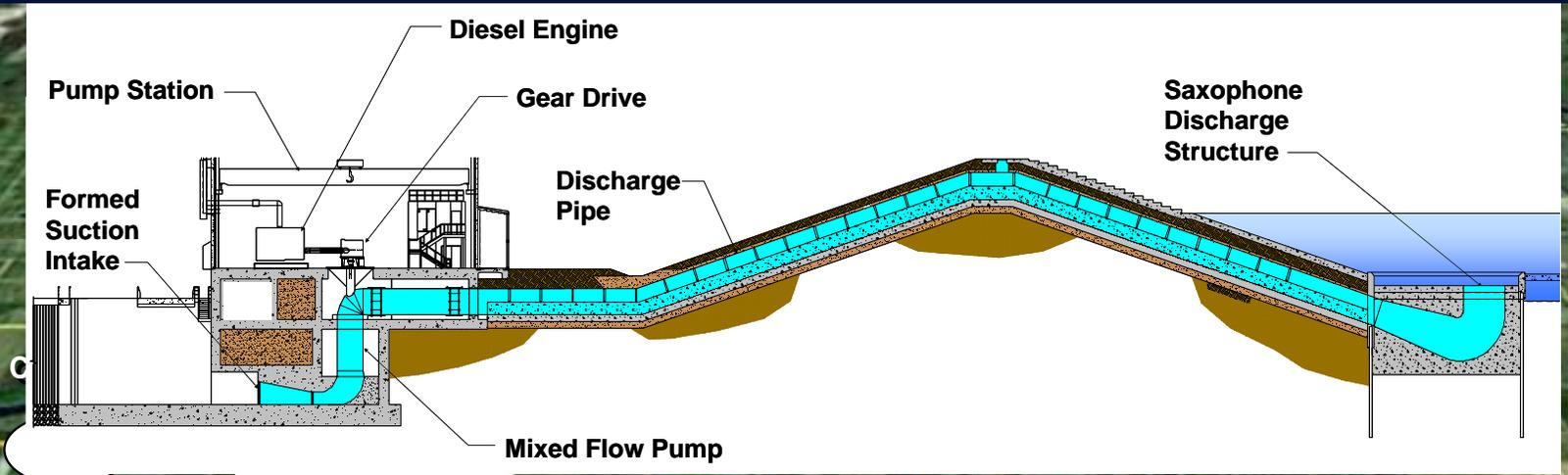
Caloosahatchee River (C-43) West Basin Storage Reservoir

The Recommended Plan

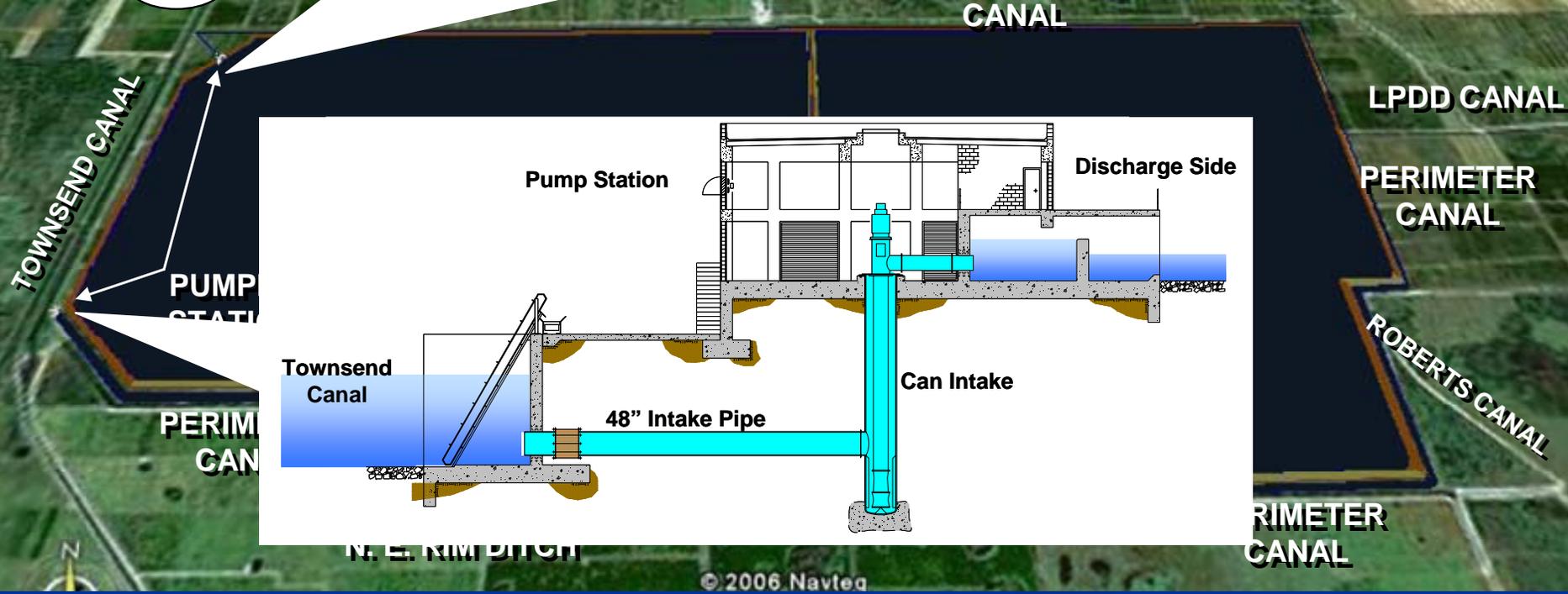


Caloosahatchee River (C-43) West Basin Storage Reservoir

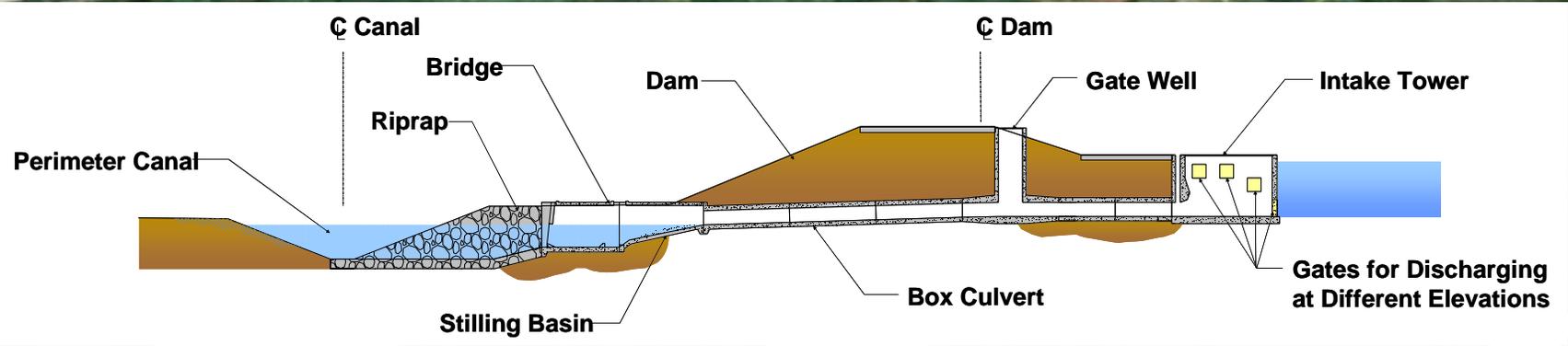
The Recommended Plan



SR 29



The Recommended Plan



Recommended Plan

Project Costs and Benefits

Total Initial Cost Final PIR : \$507,240,000

Fully Funded Cost: \$565,700,000

Restudy (Yellow Book): \$273,450,000

Ecosystem Benefits: 12,809 Average Annual Habitat Units

Annual Operation and Maintenance Cost: \$3,360,000

Average Annual Cost: \$35,100,000

Cost per Average Annual Habitat Units: \$2,740

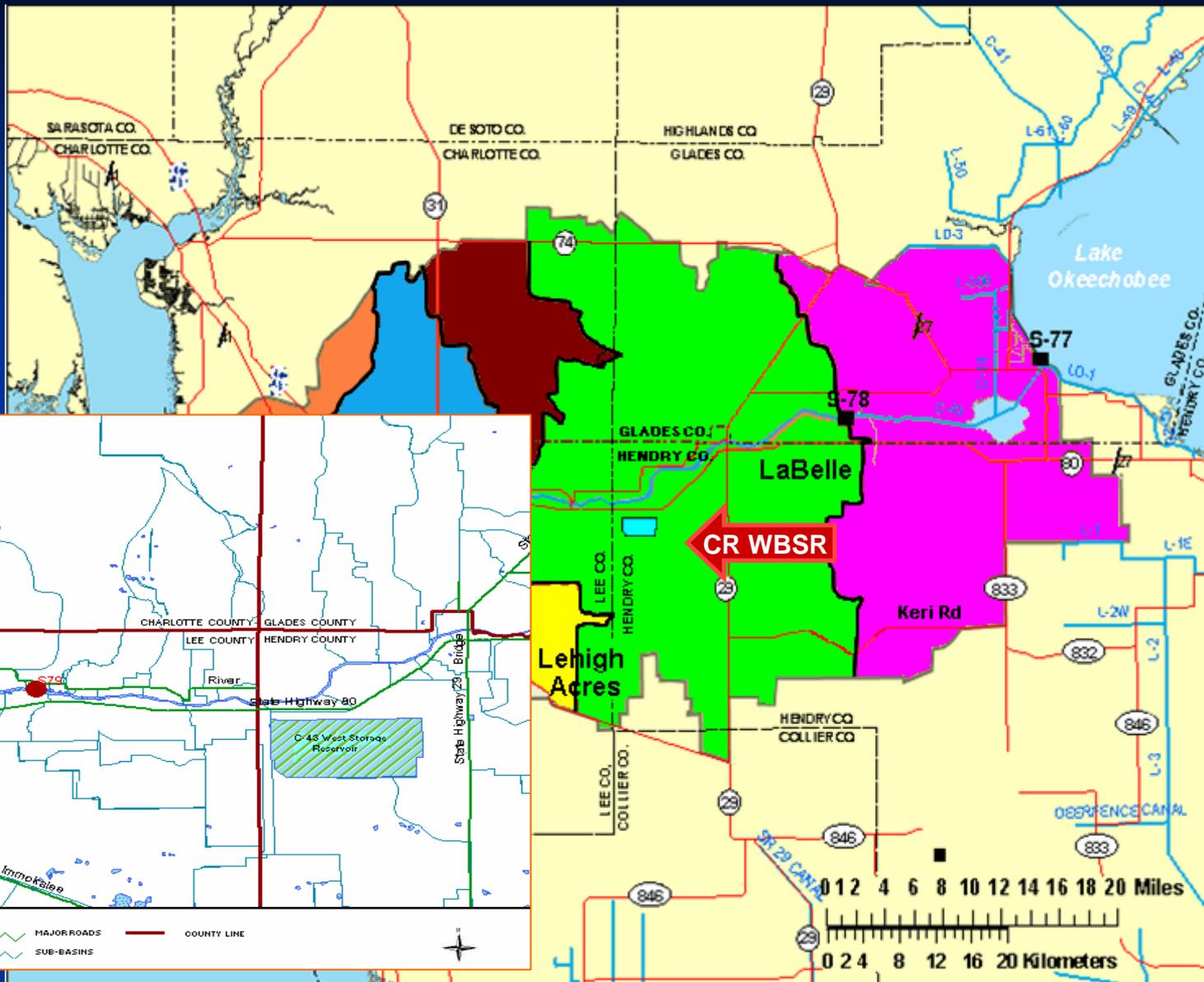
Estimated acres of estuary benefits: 71,000 acres

October 2006 price level

CALOOSAHATCHEE WATERSHED

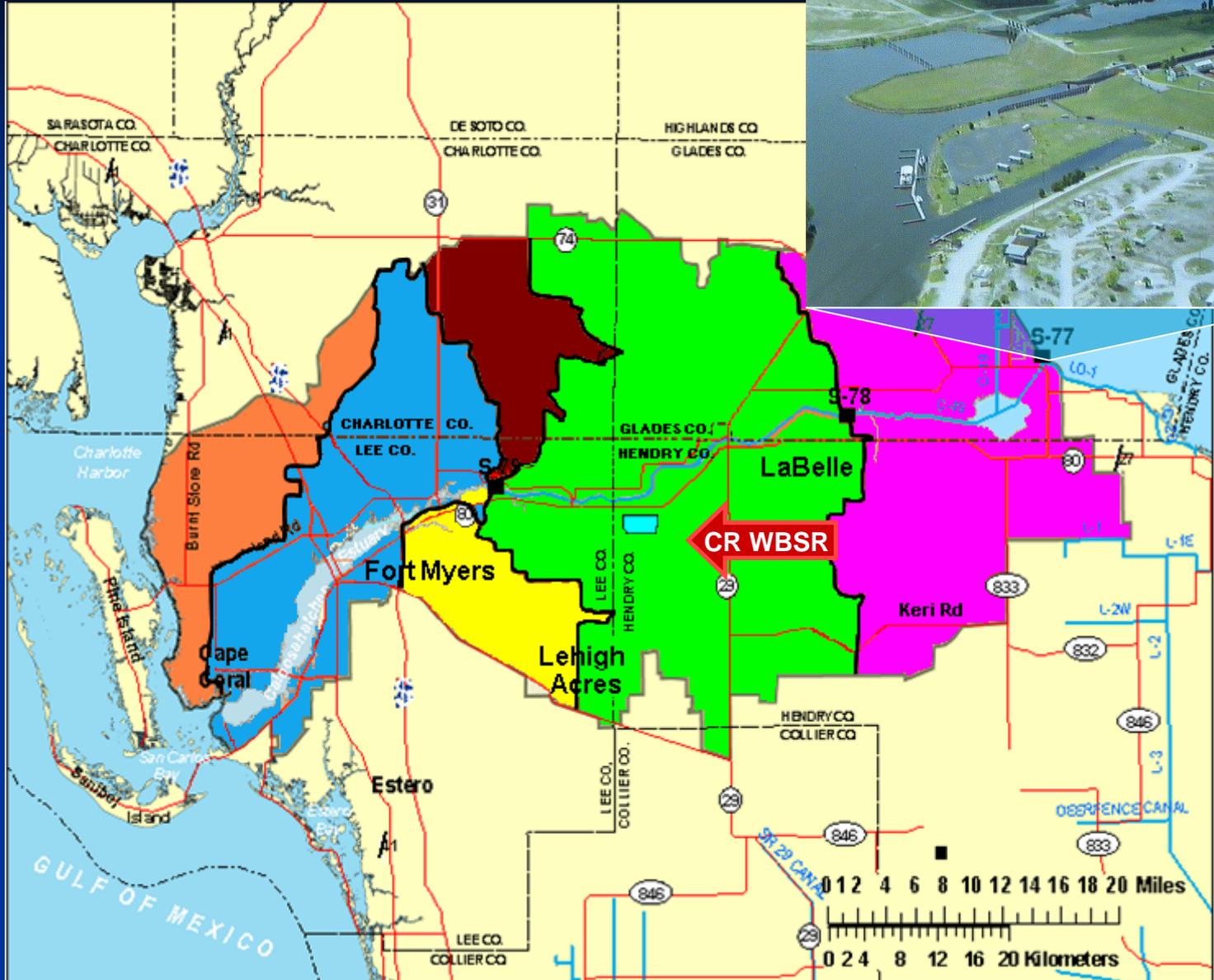
Caloosahatchee River (C-43) West Basin Storage Reservoir

Caloosahatchee River Watershed



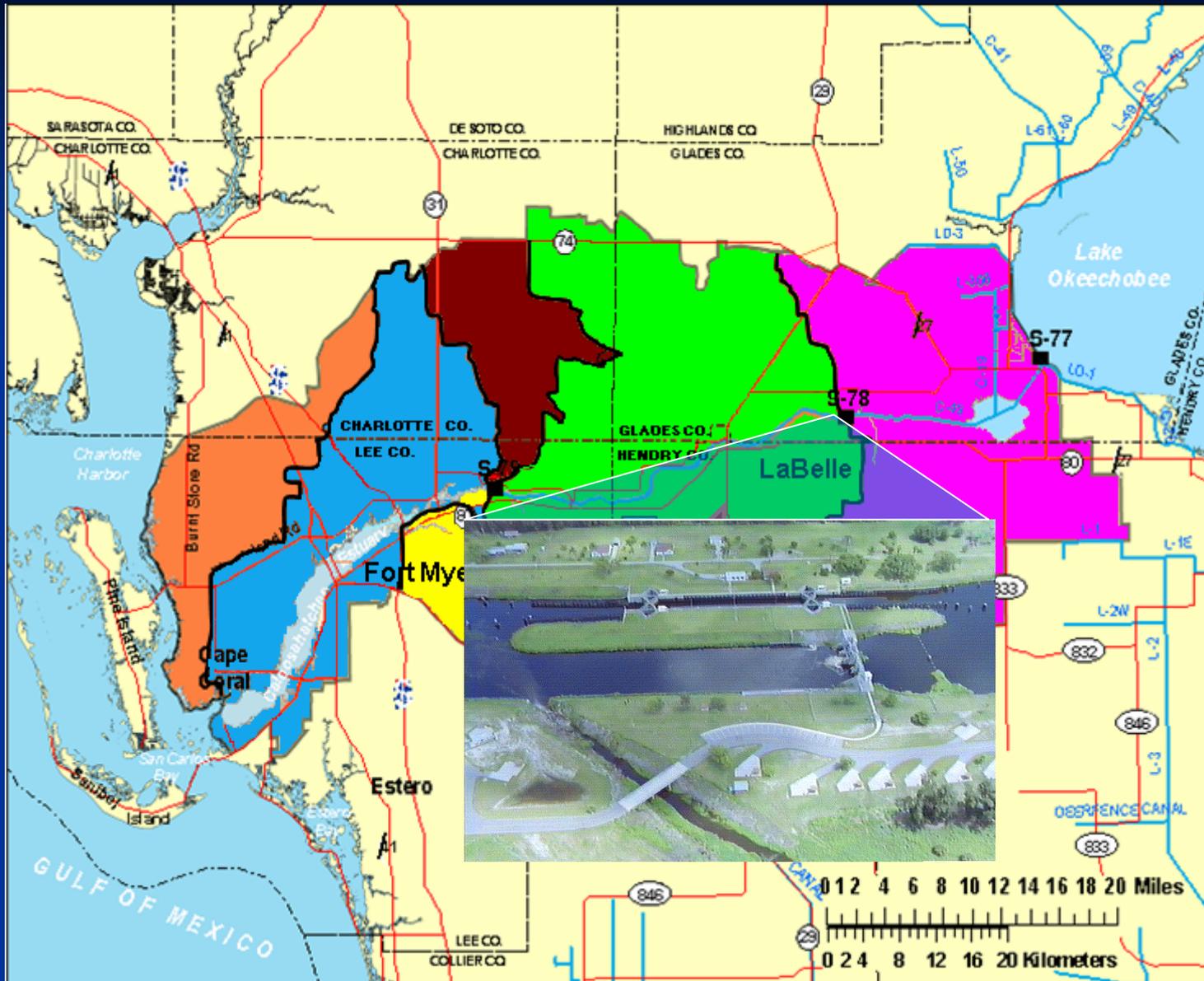
Caloosahatchee River (C-43) West Basin Storage Reservoir

Caloosahatchee River Watershed



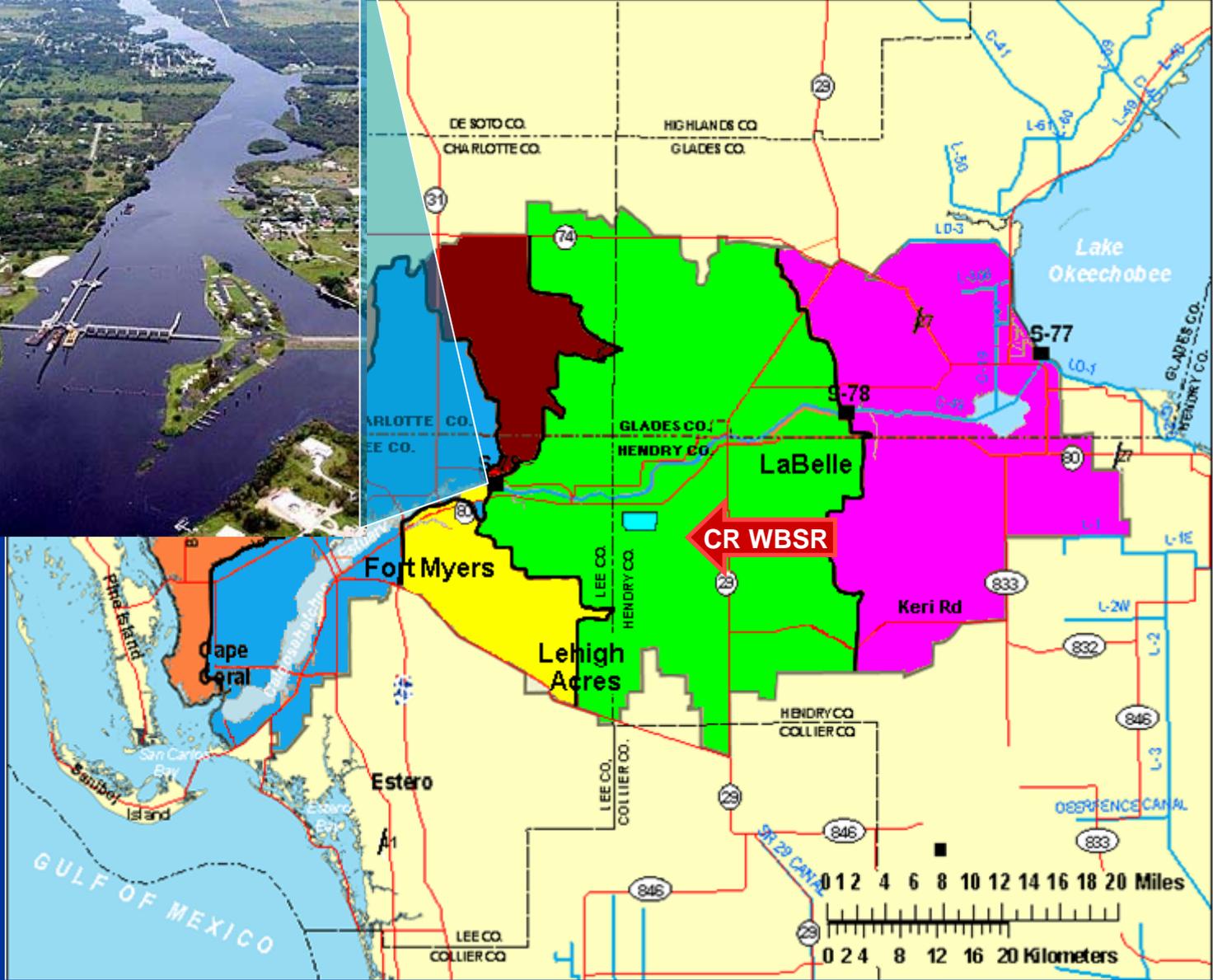
Caloosahatchee River (C-43) West Basin Storage Reservoir

Caloosahatchee River Watershed



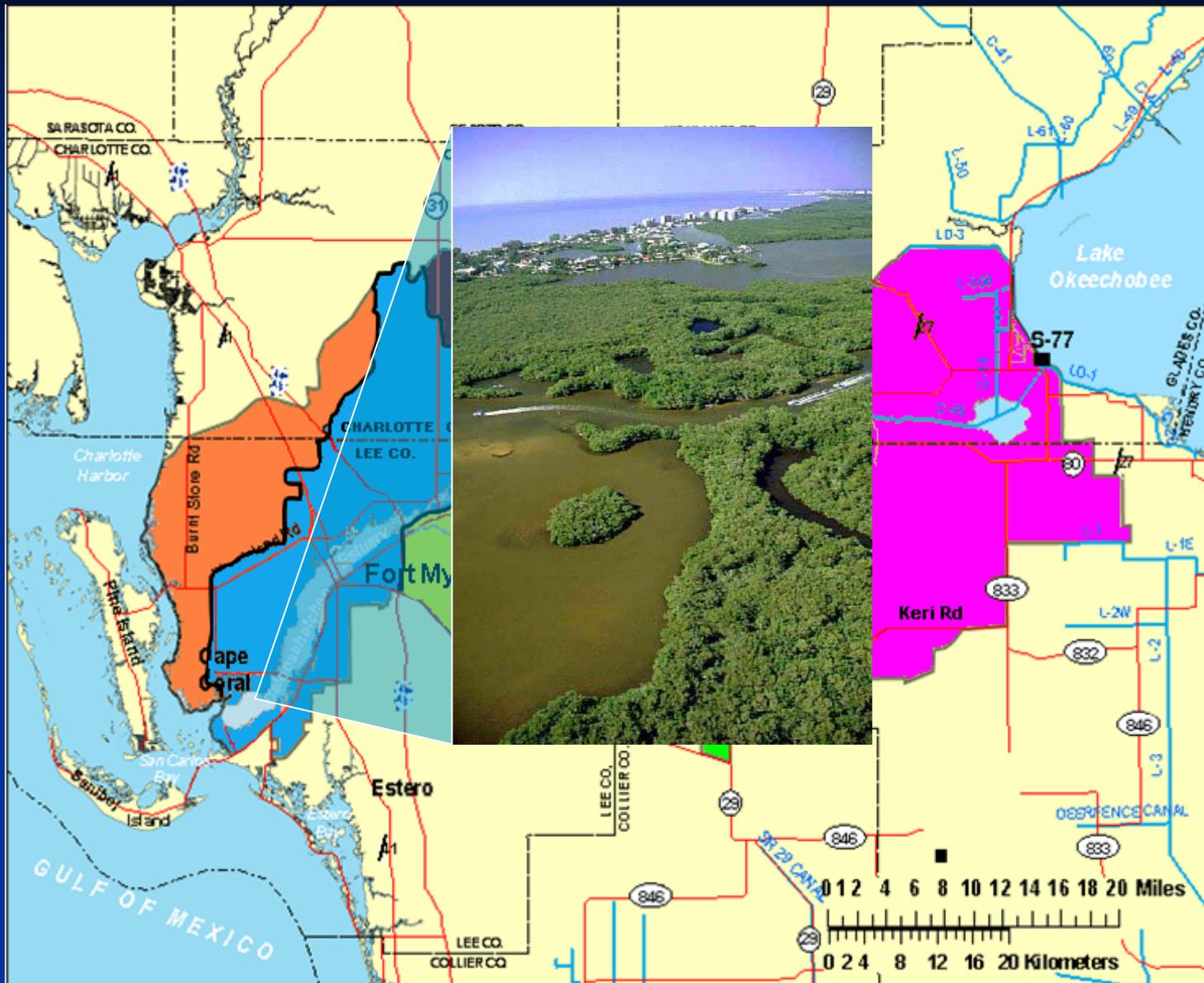
Caloosahatchee River (C-43) West Basin Storage Reservoir

Cape Hec River Watershed



Caloosahatchee River (C-43) West Basin Storage Reservoir

Caloosahatchee River Watershed



Caloosahatchee River (C-43) West Basin Storage Reservoir

Problems in the Caloosahatchee Estuary

Problems:

- Excessive high flow in wet season results in unnaturally low salinity
- Low flow or lack of flow in dry season results in anoxic conditions and high salinity levels

Results:

- Degradation of aquatic vegetation, oysters, seagrass, and associated fish and wildlife
 - Indicators of estuary health
 - Seagrass provides habitat for numerous estuarine species

Future Without Project Condition

Hydrology

Ecology

Socioeconomics



PLANNING

Caloosahatchee River (C-43) West Basin Storage Reservoir

Planning Goals & Objectives

Restore Ecosystem Function to the Caloosahatchee River & Estuary

- Improve quantity and timing of freshwater flows to the Caloosahatchee Estuary

Enhance economic values and social well being

- Provide recreational, tourism, and environmental education opportunities

Planning Constraints

- **Protect existing legal sources of water**
- **Maintain existing level of flood protection**
- **Avoid contributing to degradation of water quality**
- **Minimize impacts to existing wetlands**
- **Avoid impacts to navigation**

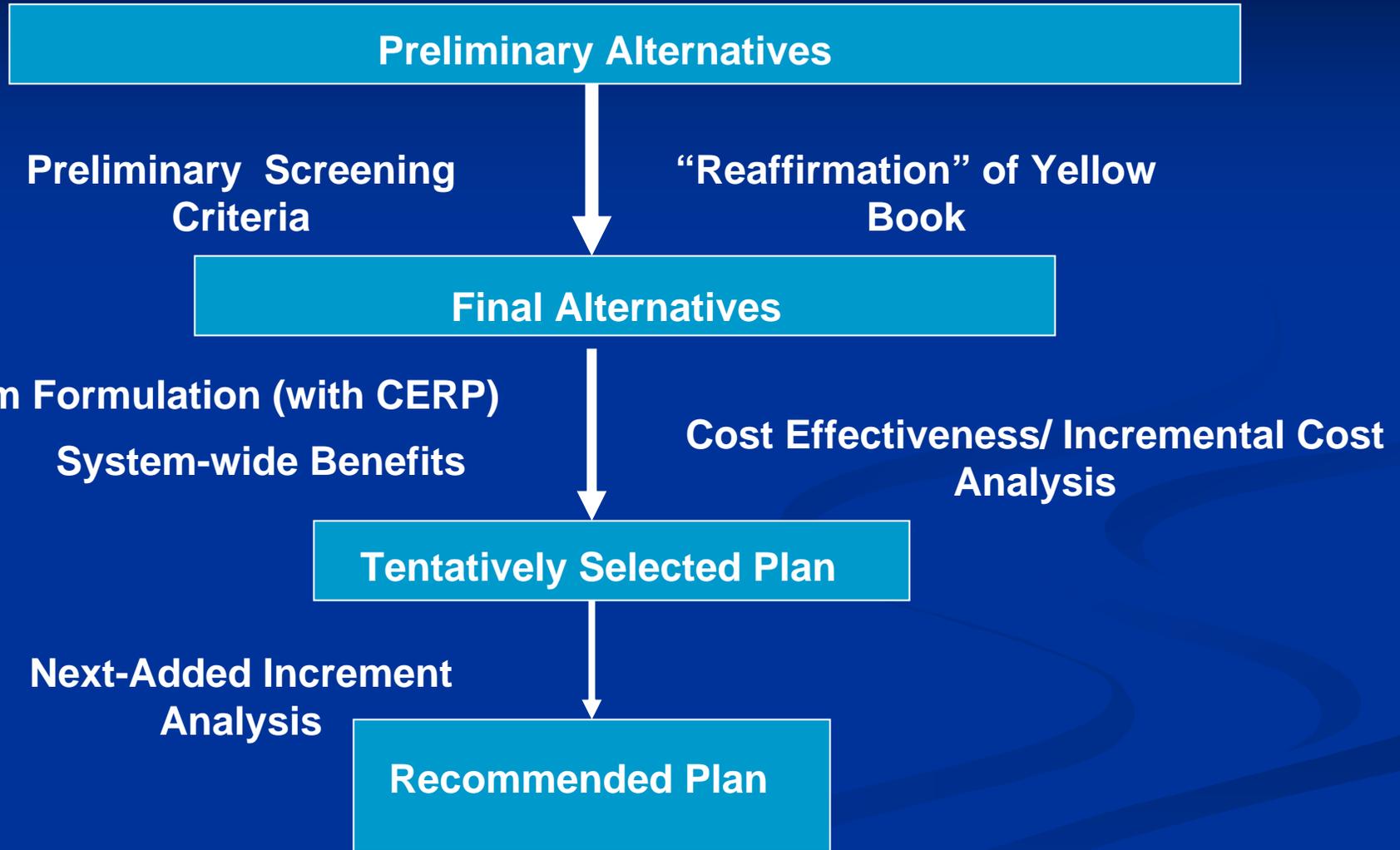
Plan Formulation Strategy

Two PIRs

Why?

- Our understanding of basin hydrology has changed
- Land available to build west reservoir
- Acceler8 west reservoir underway is a first step to provide restoration benefits to the estuary.

Formulation of Alternatives



Final Array of Alternatives

Alternative	Reservoir Size (ac-ft)	Dam Height (ft)	Pool Elevation (ft)	Pump Capacity (cfs)
Alternative One: No-Action (Future-Without)	N/A	N/A	N/A	N/A
Alternative 2:	100,000	29 to 34 (EL=54)	El=35	1500
Alternative 3 B:	170,000	32 to 37 (EL=57)	El=42	1500
Alternative 3 C:	170,000	32 to 37 (EL=57)	El=42	3800
Alternative 4A:	220,000	41 to 46 (EL=66)	El=47	3800

Ecosystem Benefit Analysis

Species used to determine benefits:

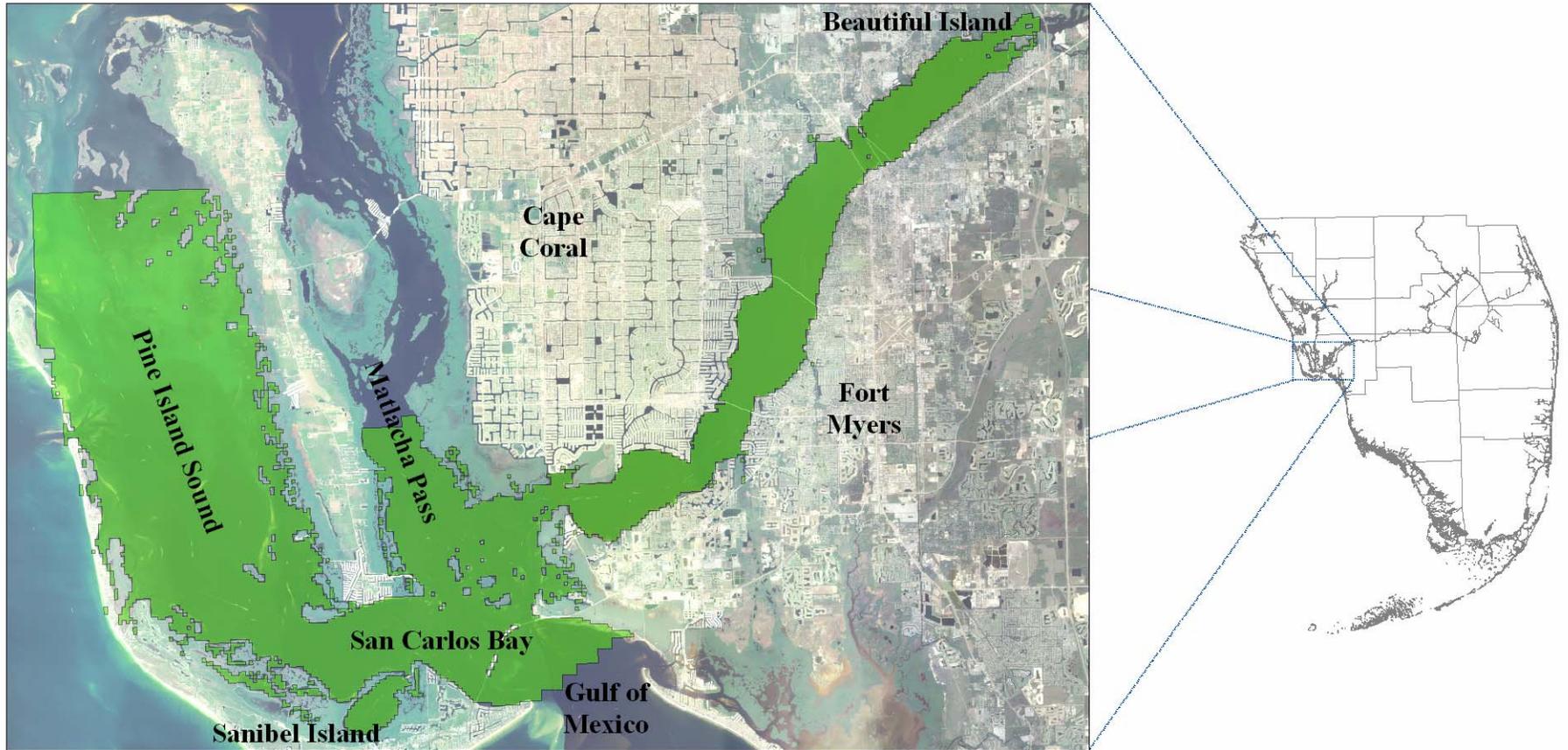
- Eastern Oyster
- *Vallisneria* – also known as tape grass or wild celery
- Seagrasses – *Halodule wrightii* and *Thalassia testudinum*

These species provide habitat for numerous estuarine organisms



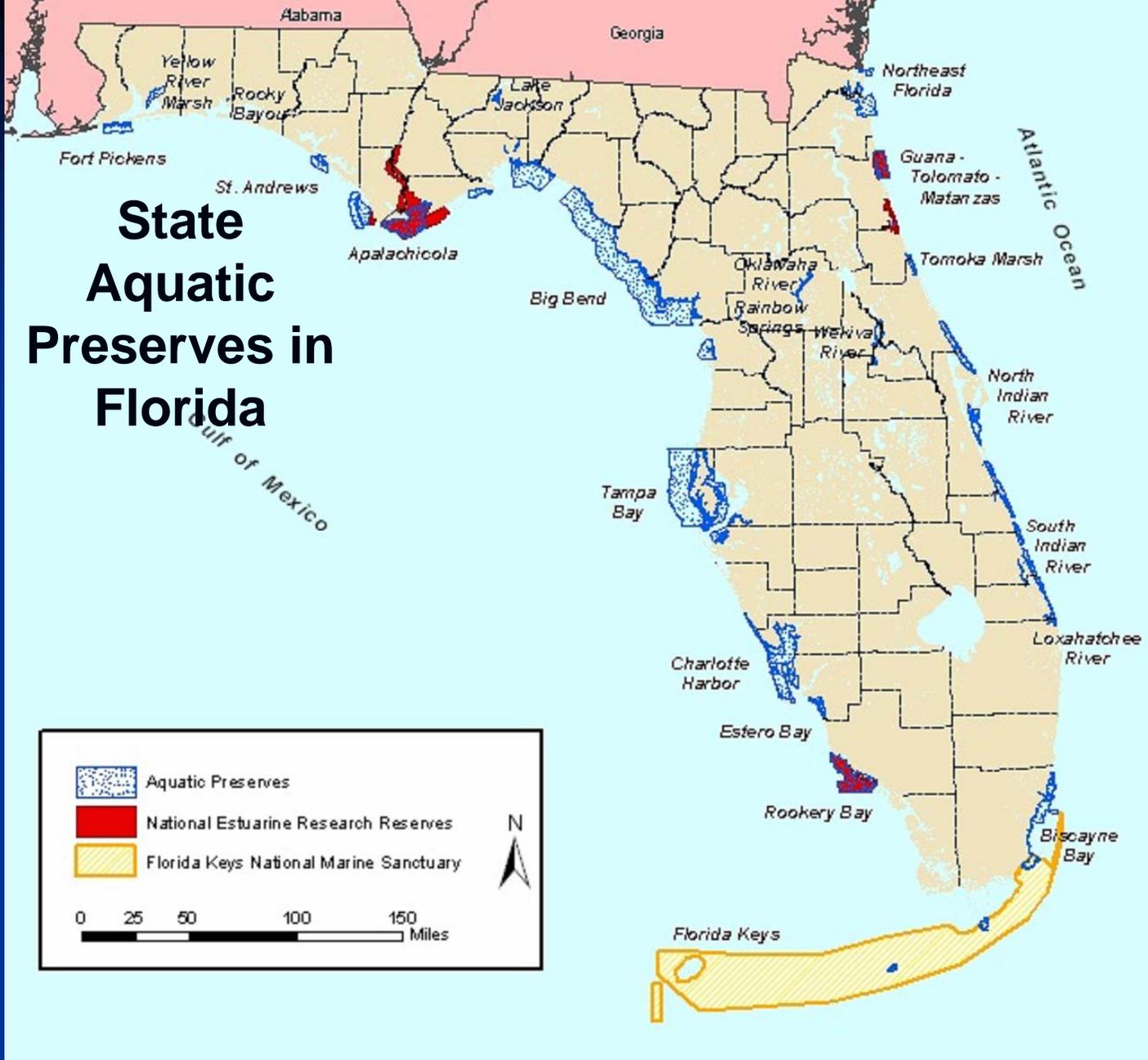
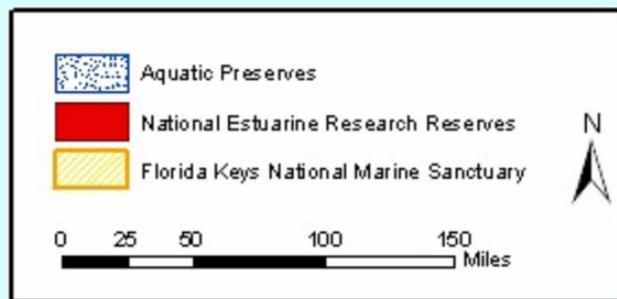
Image provided by US Geological Survey - Sirenia Project

Area of Ecosystem Benefit



Legend		
	Benefit Area	70,979 acres

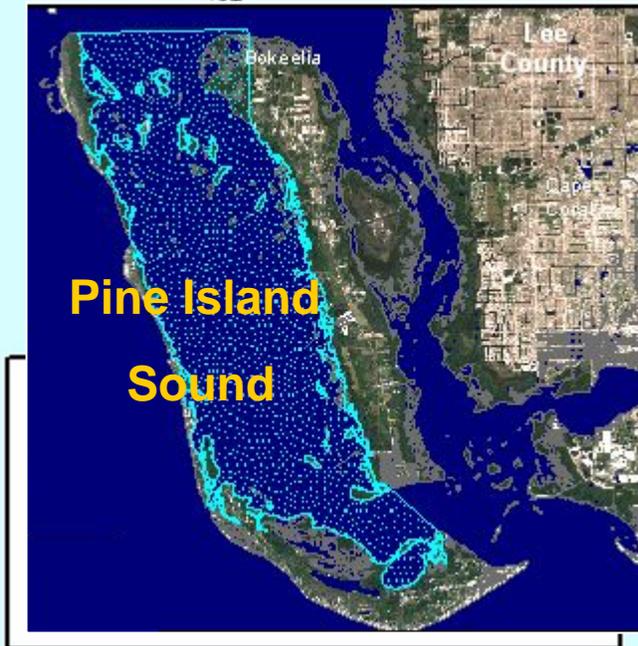
State Aquatic Preserves in Florida



State Aquatic Preserves in Florida

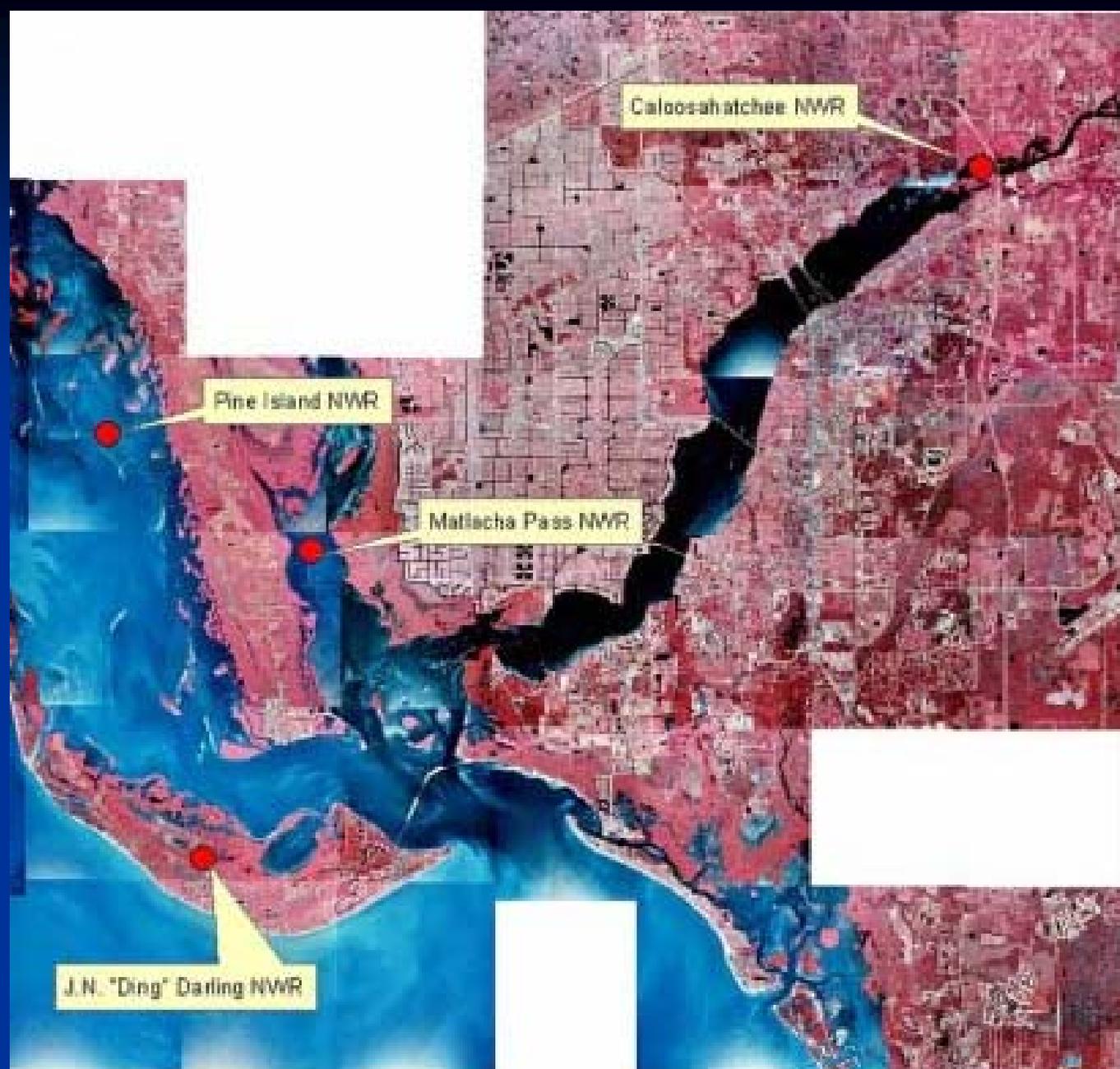


State Aquatic Preserves in Florida



Federally Protected Areas Benefited by Project

- 5 National Wildlife Refuges
- Federal Manatee Refuge
- Charlotte Harbor National Estuary Program



Caloosahatchee River (C-43) West Basin Storage Reservoir

Comparison of Final Array Alternatives

<u>Alternative</u>	<u>Reservoir Size (Acre-Feet)</u>	<u>Pump Capacity (CFS)</u>	<u>Ecosystem Lift (Avg Annual Habitat Units)</u>	<u>Avg Annual Costs (\$1000)</u>	<u>Avg. Cost per Habitat Unit</u>	<u>Cost Effective</u>
Alt 1 No-Action Future- Without	N/A	N/A	N/A	N/A	N/A	N/A
Alternative 2	100,000	1500	10,628	\$31,904	3,002	Yes
Alternative 3B	170,000	1500	12,809	\$35,100	2,740	Yes
Alternative 3C (NER)	170,000	3800	16,397	\$38,429	2,344	Yes
Alternative 4A	220,000	3800	15,907	\$40,629	2,554	No

Plan Selection

Selected Alternative Plan:

- Alt 3B (170,000 ac-ft storage, 1500 cfs pump capacity)

Compelling Reasons to Choose 3B

- Logical first increment that provides immediate relief to the Estuary
- Can be implemented incrementally: 3B does not preclude future implementation of 3C
- Cost effective plan in accordance with Corps guidance
- Achieves project objectives
- Effective management of risk and uncertainty

Selected Alternative Plan

Project Assurances

- Identification of natural system water to be reserved or allocated by the State of Florida
- Median annual value of 106,000 ac-ft

Savings Clause

- No adverse effect on existing legal sources of water
- Partial transfers
 - Agricultural users kept whole by impoundment
- No adverse effect on level of service for flood protection

Real Estate Considerations

- **Approximately 10,700 acres required**
- **Plan formulation and cost estimates based actual land acquisition costs**
 - **Per July 2007 draft of the Programmatic Regulations Guidance Memorandum #1**

SELECTED PLAN

Caloosahatchee River (C-43) West Basin Storage Reservoir

Caloosahatchee River (C-43) West Basin Storage Reservoir Project

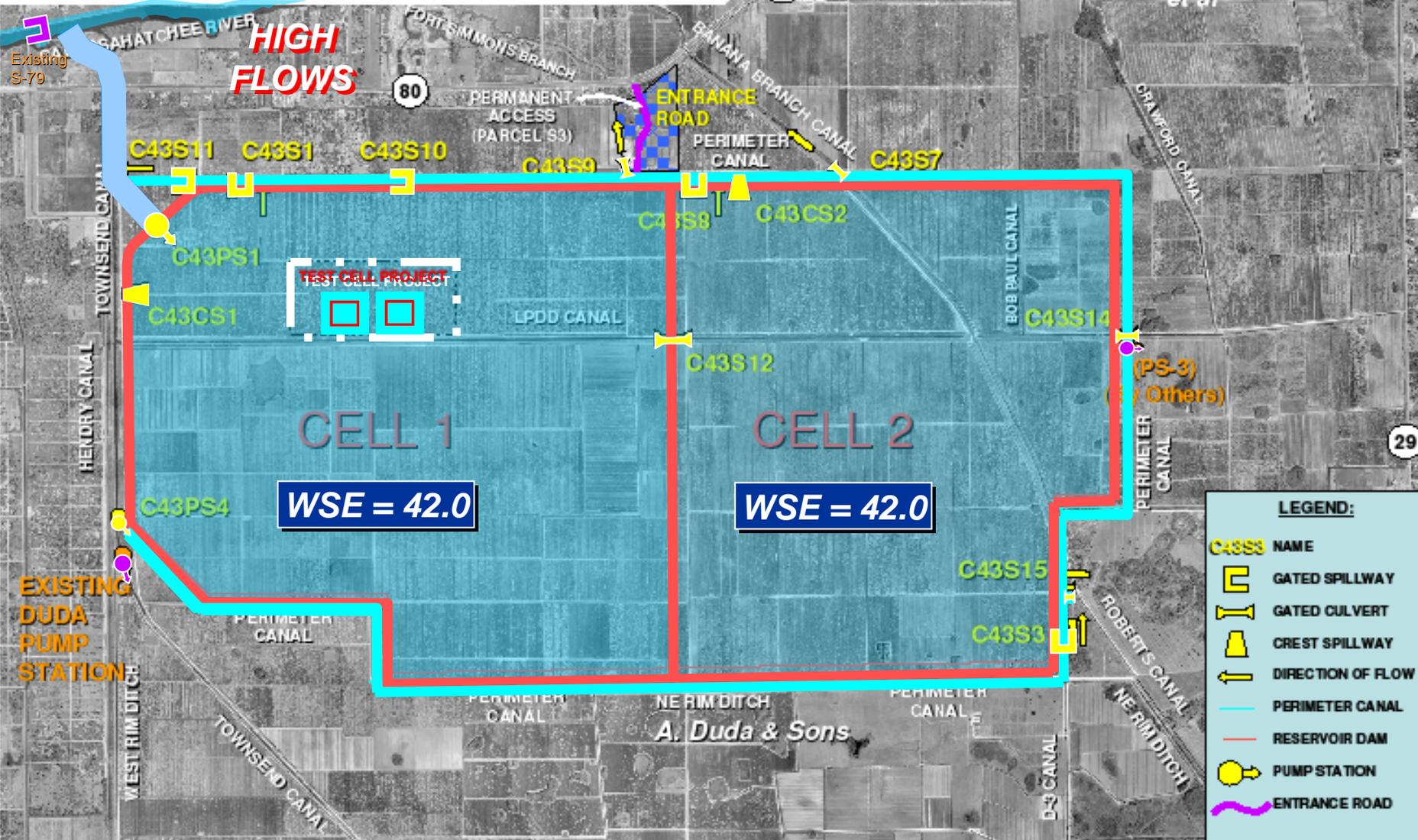
PRELIMINARY SITE PLAN

Stanley Consultants

May 2007



NORMAL PUMPING SEQUENCE



Caloosahatchee River (C-43) West Basin Storage Reservoir Project

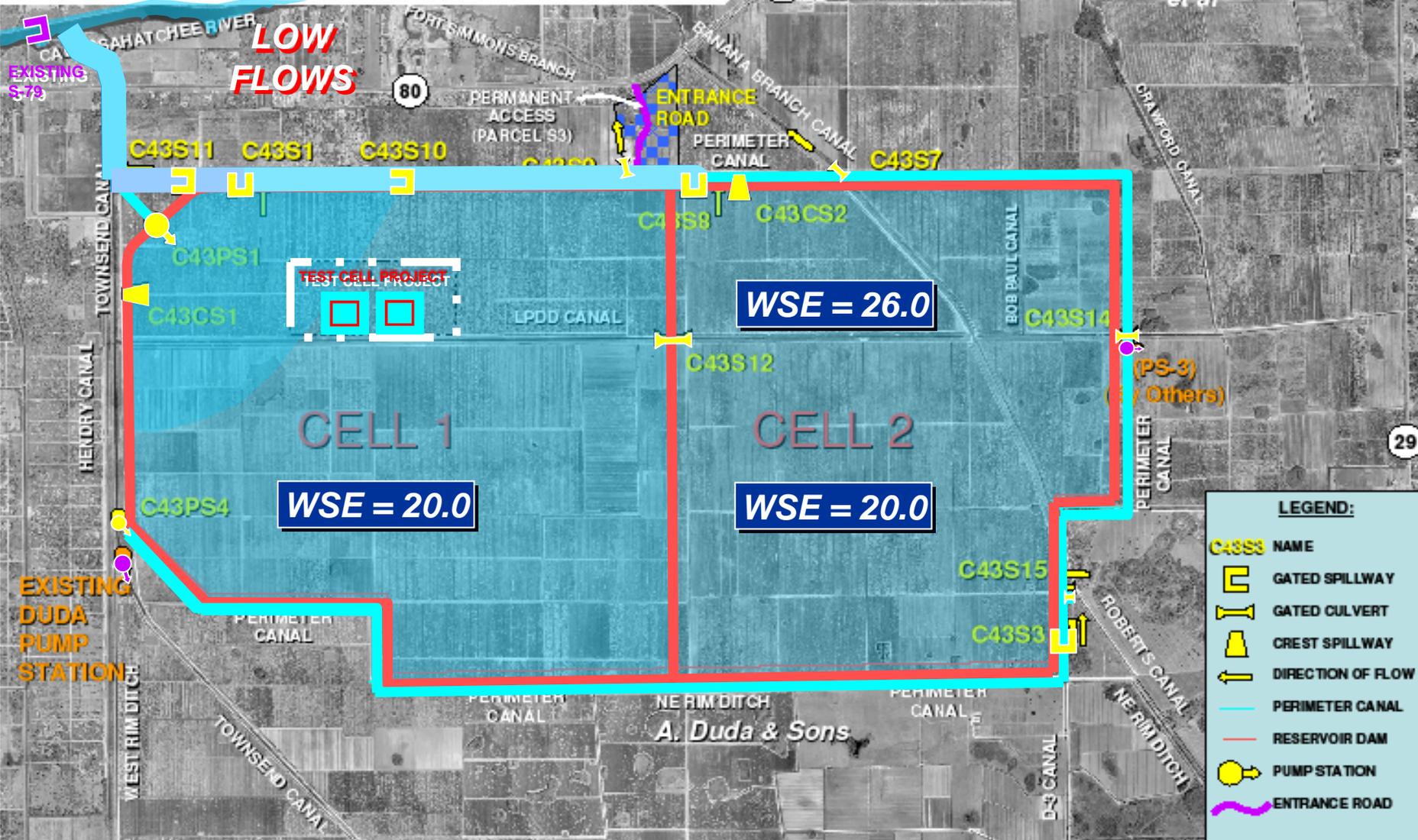
PRELIMINARY SITE PLAN

Stanley Consultants *pc*

May 2007



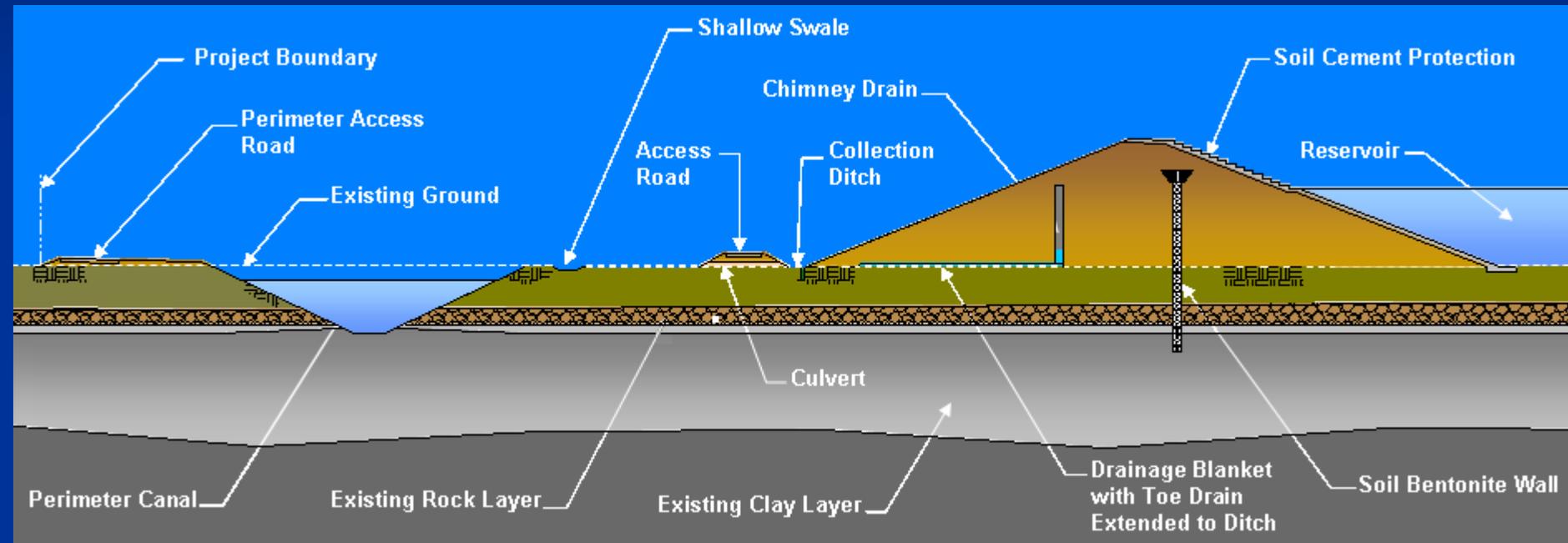
NORMAL DISCHARGE SEQUENCE



LEGEND:

C43SS NAME	NAME
	GATED SPILLWAY
	GATED CULVERT
	CREST SPILLWAY
	DIRECTION OF FLOW
	PERIMETER CANAL
	RESERVOIR DAM
	PUMP STATION
	ENTRANCE ROAD

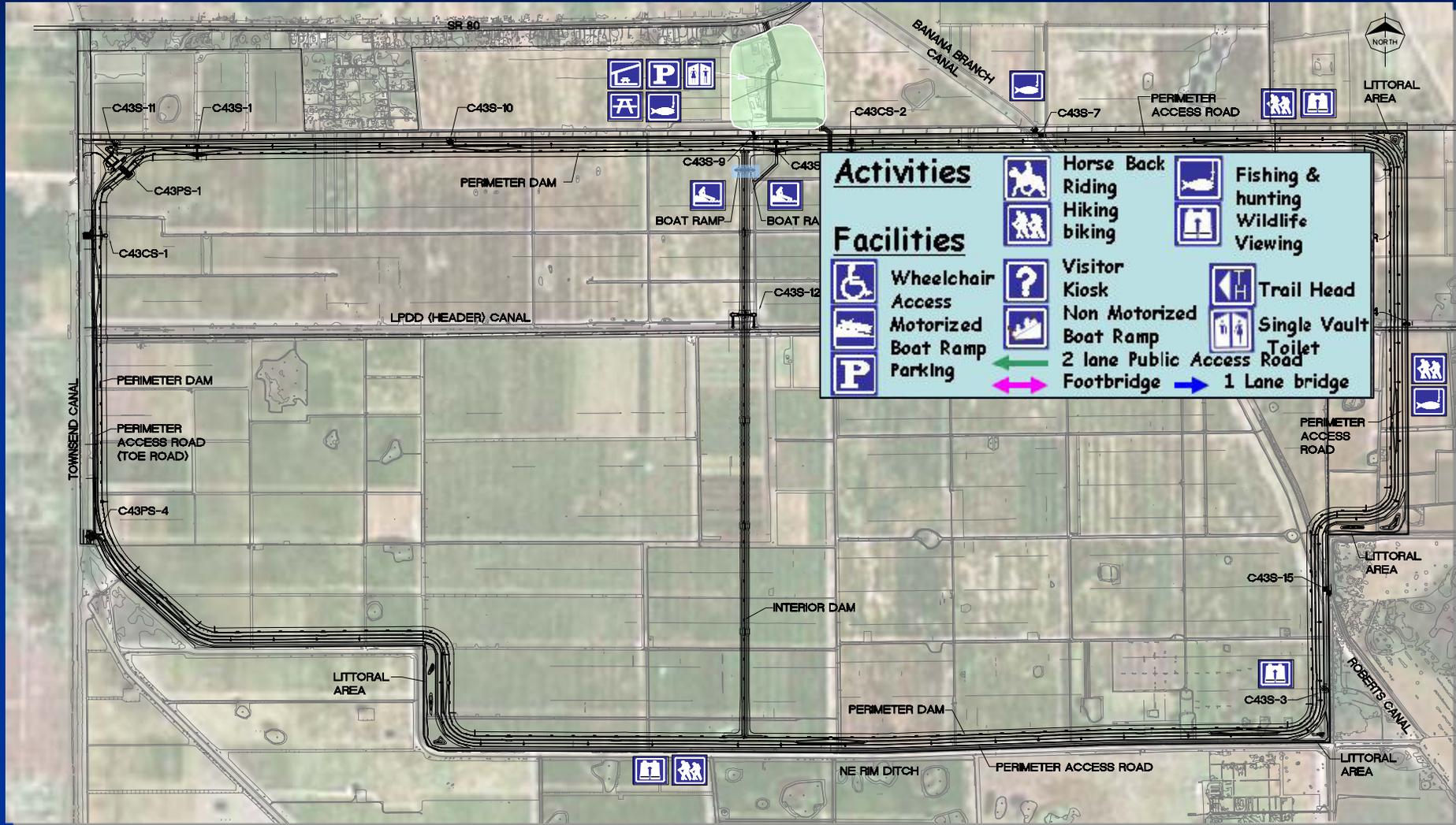
C-43 DAM & CANAL TYPICAL SECTION



Caloosahatchee River (C-43) West Basin Storage Reservoir



Recreation Features



Caloosahatchee River (C-43) West Basin Storage Reservoir

Cost Comparison

	Restudy (Yellow Book) Cost (October 2006 price level)	Final PIR Cost (October 2006 price level)
Total Project Cost	\$273,450,000	\$507,240,000
Lands & Damages	\$186,488,000	\$80,420,000
Channels & Canals	\$2,148,000	\$2,606,000
Embankments	\$20,528,000	\$246,647,000
Pumps	\$31,331,000	\$57,360,000
Flood Control & Diversion Structure	\$3,707,000	\$12,415,000
Planning, Engineering and Design	\$15,743,000	\$44,652,000
Construction Management	\$13,146,000	\$21,600,000

COMPLIANCE

Caloosahatchee River (C-43) West Basin Storage Reservoir

Independent Technical Review

- **Dedicated External Independent Technical Review Team**
- **Conducted at Key Milestones**
- **MVD and NWW review and approval of External ITR for Final PIR/EIS**

Type of Review	Milestone	Certification Date
ITR	Feasibility Scoping Meeting	11 FEB 2005
External ITR	Alternative Formulation Briefing	5 SEP 2006
External ITR	Draft Report	29 MAR 2007
External ITR	Final Report	26 JUL 2007

External Peer Review

External Peer Review

- Programmatic reviews conducted by National Academy of Sciences
- Compliance with March 2007 Riley memo and supplemental information
- Reviewed and Approved by SAD and MVD

NEPA Compliance

Integrated Project Implementation Report / Environmental Impact Statement

- Coordinated with Federal, State and local agencies, Native American Tribes, private organizations, and other interested parties
- All comments considered and incorporated as appropriate

Final Coordination Act Report

- Signed 17 July 2007
- No significant issues

Cultural Resources and Historic Properties

- Concurrence from State Historic Preservation Officer 5 June 2007

Section 7 (ESA) Consultation Complete

No Effect	May Affect But Not Likely To Adversely Affect	May Adversely Affect
<p>Bald eagle Florida scrub jay Florida grasshopper sparrow Red cockaded woodpecker Okeechobee gourd Beautiful pawpaw</p>	<p>Wood stork West Indian manatee Everglades snail kite American crocodile Piping plover Small tooth sawfish Sea turtles</p>	<p>Eastern indigo snake Audubon's crested caracara Florida panther</p>

HTRW

**Copper in soil from
previous agricultural
land use**

**Solution: encapsulate
contaminant in interior
reservoir levee**

**Local sponsor
responsibility**

USFWS buy-in on solution



POLICY REVIEW

Caloosahatchee River (C-43) West Basin Storage Reservoir

Public Involvement

Opportunities for Public Input

- **Public Workshops** 2001-2002
- **NEPA Scoping Meeting** May 2003
- **Regional and project PDT meetings** Feb 2002 – present
- **Recreation Workshop** Apr 2007
- **Public meeting on draft report** May 17, 2007
- **Public comment period on draft report** 27 Apr-11 Jun 2007
- **Acceler8 Design Public Workshops** 2005-2006

Consultation with South Florida Ecosystem Restoration Task Force

- **Draft Report** May 2007

Consistency with USACE Civil Works Strategic Plan Approach

Holistic Approach

CR(C-43)WBSR and CERP designed to address multiple water resource problems

Manage Water Resources by Watershed

CERP was formulated on 18,000 square miles of south Florida ecosystem

System Approach to Analyze Problems and Solutions

CR(C-43)WBSR and CERP evaluated economic, environmental, social, political, and other factors

Collaboration, Partnership, Teamwork → Solutions

CR(C-43)WBSR utilized multi-agency, multi-disciplinary project delivery team

Maximize Efficiency of Existing Resources

USACE, sponsor, and other agencies combined resources to maximize efficiency

Environmental Operating Principles

Strive to Achieve Environmental Sustainability

Three of 60+ components utilizing adaptive management framework

Consider Environmental Consequences

Provide immediate benefits to the Everglades system

Seek Balance and Synergy

Provides large ecosystem benefits while considering local impacts

Accept Responsibility

Compliance with National Environmental Policy and Endangered Species Acts

Mitigate Impacts

Maximizes benefits to the system while minimizing impacts to mitigation and cultural sites

Understand the Environment

Inclusive and open process that engaged all stakeholders, interests groups and agencies

Respect Other Views

Public input was encouraged through public and stakeholder meetings

12 Actions For Change

Employ integrated, comprehensive systems – based approach

Formulated to optimize system-wide benefits to further CERP goals and objectives

Employ risk-based concepts

Minimized risk by developing the Design Criteria Memorandums

Continuously reassess & update policy

Develop and update program specific guidance and apply lessons learned to all projects

Dynamic independent review

National Academy of Sciences/National Research Council in addition to external ITR and review by sponsor's design consultants

Employ adaptive planning & engineering systems

Project involves program-level adaptive assessment (monitoring) and further management actions

Focus on sustainability

Will be monitored based on long-term system-wide contributions

Review and inspect completed works

Utilized data obtained from SFWMD consultants (embankment overwash rates)

Assess & modify organizational behavior

Dedicated team for CERP review at HQ & SAD

Effectively communicate risk / Establish public involvement risk reduction strategies

Information provided regularly via public notices PDT meeting and summaries, newsletters, internet, etc.

Manage and enhance technical expertise and professionalism

SAJ, SFWMD and SFWMD consultants have premier experience in dams and reservoirs construction, overwash rates, etc. Numerous technical papers presented on design and test cells

Invest in research

Work with SFWMD on test cells for impoundments to mitigate risk and provide technical information

Schedule for Project Implementation

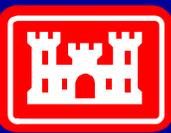
Draft PIR/EIS in Federal Register	April 2007
Final PIR submitted to HQ/SAD	July 2007
Civil Works Review Board	Aug 2007
Final PIR in Federal Register	Sept 2007
Chief's Report	Dec 2007
Record of Decision expected	Jan 2008
Project Cooperation Agreement	Aug 2009

RECOMMENDATION

**Approval to Release
Final Project Implementation Report and
Environmental Impact Statement
for
State and Agency Review**

**LET'S DO THIS
JUST SAY YES**





US Army Corps
of Engineers

One Team – Relevant, Ready, Responsive, Reliable

***Presentation
to the***

Civil Works Review Board

Comprehensive Everglades Restoration Plan

Caloosahatchee River (C-43) West Basin

Storage Reservoir ,

***Final Project Implementation Report
and Environmental Impact Statement***

by

BG Joseph Schroedel

Commander

South Atlantic Division

23 August 2007



US Army Corps
of Engineers

One Team – Relevant, Ready, Responsive, Reliable

Key Partners

- South Florida Water Management District (SFWMD)
 - Ken Ammon, Janet Starnes
- Department of Interior
 - Rock Salt
- Florida Department of Environmental Protection
 - Greg Knecht



US Army Corps
of Engineers

One Team – Relevant, Ready, Responsive, Reliable

SFEER HQ-DC

Team Members

- Gary Hardesty, HQ-DC SFEER Program Manager
- Steve Kopecky, Planning and Policy (SAD-RIT)
- Lee Ware, OWPR
- John Furry, Environmental (SAD-RIT, OWPR)
- Jeanette Gallihugh, Environmental (OWPR)
- Brenda Johnson-Turner, Real Estate (SAD-RIT)
- Phil Steffen, Counsel (SAD-RIT)
- Miguel Jumilla, Cost Engineering
- Jerry Webb, Engineering
- Dave Shepp, Engineering

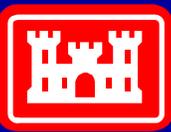


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One Team – Relevant, Ready, Responsive, Reliable

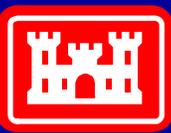
Rationale for SAD Support

- Concur with District Commander's findings & recommendations.
- Report complies with all applicable policy & laws in place at this time.
- Plan supported by sponsor and congressional delegation.
- Recognize advance work planned and supported by SFWMD
- Plan is consistent with Comprehensive Everglades Restoration Plan
- Plan will provide positive environmental benefits
- Anticipate favorable response to the draft Chief's Report.



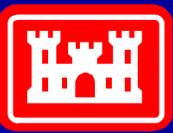
Certification of Legal & Policy Compliance

- Legal certification of the final Project Implementation Report made by SAJ District Counsel on 26 July 07.
- Technical and Policy Compliance:
 - External ITR certification complete, all ITR comments have been resolved.
 - Ecosystem PCX – MVD Certification, 30 Jul 07.
 - Policy compliance issues have been resolved.



SAD Quality Assurance Activities

- Continuous involvement throughout development of the PIR.
- Worked w/PCX, vertical team in establishment of peer review plan – approved by SAD 16 Aug 07.
- SAD Final Report Processing Checklist used to keep PDT focused on policy and ensure proposed plan reflects district leadership support.
- Review of Policy Compliance Memo: all issues have been adequately addressed.
- Examples of policy issues resolved.
 - Project phasing
 - Savings clause and identification of beneficial water



US Army Corps
of Engineers

One Team – Relevant, Ready, Responsive, Reliable

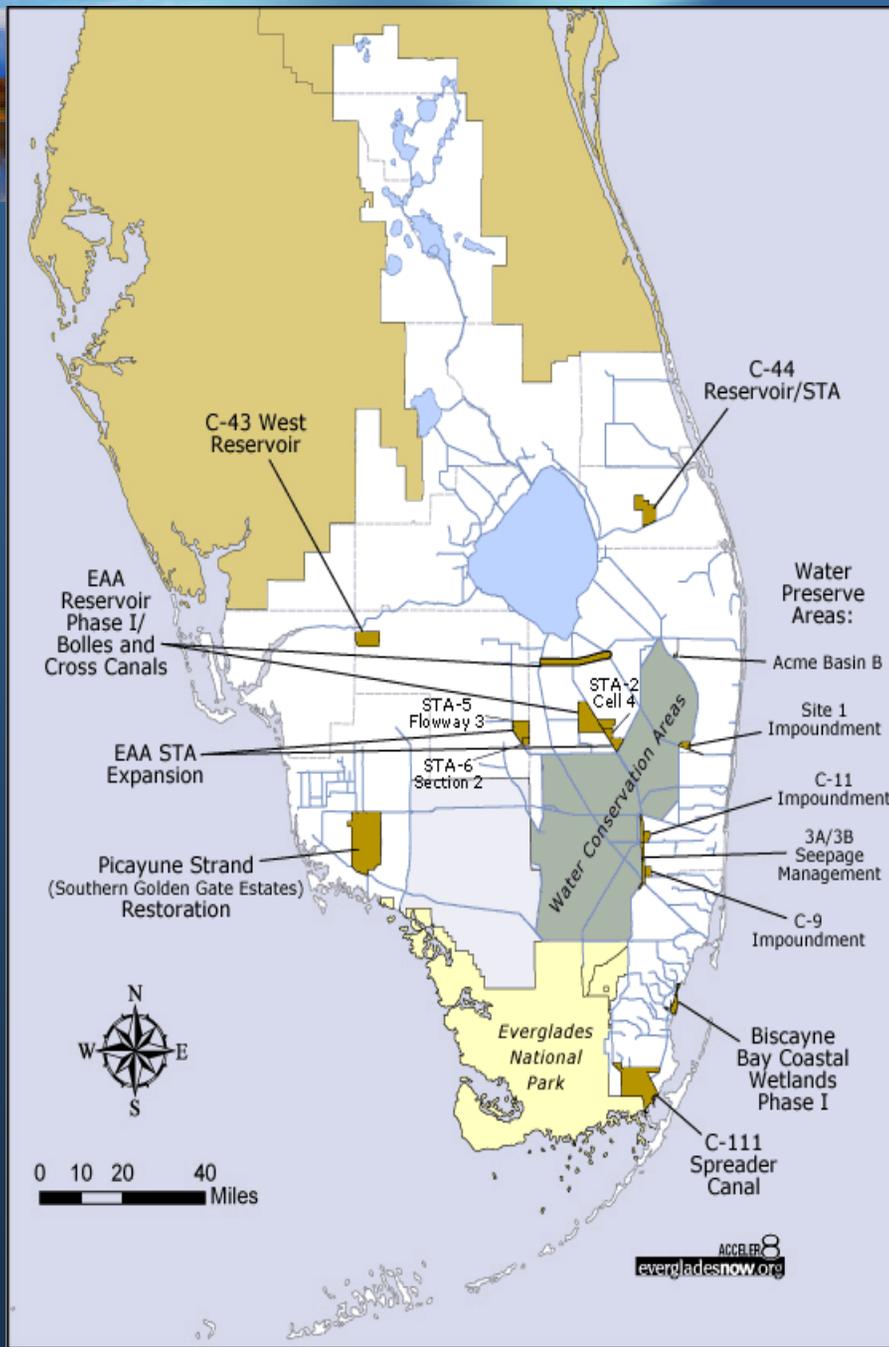
SAD Recommendation

- Approve Final Report
- Release for State and Agency Review
- Complete Chief's Report



Caloosahatchee River (C-43) West Basin Storage Reservoir Project

**Civil Works Review Board Meeting
August 23, 2007**

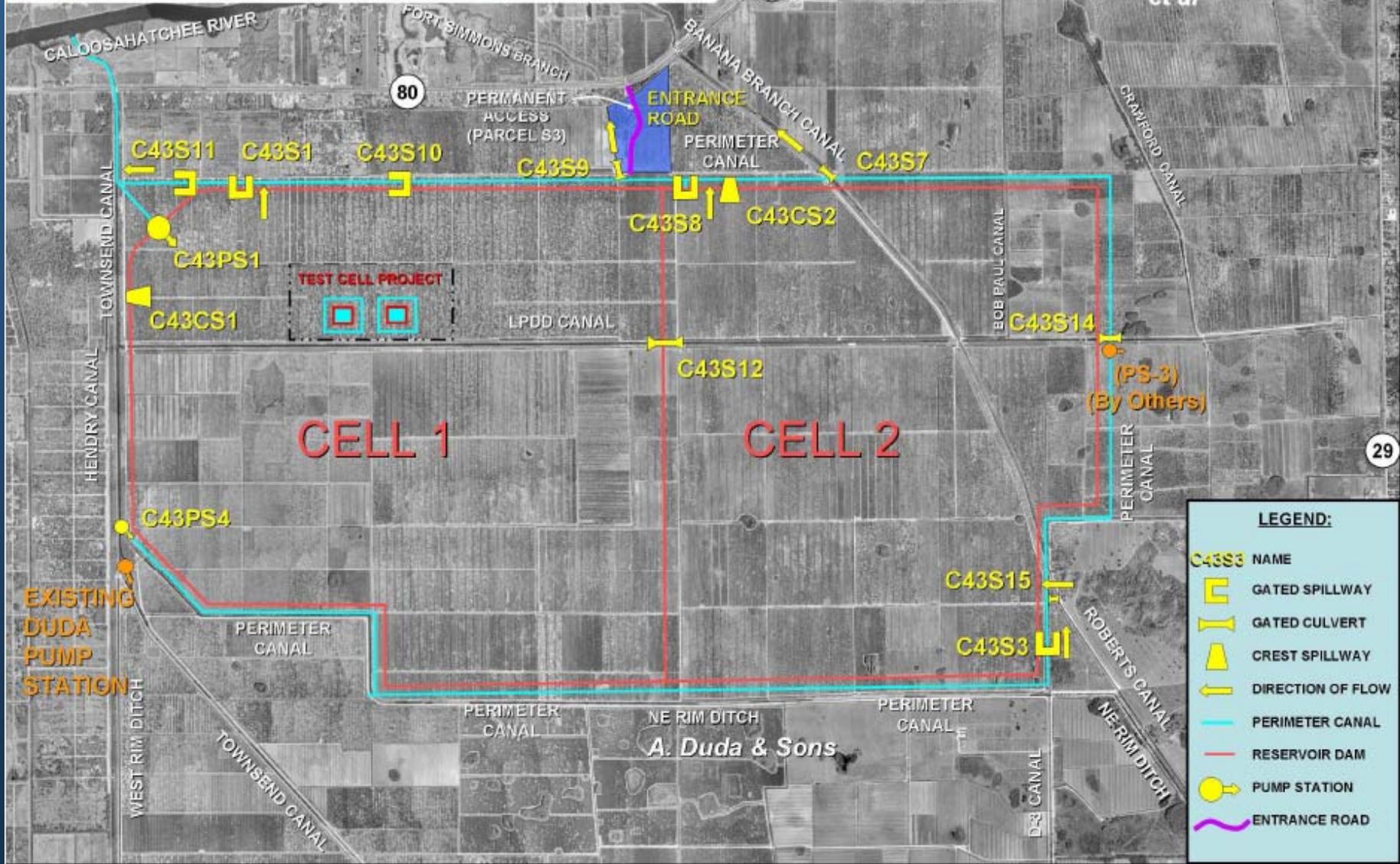


Caloosahatchee River (C-43) West Basin Storage Reservoir Project

PRELIMINARY SITE PLAN



May 2007



Bob Paul, Inc. et al

29

29

LEGEND:

- | C43S3 | NAME |
|-------|-------------------|
| | GATED SPILLWAY |
| | GATED CULVERT |
| | CREST SPILLWAY |
| | DIRECTION OF FLOW |
| | PERIMETER CANAL |
| | RESERVOIR DAM |
| | PUMP STATION |
| | ENTRANCE ROAD |





Sponsor Support for Project

- Concur with selected alternative plan
- Concur with conceptual design and cost estimate – aligns with detailed design and cost estimates being developed independently by SFWMD contractors
- In lock-step with Corps-SAJ on PIR, except one recommendation in District Engineer's Recommendations
 - Method for valuation of lands for crediting purposes



PIR Recommendation

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

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

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



Section 601(e)(5) of WRDA-2000

(5) CREDIT.—

(A) IN GENERAL.—Notwithstanding section 528(e)(4) of the Water Resources Development Act of 1996 (110 Stat. 3770) and regardless of the date of acquisition, the **value** of lands or interests in lands and incidental costs for land acquired by a non-Federal sponsor in accordance with a project implementation report for any project included in the Plan and authorized by Congress shall be—

- (i) included in the total cost of the project; and
- (ii) credited toward the non-Federal share of the cost of the project.



Engineering Regulation (ER)405-1-12

12-36. **Value** of Lands, Easements, and Rights-of-Way (LER).

a. Date of Valuation.

(1) The fair market value of LER owned by the non-Federal sponsor on the effective date of the PCA for the project is the fair market value of the real property interests as of the date the non-Federal sponsor provides the Government with authorization for entry thereto for construction purposes.

(2) The fair market value of LER acquired by the non-Federal sponsor after the effective date of the PCA for the project is the fair market value of the real property interests at the time the interests are acquired.



Corps Recent Policy Decision on Cost-Sharing Water Quality Features

- **Shifts over \$250 million in costs to State for Lake Okeechobee Watershed Project alone**
- **Extension of this policy call to other CERP Projects would result in even greater impact on State's cost-share**
- **In light of this policy decision and the additional cost burden, State must re-evaluate our ability to provide 50% cost-share for all of CERP**
- **Has direct influence on which alternative land valuation procedure State can support**



State Proposal Would Not Change Plan Selection

- **Concern has been expressed that State's requested valuation approach would result in selection of a different alternative project site**
- **Selected site is uniquely sited amidst existing canals to collect watershed and lake runoff**
- **Selected site has unique clay layer making it very suitable for reservoir**
- **80% of land is covered under DOI Grant so would not be subject to alternative valuation approach**
- **Any alternative site, 100% of the land need to be valued using the alternative approach, making it highly unlikely to result in lower cost**



Potential Cost Impact of Using Standard Corps Valuation Approach

- Concern has been expressed that State's request would significantly impact project cost
- For C-43 Project, only about 3,300 acres (~30%) would be subject to standard valuation procedure; remainder are covered under DOI Grant Agreement
- Using standard valuation procedure would add about \$15 to \$25 million to a total project cost of \$507 million (~ 3 to 5% increase)



Sponsor Request

- **Approve Final PIR**
- **Set up meeting between State, Chief of Engineers and Secretary Woodley to develop an alternative, mutually acceptable approach for valuing lands for crediting purposes**
- **Revise recommendation and cost estimate in Chief's Report based on agreement reached with Secretary Woodley.**



Acceler8 Construction Update

August 23, 2007



In Construction: \$259 Million

- STA 2 Expansion (Gulf Group) \$ 18.7 Million 99 % complete
- STA 5 Expansion (Interlaken) Completed
- STA 6 Expansion (Harry Pepper) \$ 23.4 Million 99 % complete
- C-44 Test Cells (Barnard) Completed
- C-44 TIWCD Reconfig (CAN Const) Completed
- C-44 Site Prep Phase I (Overland) Completed
- C-44 Site Prep Phase II (Running W) \$ 4.3 Million 61 % complete
- Picayune - Demolition (Cross) Completed
- Picayune – Prairie Canal (Globetec) Completed
- Picayune – Road Removal (AEM) \$ 3.9 Million 98 % complete
- EAA Reservoir – GMP#1 (BPJV) Completed
- EAA Reservoir – GMP#2 (BPJV) \$112.7 Million 16 % complete
- EAA Reservoir – GMP#3 (BPJV) \$ 95.9 Million 21 % complete





DISCUSSION



Civil Works Review Board

Significant Policy Review Concerns

CERP, Caloosahatchee River, C-43 West Basin Storage Reservoir Project

Lee Ware, P.E.

Office of Water Project Review

Planning and Policy Compliance Division

Washington, DC – August 23, 2007



CERP, C-43 West Basin Storage Reservoir Project

Areas of Policy Concern:

- Without-Project Conditions
- Independence of Phased Projects
- Environmental Compliance
- Engineering Design
- MCACES Cost Estimates
- Characterization of the TSP
- Sponsor Support and Crediting



CERP, C-43 West Basin Storage Reservoir Project

Without-Project Conditions

Concern: The AFB materials did not adequately explain how future without-project conditions would be shaped by regulatory considerations.

Reason: Regulatory authorities that protect EFH and T&E species, assure mitigation of wetland losses, protect water quality by implementing BMPs, and assure compliance with flood plain regulations are critical to projecting future conditions in accordance with the P&G.

Resolution: Additional text was provided in the draft and final PIRs to describe the effects of the regulatory environment on future without-project conditions.

Resolution Impact: Concern resolved



CERP, C-43 West Basin Storage Reservoir Project

Independence of Phased Projects

Concern: The AFB materials presented C-43 as a multi-phased project. It wasn't clear whether this project would be impacted by future studies of additional basin needs.

Reason: Projects implemented as separable elements must be independent and economical in order to assure that wise investments are made.

Resolution: The final report describes the C-43 project as an independent element for estuary restoration. Future PIR studies will address water supply in the upper Caloosahatchee Watershed and ASRs.

Resolution Impact: Concern resolved



CERP, C-43 West Basin Storage Reservoir Project

Environmental Compliance

Concern: The AFB materials were unclear on what efforts had been undertaken to achieve environmental compliance, what input had been provided, and how that was being incorporated into the project planning.

Reason: In addition to NEPA requirements, planning efforts must comply with all applicable statutes and Executive Orders in developing the project.

Resolution: The PIR explains the status of compliance and how input was considered in developing the recommended plan.

Resolution Impact: Concern resolved



CERP, C-43 West Basin Storage Reservoir Project

Engineering Design

Concern: The draft report used an over-wash rate for embankment design that appeared conservative. A sensitivity analysis was suggested.

Reason: Corps design criteria for dams allows some over-wash in determining freeboard requirements, as long as the magnitude and duration do not threaten safety. Selected criteria must assure no failure from wind set up, waves, and uncertainties.

Resolution: The allowable over-wash rate was increased from .001 to .005 cfs/ft in the final PIR.

Resolution Impact: Concern resolved



CERP, C-43 West Basin Storage Reservoir Project

MCACES Cost Estimates

Concern: The draft report used cost values for E&D, S&A , and LERRD costs that appeared inconsistent. It was also unclear whether ITR was performed for the full MCACES estimate.

Reason: Corps guidance requires that the rationale for selected cost factors be explained and that consistent information be provided on real estate costs.

Resolution: The district verified the cost factors in the MCACES estimate and revised the estimate for LERRD. Walla Walla District performed ITR on the final PIR.

Resolution Impact: Concern resolved



CERP, C-43 West Basin Storage Reservoir Project

Characterization of the TSP

Concern: The draft report presented Alternative 3B as the TSP, although system-wide analyses showed Alternative 3C was more cost effective. An ASA waiver might be required to recommend the smaller TSP.

Reason: CERP programmatic regulations call for plan selection based on system-wide analyses. Corps guidance generally leads to recommendation of the most cost effective plan. Guidance does not provide a categorical exemption that allows recommendation of a TSP smaller than NER.

Resolution: Informally coordinated with ASA. The final report describes 3C as the NER plan and provides rationale for recommendation of 3B similar to that for categorical exemption for other project purposes.

Resolution Impact: Concern resolved



CERP, C-43 West Basin Storage Reservoir Project

Sponsor Support and Crediting

Concern: SFWMD letter conditions its support on developing a mutually acceptable approach for valuation of lands not covered by DOI grant agreements for crediting. The PIR follows programmatic regulations for project formulation, cost estimating, and local cooperation.

Reason: CERP programmatic regulations base the valuation for lands already acquired on actual acquisition cost rather than estimated market value in order to limit project cost growth.

Resolution: Sponsor letter should support the project consistent with the PIR. A valuation change would affect project costs, crediting/cost shares, and local cooperation, but would not impact project formulation.

Resolution Impact: Unresolved. Issue could be addressed during State & Agency review.



CERP, C-43 West Basin Storage Reservoir Project

HQUSACE Policy Compliance Review Team
RECOMMENDATION

Release the PIR and EIS for S&A Review

