

CSOP – Purpose and Objectives

Planning Conditions

Presented by:

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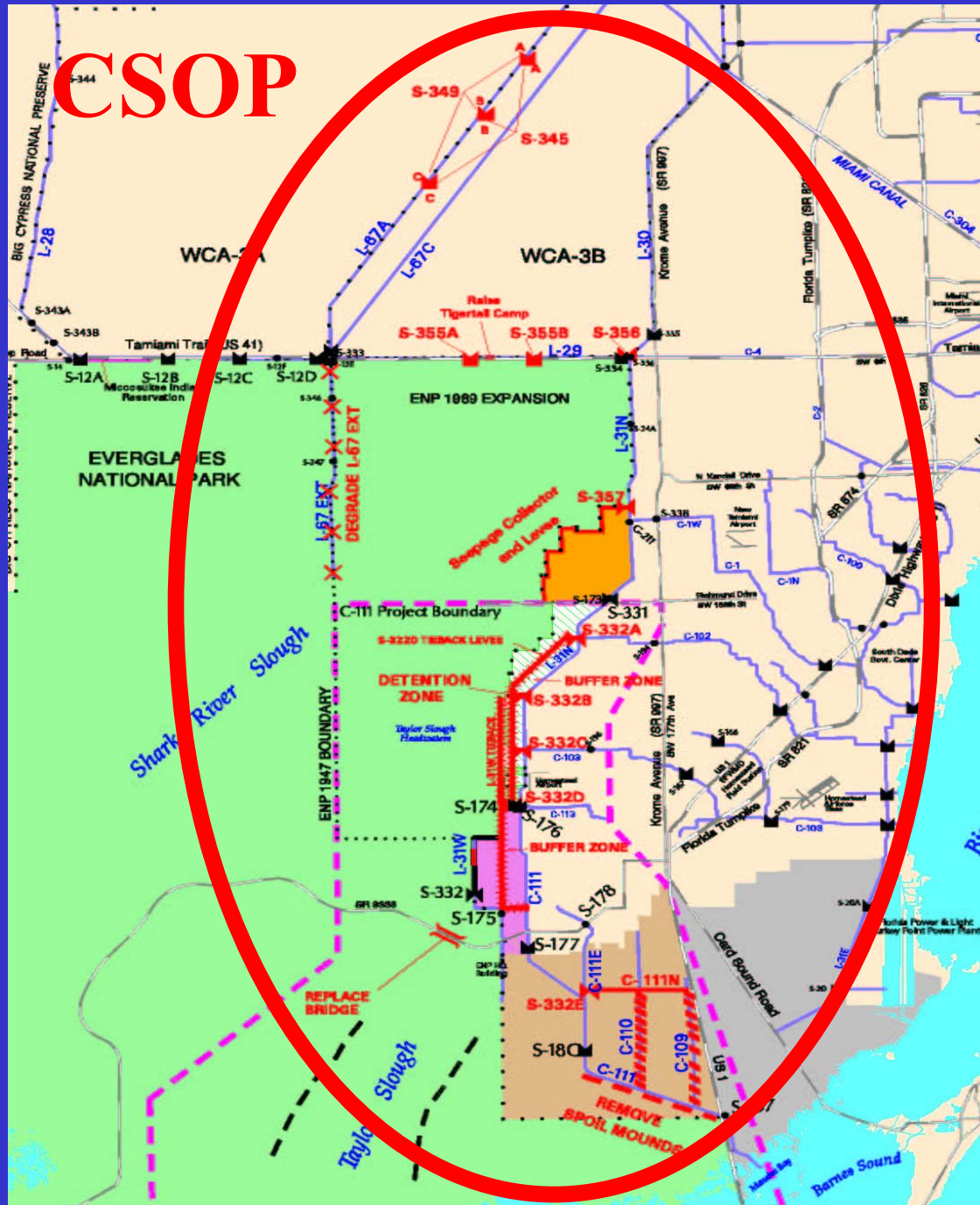
Jacksonville District

Combined Structural and Operational Plan Advisory Team

Organizational Meeting

December 17-18, 2003

CSOP



MWD Project Features

Improve water deliveries to ENP and restore natural hydrologic conditions to Northeast Shark River Slough

C-111 Project Features

Restoration of Taylor Slough and eastern panhandle of ENP while preserving flood protection and other project purposes

Why CSOP?

CSOP is needed to define an integrated operational plan for two modifications of the C&SF project – MWD and C-111 – the final operational plan was not defined in the authorizing documents

Includes consideration of structural design refinements outlined in the 2001 Value Engineering Report for MWD project and design refinements to better integrate 8.5 SMA Alt 6D plan with C-111

Goal: Maximize restoration while preserving other project purposes and to explore opportunities for enhanced performance

CSOP Purpose & Objectives Paper

- **Describes the purposes of the C-111 and MWD projects per authorizing documents**
 - 1992 MWD General Design Memorandum (GDM)
 - 1994 C-111 General Re-evaluation Report (GRR)
- **Defines the scope of CSOP investigations**
 - Based on structural modifications already authorized
 - Assumes that authorized plans are in-place
 - cannot significantly change project purposes, costs, impacts, benefits without further authorization
 - not CERP, not a Flood Damage Reduction study, not re-formulation of MWD or C-111
- **Outlines planning conditions for evaluations**

MWD Objectives (1992 GDM)

Construct modifications to improve water deliveries and restore natural hydrologic conditions in ENP by:

Timing

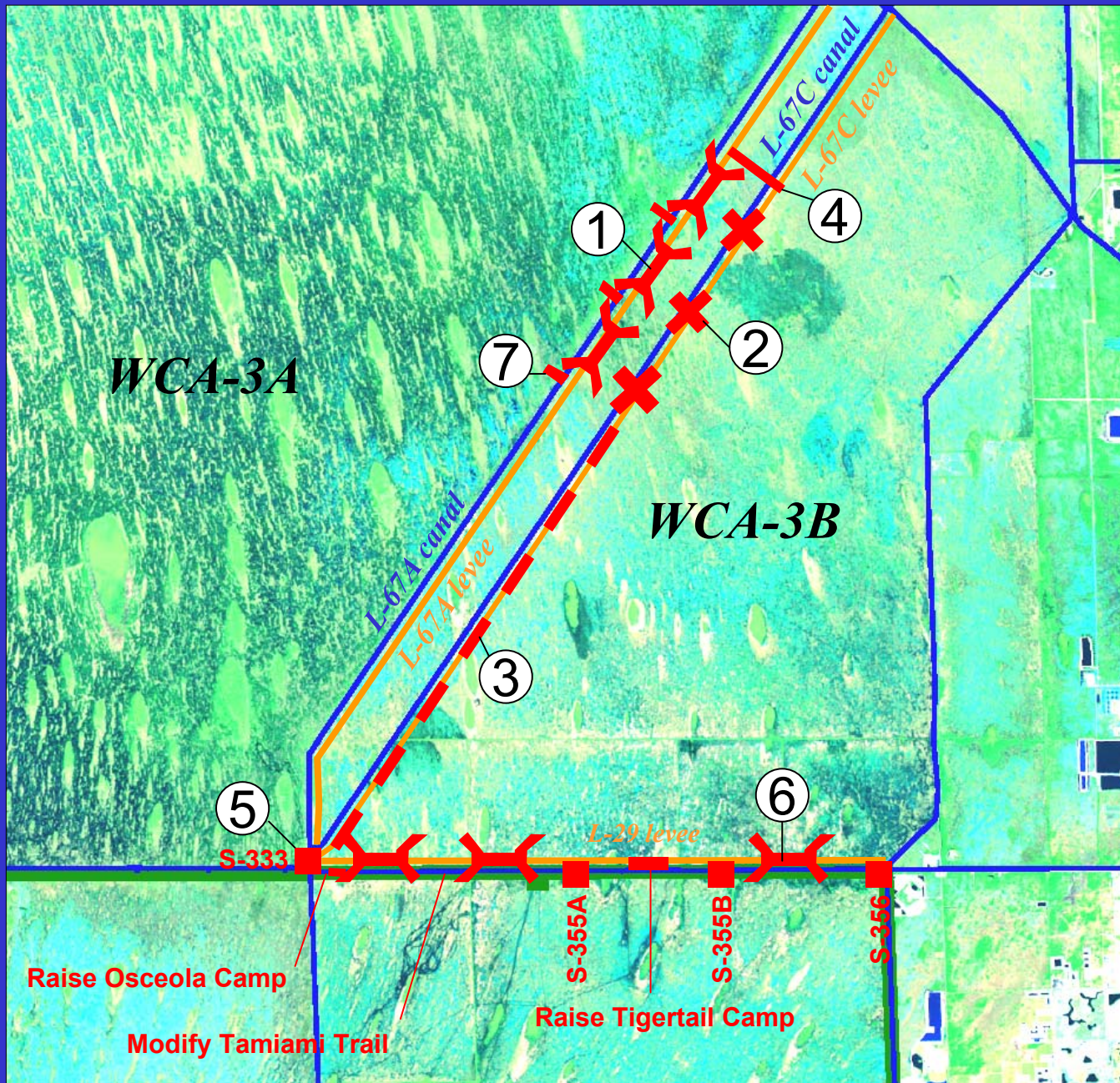
- Changing the schedule of water deliveries so that it fluctuates in consonance with local meteorological conditions, including providing for long term and annual variation in ecosystem conditions in the Everglades

Location

- Restoring WCA 3B and Northeast Shark Slough as a functioning component of the Everglades hydrologic system

Volume

- Adjusting the magnitude of water discharged to ENP to minimize the effects of too much or too little water



MWD Design Refinements

L-67 weirs to replace S-345/349's

L-29 weirs

L-67C partial backfill

Degrade L67C

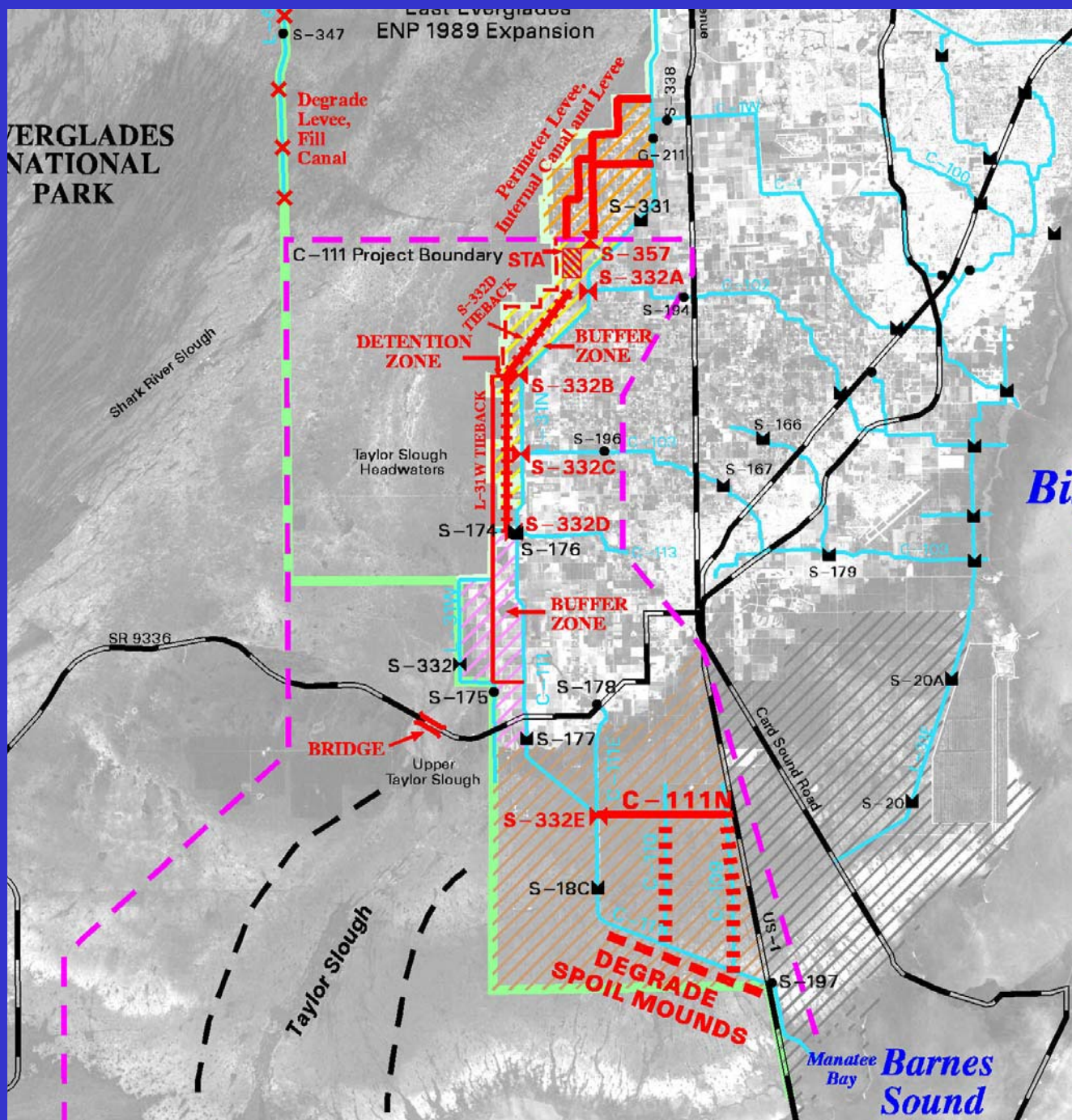
N tieback levee

Proposed Conveyance Features

C-111 Objectives (1994 GRR)

- **Restore historic hydrologic conditions in the Taylor Slough, Rocky Glades, and eastern Panhandle of the ENP**
- **Protect the natural values associated with the ENP**
- **Eliminate the damaging freshwater flows to Manatee Bay/Barnes Sound and increase flows to northeast Florida Bay from the lower C-111**
- **Maintain the level of flood damage reduction associated with the 1994 C-111 GRR recommended plan**
- **Ensure that C-111 project waters diverted to ENP meet all applicable water quality criteria**
- **Explore opportunities for an enhanced level of flood damage reduction for the C-111 Basin east of L-31N and C-111 canals consistent with the restoration objectives, the USACE's authority for the MWD and C-111 projects and operational considerations**

EVERGLADES NATIONAL PARK



C-111 Design Refinements

- S-332A
- Pump Capacities
- Culverts
- S-332 & L-31W canal extension

CSOP Planning Conditions

- **CSOP Base Condition**

- 1983 Base (updated to include STAs and WSE) will be *benchmark* to evaluate benefits & impacts consistent with previous documents – This does not represent minimum restoration or minimum level of flood protection (targets defined by performance measures)

- **No Action Alternative**

- C-111 and MWD project modifications constructed as authorized and operated in accordance with Interim Operational Plan

- **Minimum Level of Flood Damage Reduction**

- The minimum level of performance is defined by 1994 C-111 GRR recommended plan (Alt 6A) which includes the authorized optimum canal levels and design discharge criteria (managing volume associated with design flood)

CSOP Base

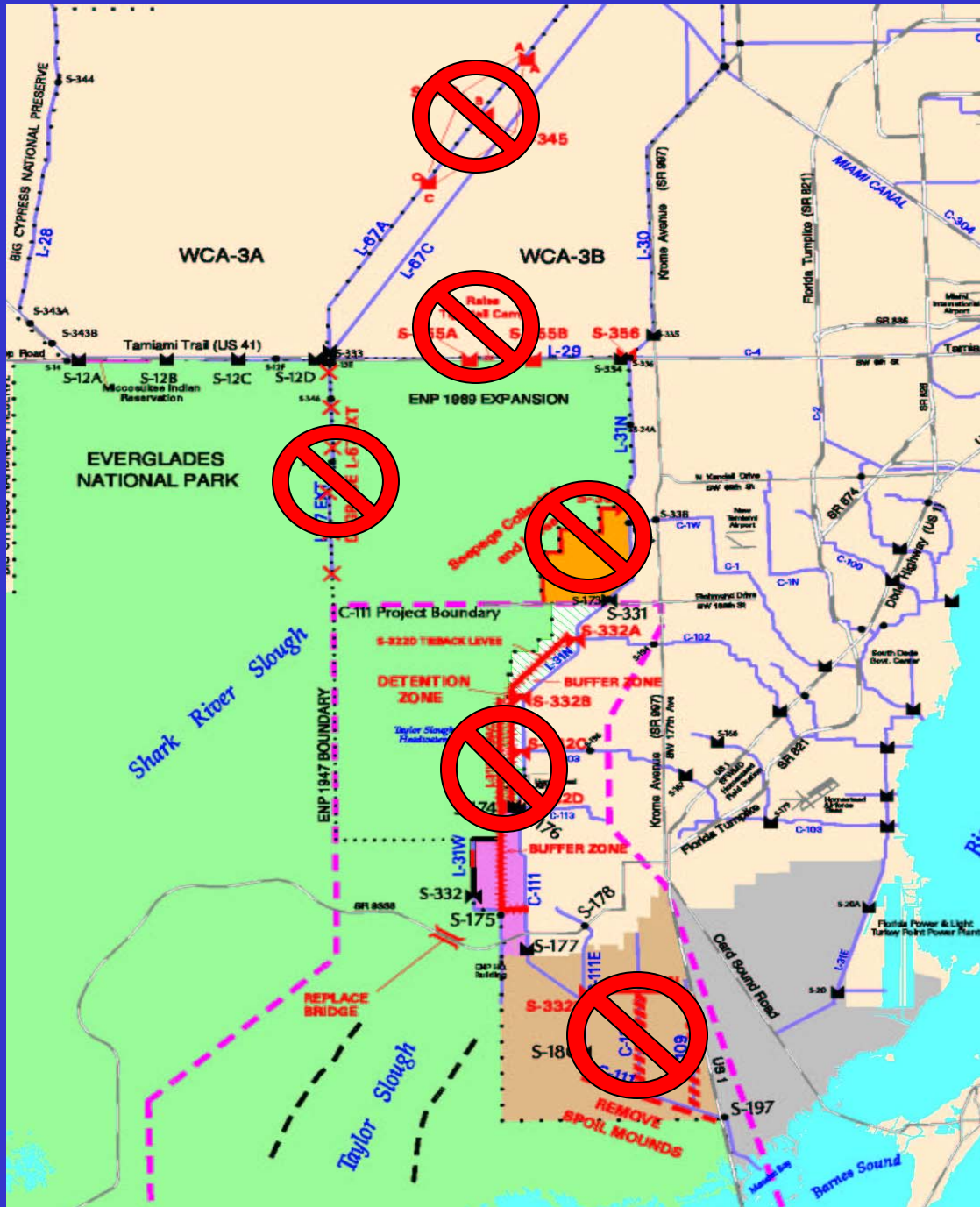
(No 1992 MWD GDM or 1994 C-111 GRR modifications)

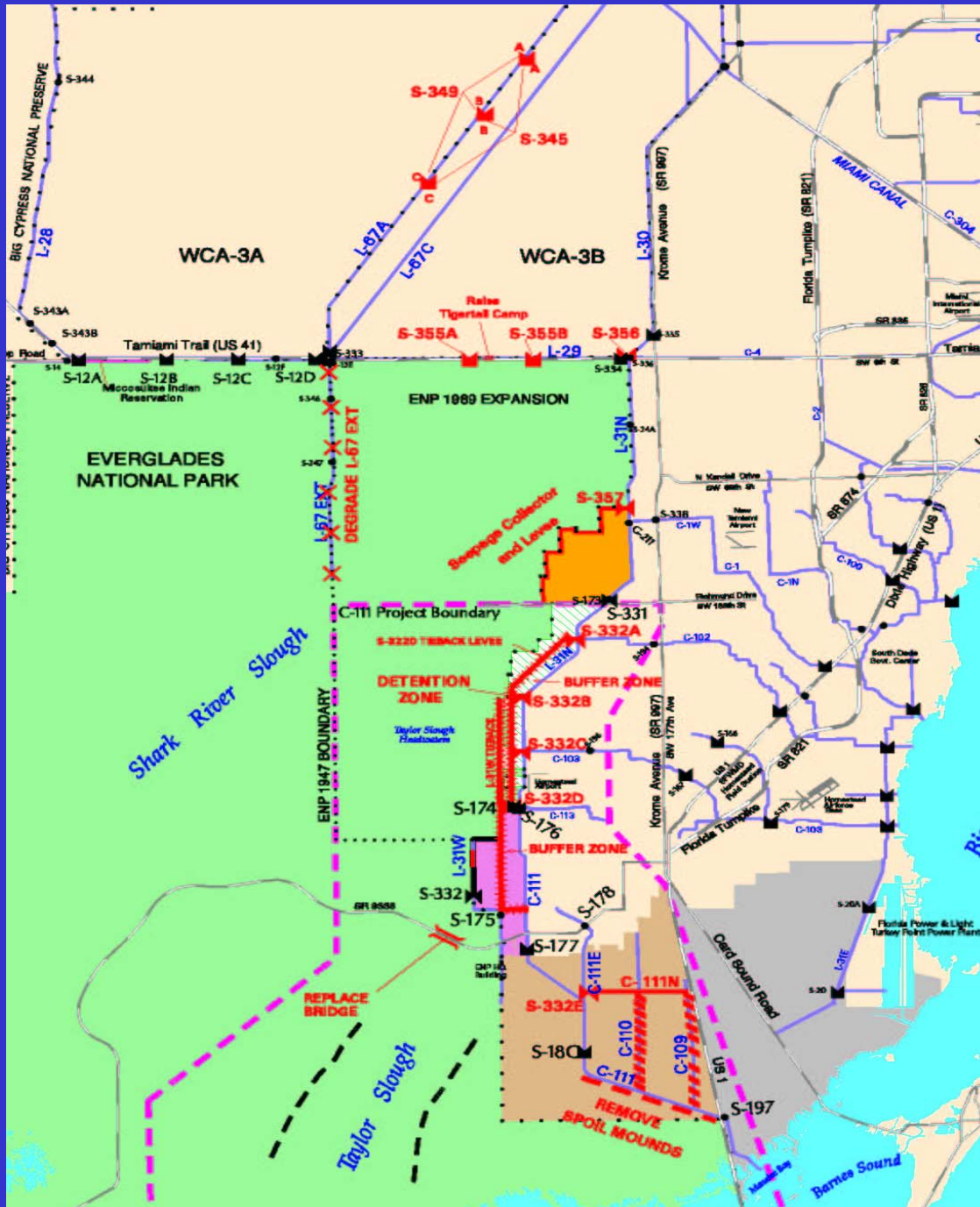
Lake Okeechobee WSE

Minimum Deliveries Schedule

S-332 @ 165 cfs

Optimal Canal Levels in SDCS





No Action

(No CSOP= no design refinements, IOP operations)

Lake Okeechobee WSE, STA's

IOP Operations

Authorized MWD Constructed

- ✓8.5 SMA GRR
- ✓Tamiami Trail GRR
- ✓S345/S349's in L-67
- ✓S-356

Authorized C-111 Constructed

- ✓S332 A,B,C @ 300 cfs
- ✓S332D @ 575 cfs
- ✓Culverts in buffer levee
- ✓S332 @ 165 cfs w/connector canal
- ✓L-31W degrade
- ✓S332E @ 50 cfs, spader canal
- ✓C-109, C110, TS Bridge

C-111 GRR Plan

(Minimum Level of Flood
Damage Reduction)

1978 LO w/Interim Plan in effect

Minimum Deliveries Schedule

Optimal Canal Levels in SDCS

Authorized MWD Constructed

✓8.5 SMA GRR

✓Tamiami Trail GRR

✓S345/S349's in L-67

✓S-356

Authorized C-111 Constructed

✓S332 A,B,C @ 300 cfs

✓S332D @ 575 cfs

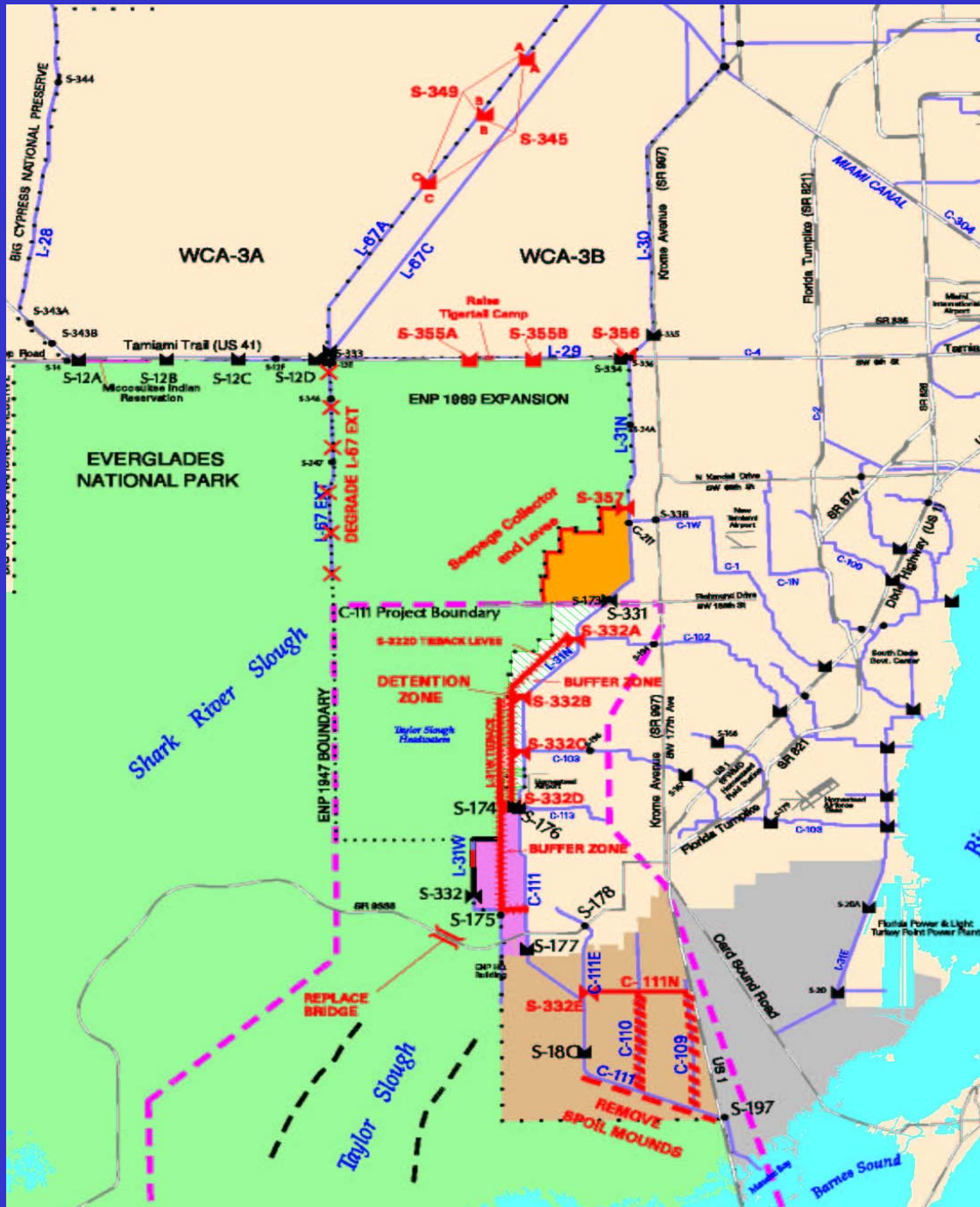
✓Culverts in buffer levee

✓S332 @ 165 cfs w/connector canal

✓L-31W degrade

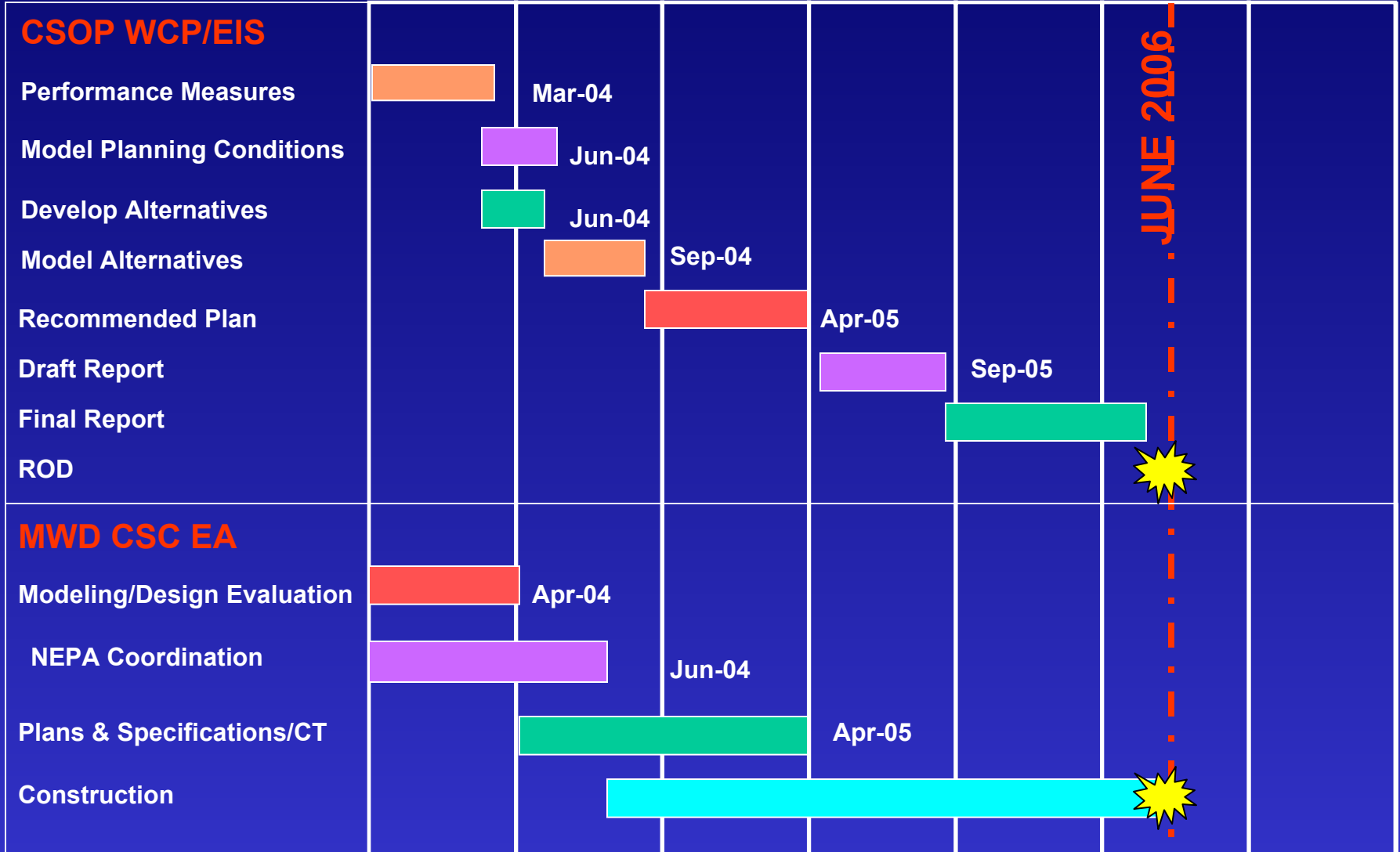
✓S332E @ 50 cfs, spreader canal

✓C-109, C110, TS Bridge



CSOP Schedule

Oct 03 Apr 04 Oct 04 Apr 05 Oct 05 Apr 06 Oct 06 Apr 07



**Failure...
not an option**



**No action...
not an option**



**If not us...
then who?**

**If not now...
then when?**



CSOP Multi-Stakeholder Collaborative Process

