

CENTRAL EVERGLADES PLANNING PROJECT



South Florida Ecosystem Restoration Task Force

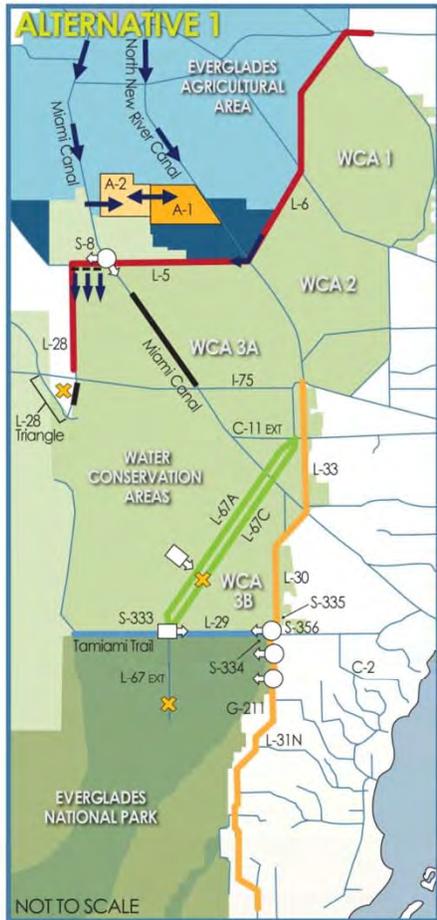
PRESENTED BY

Kim Taplin

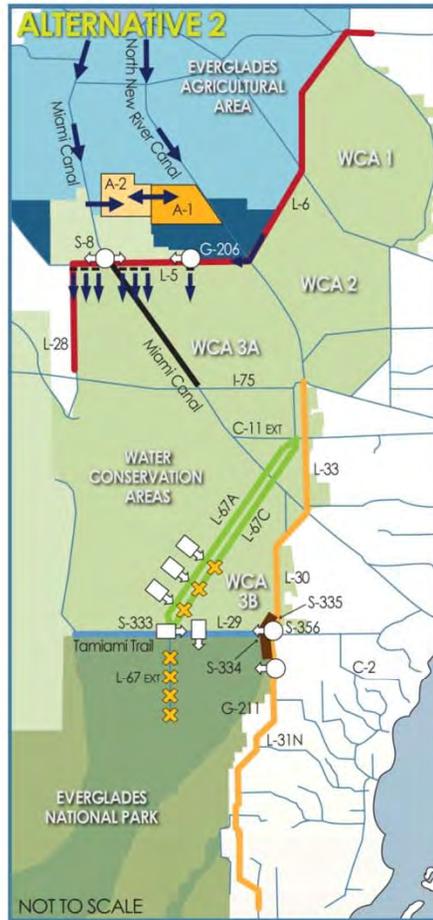
Chief, Central Everglades Branch
U.S. Army Corps of Engineers

July 8, 2013

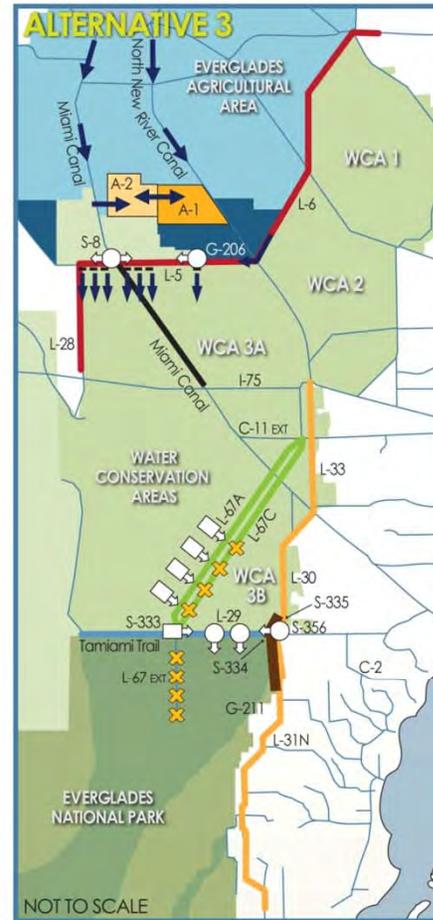
CEPP FINAL ARRAY OF ALTERNATIVES



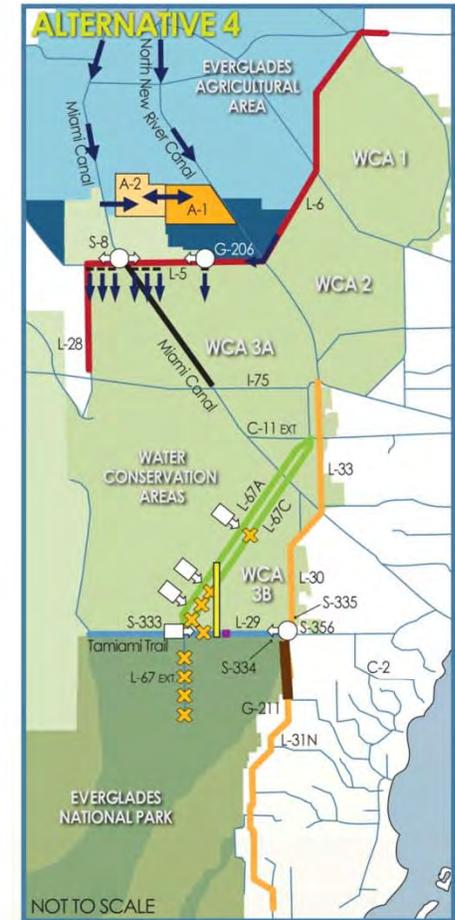
ALTERNATIVE 1



ALTERNATIVE 2

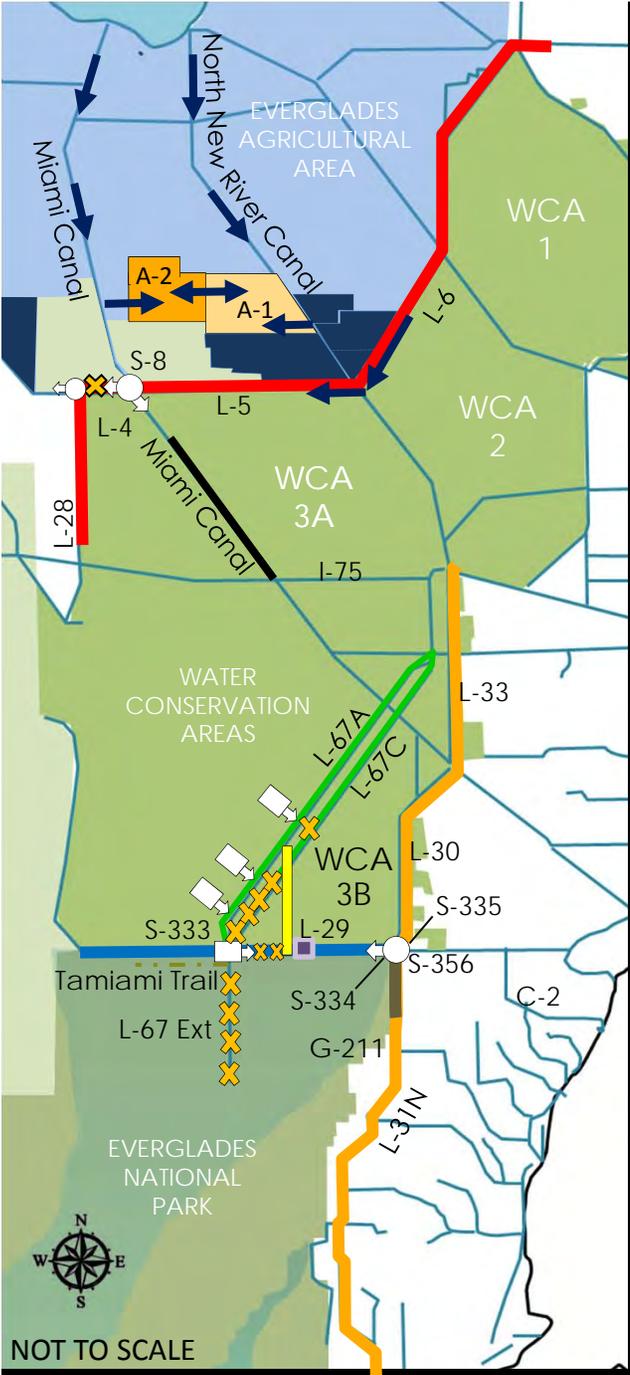


ALTERNATIVE 3



ALTERNATIVE 4

TENTATIVELY SELECTED PLAN



STORAGE AND TREATMENT

- Construct A-2 FEB and integrate with A-1 FEB operations
- Lake Okeechobee operation refinements within LORS

DISTRIBUTION/CONVEYANCE

- Diversion of L-6 flows, Infrastructure and L-5 canal improvements
- Remove western ~2.9 miles of L-4 levee (west of S-8 3,000 cfs capacity)
- Construct 360 cfs pump station at western terminus of L-4 levee removal
- Backfill Miami Canal and Spoil Mound Removal ~1.5 miles south of S-8 to L-75

DISTRIBUTION/CONVEYANCE

- Increase S-333 capacity to 2,500 cfs
- Two 500 cfs gated structures in L-67A, 0.5 mile spoil removal west of L-67A canal north and south of structures
- Construct ~8.5 mile levee in WCA 3B, connecting L-67A to L-29
- Remove ~8 miles of L-67C levee in Blue Shanty flowway (no canal back fill)
- One 500 cfs gated structure north of Blue Shanty levee and 6,000-ft gap in L-67C levee
- Remove ~4.3 miles of L-29 levee in Blue Shanty flowway, divide structure east of Blue Shanty levee at terminus of western bridge
- Tamiami Trail western 2.6 mile bridge and L-29 canal max stage at 9.7 ft (FUTURE WORK BY OTHERS)
- Remove entire 5.5 miles L-67 Extension levee, backfill L-67 Extension canal
- Remove ~6 mile Old Tamiami Trail road (from L-67 Ext to Tram Rd)

SEEPAGE MANAGEMENT

- Increase S-356 pump station to ~1,000 cfs
- Partial depth seepage barrier south of Tamiami Trail (along L-31N)
- G-211 operational refinements; use coastal canals to convey seepage

Note: System wide operational changes and adaptive management considerations will be included in project

FEB	STA	Pump	Old Tamiami Trail Removal
Backfill	Levee Removal	Gated Structure	
Seepage Barrier	Divide	Levee	

“What We Heard”

- Need for additional water supply performance
- Savings Clause concerns
- Cost and Implementation concerns
- Water Quality and Cost Share

“What We Did”

- Additional modeling (Apr – Jun) to further optimize TSP
 - Optimized LO and IRL operations for LOSA
 - Optimized operations for WCA-2A/B and lower east coast to address savings clause concerns
 - Increased water supply demands
 - Presented results to PDT on 1 July

Key Policy Issue - Water Quality to Everglades National Park

- Documentation requested to be included in the Draft CEPP PIR:
 - Acknowledgement that there is a likelihood of an exceedance due to increased flows into ENP based upon the current Appendix A methodology
 - The current Appendix A is no longer the appropriate method for determining water compliance given future changes in water management
 - Begin to define the process and scope for determining an appropriate methodology
 - Until a new methodology is developed the agencies determine that current and proposed state and federal action are appropriate and sufficient to achieve state and federal water quality requirements and hydrologic restoration objectives

Path Forward to Resolving Policy Issues

Water Quality

- Technical review of Appendix A by Technical Oversight Committee sub-team initiated
- Documentation of the relationship between changes in water flow and distribution
- Effects of changes in water flow and distribution on water quality in WCA's and ENP
- Recognition that in the interim, State and Federal actions, both underway and planned, are appropriate and sufficient from a hydrologic and water quality perspective

Key Policy Issue – Cost Share OMRRR State Treatment Facilities

- New flows from Lake Okeechobee will utilize SFWMD treatment facilities
 - STA-2 and STA 3/4
- SFWMD has requested that USACOE cost share 50/50 the incremental increase in OMRRR
- SFWMD has requested that, if additional treatment is required to accommodate CEPP additional water flow, USACE will cost share 50/50 for additional treatment facilities

Path Forward to Resolving Policy Issue *Cost Share*

- SFWMD provided information on magnitude of OMRRR costs of STA's
- Jacksonville District evaluating for submission to USACE vertical team for review and consideration

Key Policy Issue – Savings Clause/Project Assurances & Water Supply

- Requirements of WRDA 2000 and Chapter 373, F.S.
 - Savings Clause - Selected plan must maintain existing water supply & flood protection
 - Project Assurances - Requires water made available by the plan for natural systems and human use be identified in PIR (project benefits determine if water made available for natural system and human use)
- Areas of concern raised by some stakeholders
 - Time necessary to complete review
 - Lack of additional water made available for Agriculture and Urban uses envisioned by CERP
 - Miami-Dade County – dry season groundwater levels in south Dade and flows to Biscayne Bay

PATH FORWARD TO RESOLVING ISSUES

SAVINGS CLAUSE/*PROJECT*

ASSURANCES/WATER SUPPLY ANALYSIS

- Conducted additional modeling to determine:
 - if water supply cutbacks on LOSA could be reduced
 - determine whether increases in LECSA public water supply demands can be met while maintaining natural system performance
- Provided evaluation of natural system, water supply and flood protection performance results to PDT on 1 July:
 - Some reduction in cutbacks to LOSA in some drought years, within 1% of cutbacks in any year and improvement in overall cutbacks in back-to-back drought years – results consistent with savings clause requirements
 - Some additional water supply could be made available to LEC SA-2, 3 while maintaining natural system benefits and will be identified for water supply in project assurances

Key Policy Issue – Implementation and Sequencing

- Concerns raised about how CEPP implementation will be integrated into CERP Program and sequencing with other non-CERP projects & costs
 - Concerns raised over State efforts associated with Restoration Strategies
 - As well as other CERP projects already authorized and under construction or waiting for authorization

Path Forward to Resolving Issues *Other Non-CERP and CERP Projects*

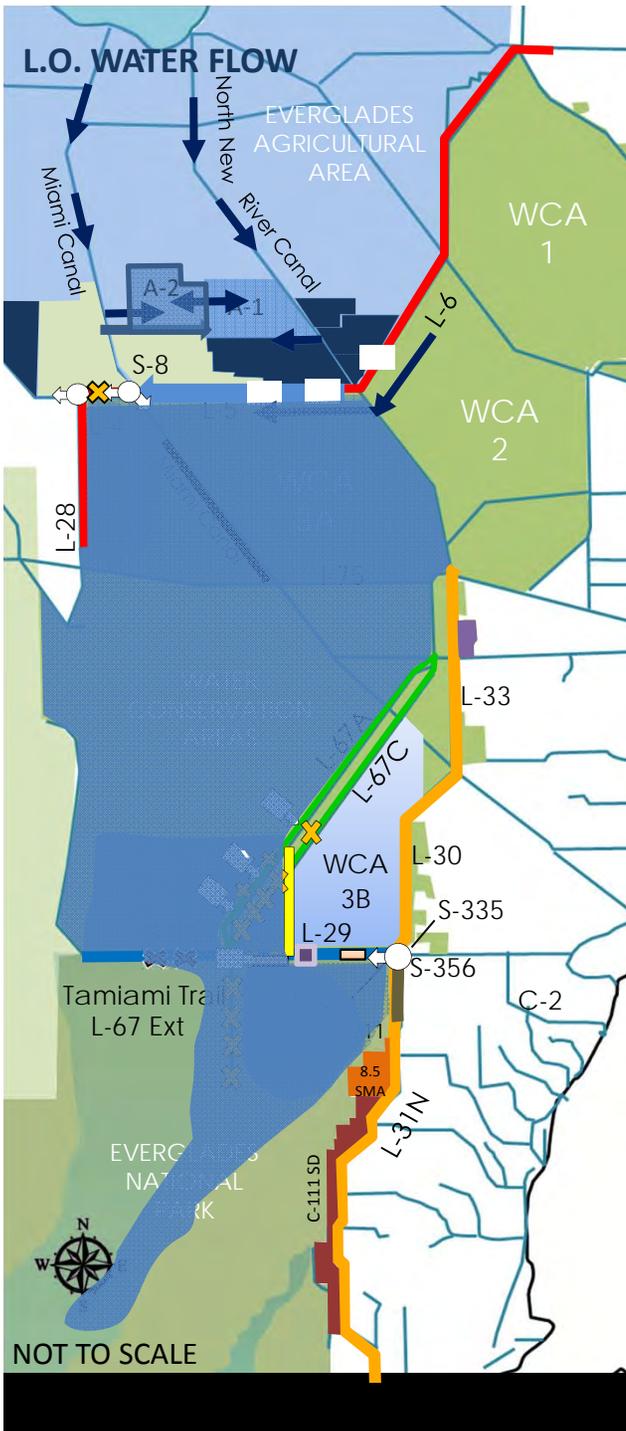
- Acknowledge in CEPP PIR dependancies on non-CERP projects (i.e. State's Restoration Strategies projects, Modified Waters Deliveries Project, Tamiami Trail Next Steps Project) as well as and other already authorized or waiting to be authorized CERP project dependencies
- Commitment to undertake appropriate public process to incorporate CEPP implementation into the overall CERP Program implementation subsequent to CEPP and other pending CERP projects authorization

PATH FORWARD RESOLVING IMPLEMENTATION/ PHASING ISSUES

Concerns associated with Restoration Strategies

- CEPP implementation will involve a number of incremental phases over a number of years
- Project elements cannot proceed unless/until it is determined that construction and/or operation of the feature:
 1. Will not cause or contribute to a violation of water quality standards; and
 2. Will not cause or contribute to a violation of the permit(s) discharge limits or specific conditions*; and
 3. Reasonable assurances exist that demonstrate adverse impacts on flora and fauna in the area influenced by the project element will not occur.

* Compliance with the WQBEL shall be determined based on the conditions contained within the NPDES permit (FL0778451), EFA permit (0311207), NPDES Consent Order (12-1148), and EFA Consent Order (12-1149).



TENTATIVELY SELECTED PLAN (Alt 4R2)

STORAGE AND TREATMENT

- Construct A-2 FEB and integrate with A-1 FEB operations
- Lake Okeechobee operation refinements within LORS

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SUMMARY OF STATUS OF KEY POLICY ISSUES

- Water Quality - close to resolution
- O &M Cost Share - HQ coordination
- Savings Clause and Project Assurances/
Water Supply - close to completion
- Implementation/ Phasing- HQ coordination
- Cost - ROM complete, refinement ongoing

INFORMATION TO BE INCORPORATED INTO DRAFT PIR

- Documentation & coordination of evaluation of final model runs:
 - Benefits and Environmental Effects of TSP
 - Savings Clause, Project Assurances Analysis, Interim Targets
 - Ecosystem Services Analysis of TSP
- Documentation from modeling team of operational optimization changes included in IORBL, ECB2012 baselines and Alt4R
- Update to Draft Preliminary Operations Manual (DPOM) consistent with operational refinements included in latest modeling
- Completion & coordination of Adaptive Management and Monitoring Plan
- Documentation & coordination of details associated with cost estimate
- Coordination of Recommended Plan Section of PIR consistent with resolution of policy issues
- Draft Fish & Wildlife Coordination Act Report (Draft PIR) and Biologic Opinion & Requirements (Final PIR)

Questions

