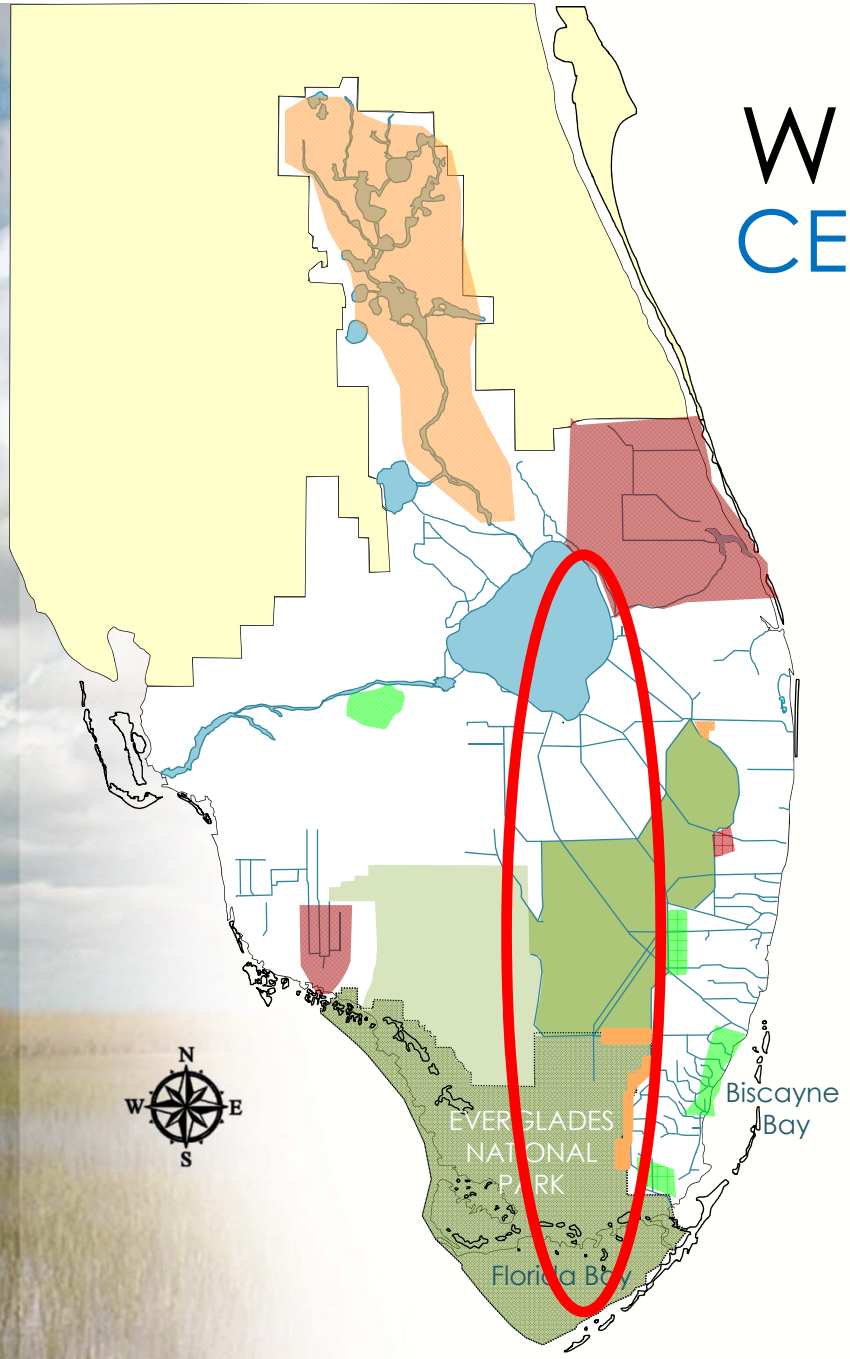
CENTRAL
EVERGLADES
PLANNING
PROJECT

Central Everglades Planning Project Update

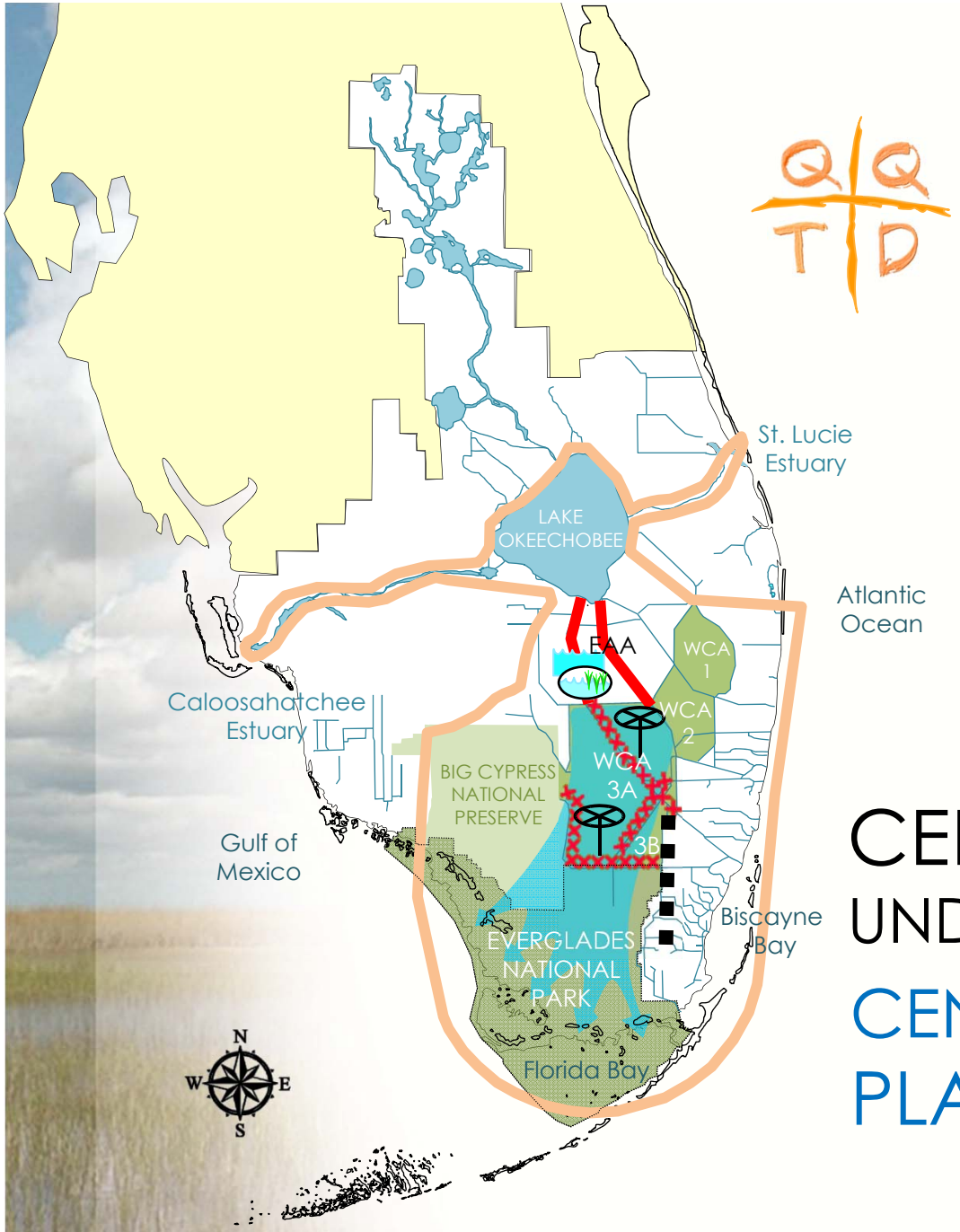
Working Group Sponsored Public Workshop

June 26, 2012



WHAT'S NEXT?
CENTRAL EVERGLADES

- Reduce undesirable discharges to east and west coast estuaries
- Deliver "new" sources of clean water to the Central Everglades and ENP
- Restore habitat in the central Everglades, focusing on the "River of Grass"



Central Everglades Planning Project Study Area

Storage, Treatment, and Conveyance in the EAA

Decompartmentalization and Sheetflow Enhancement

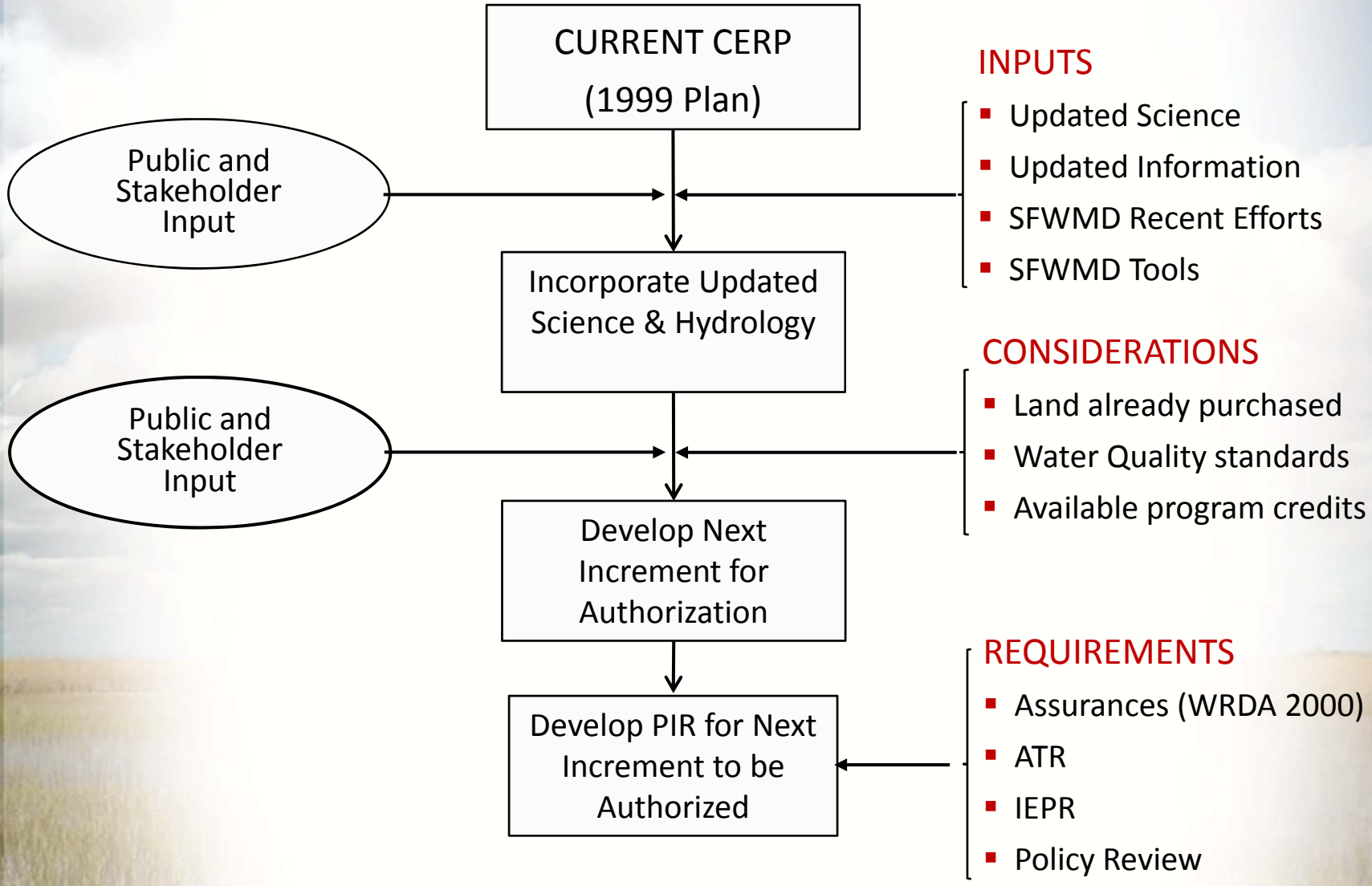
Seepage Management

Operational Changes

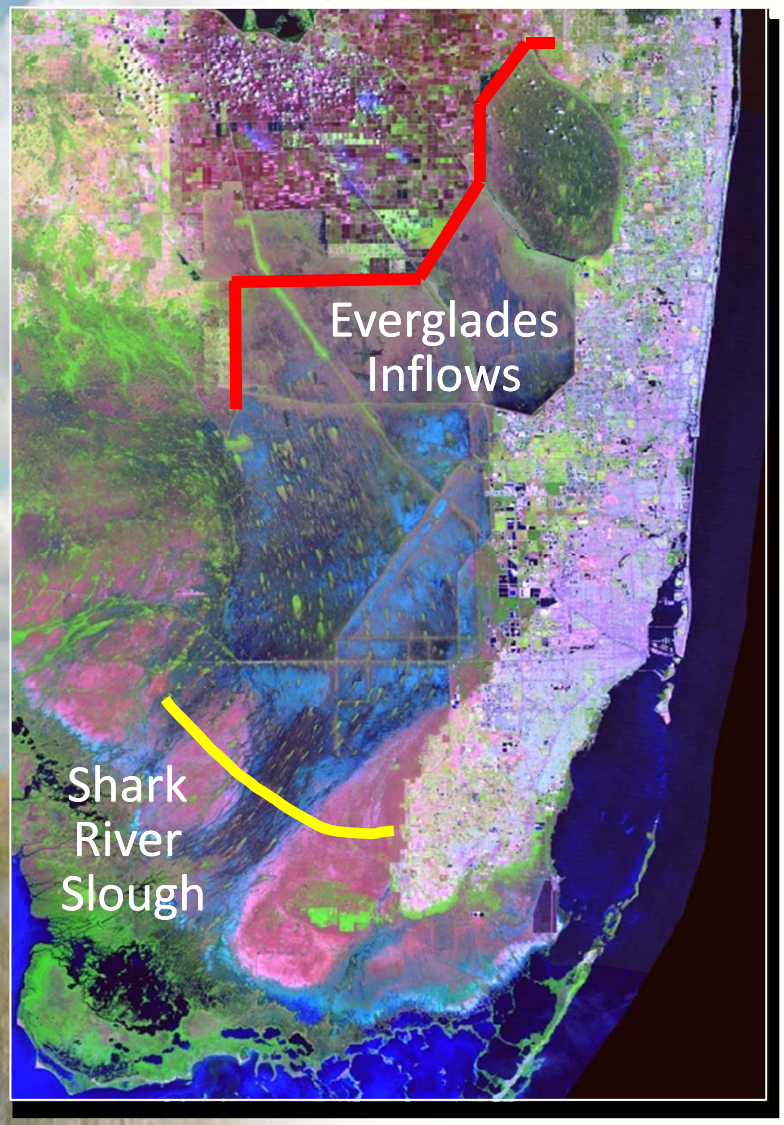
CERP COMPONENTS UNDER CONSIDERATION

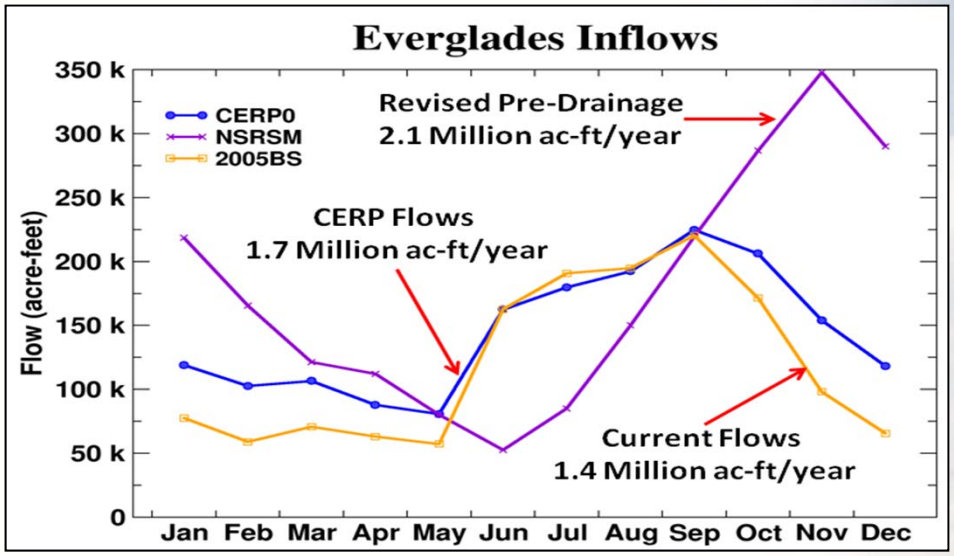
CENTRAL EVERGLADES PLANNING PROJECT

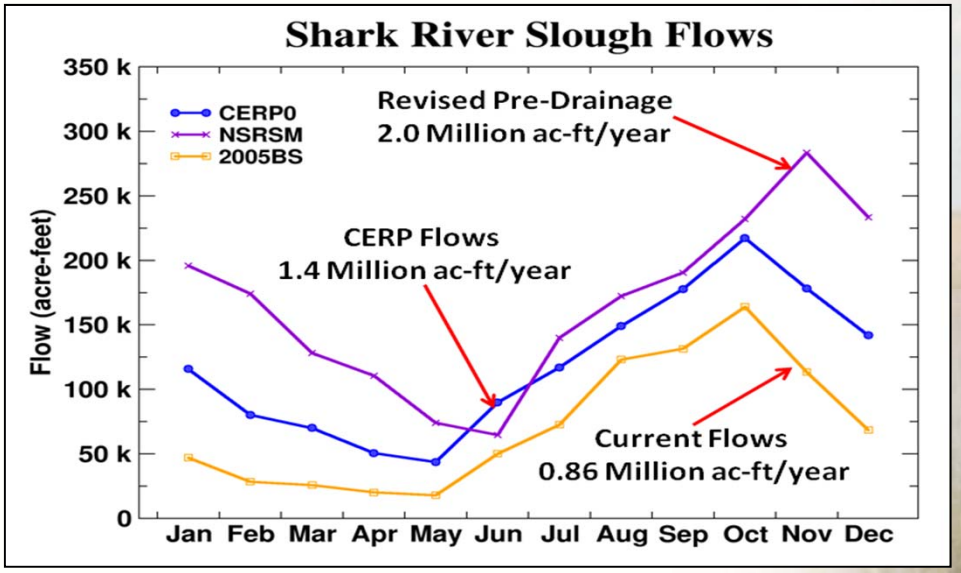
Central Everglades Planning Process



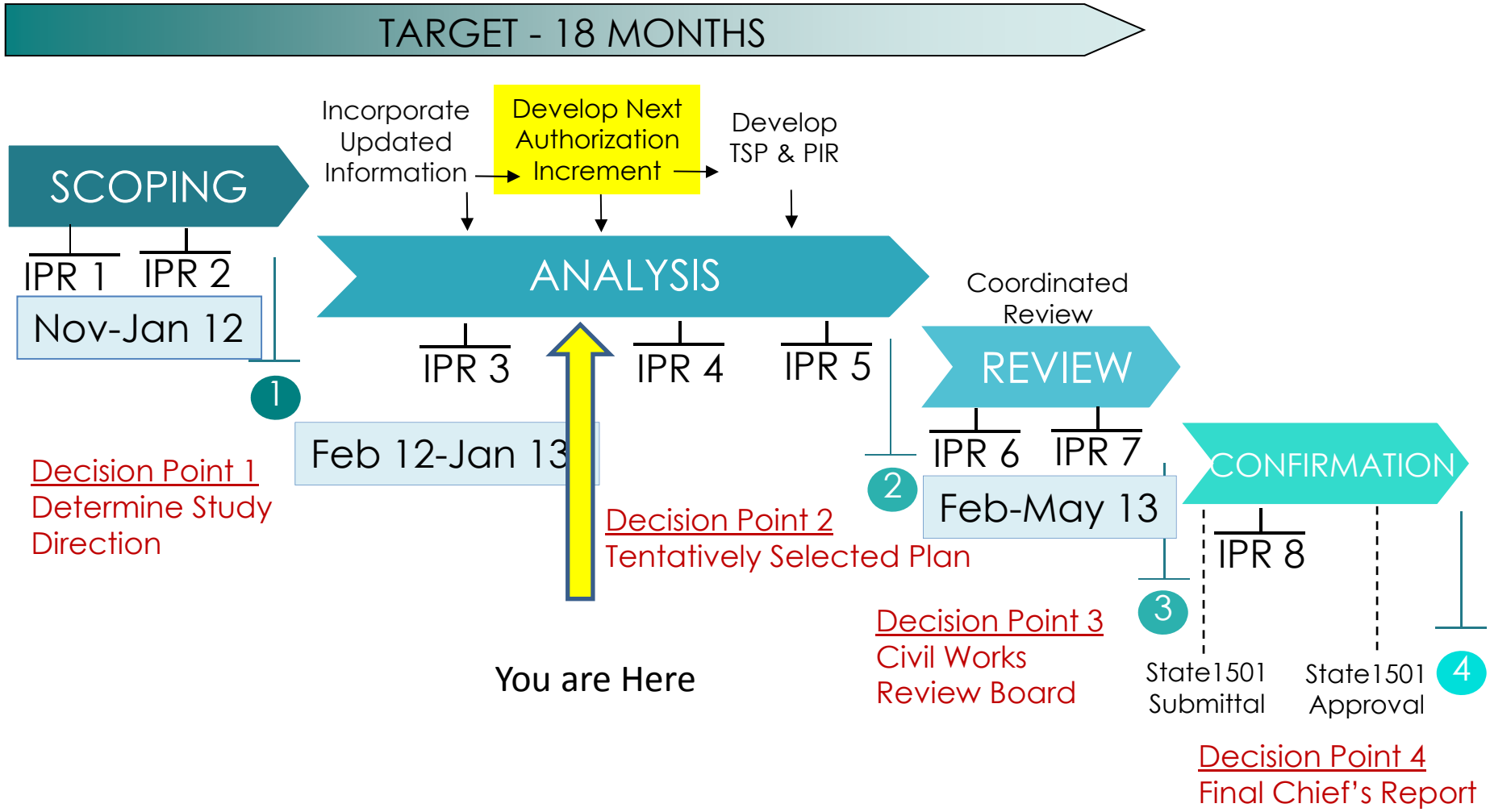
WATER FLOW IN THE EVERGLADES







CENTRAL EVERGLADES PROCESS



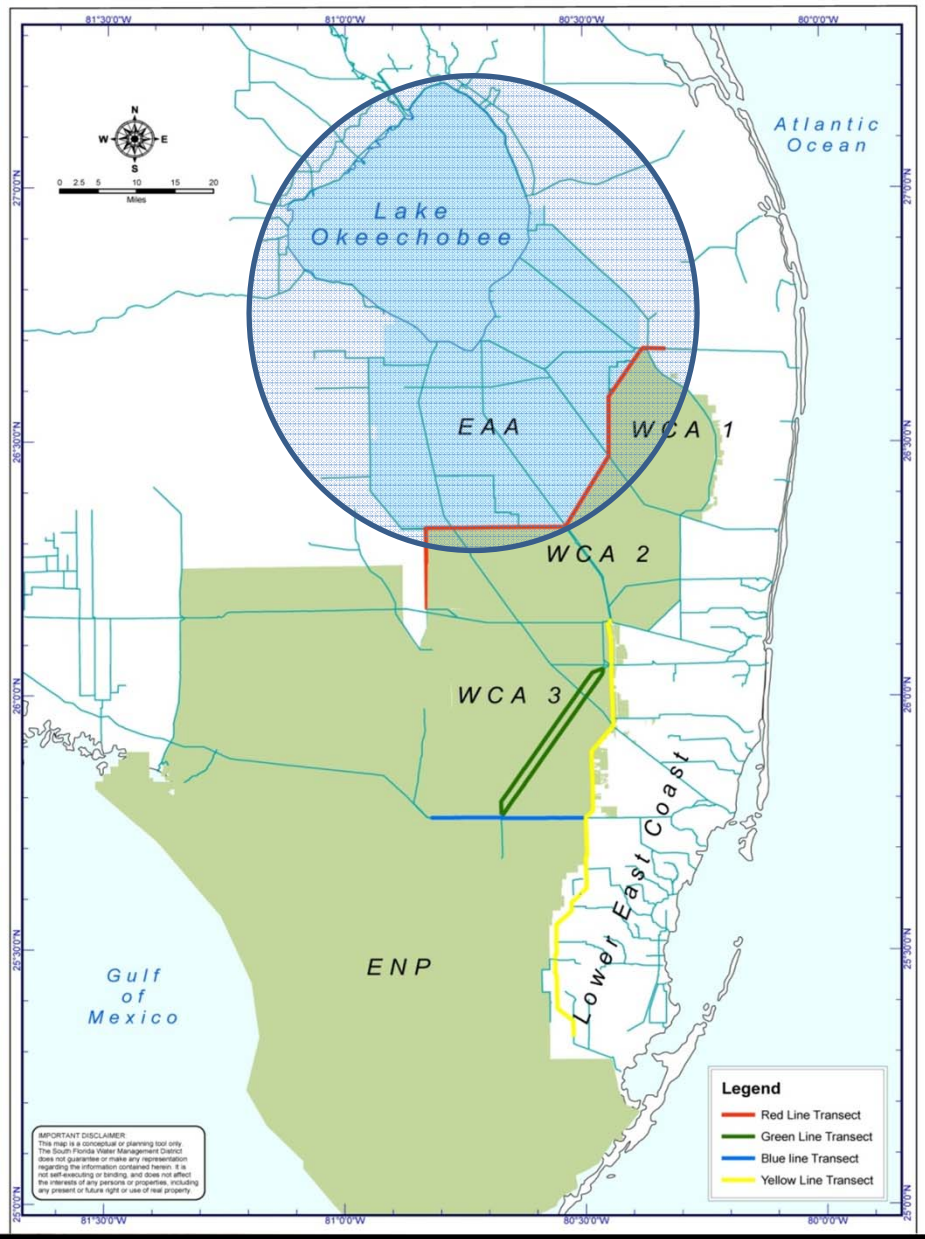
IPR: In-Progress Review with Corps Leadership

COMPONENTS CONSIDERED NORTH OF THE REDLINE

Storage and Treatment Components

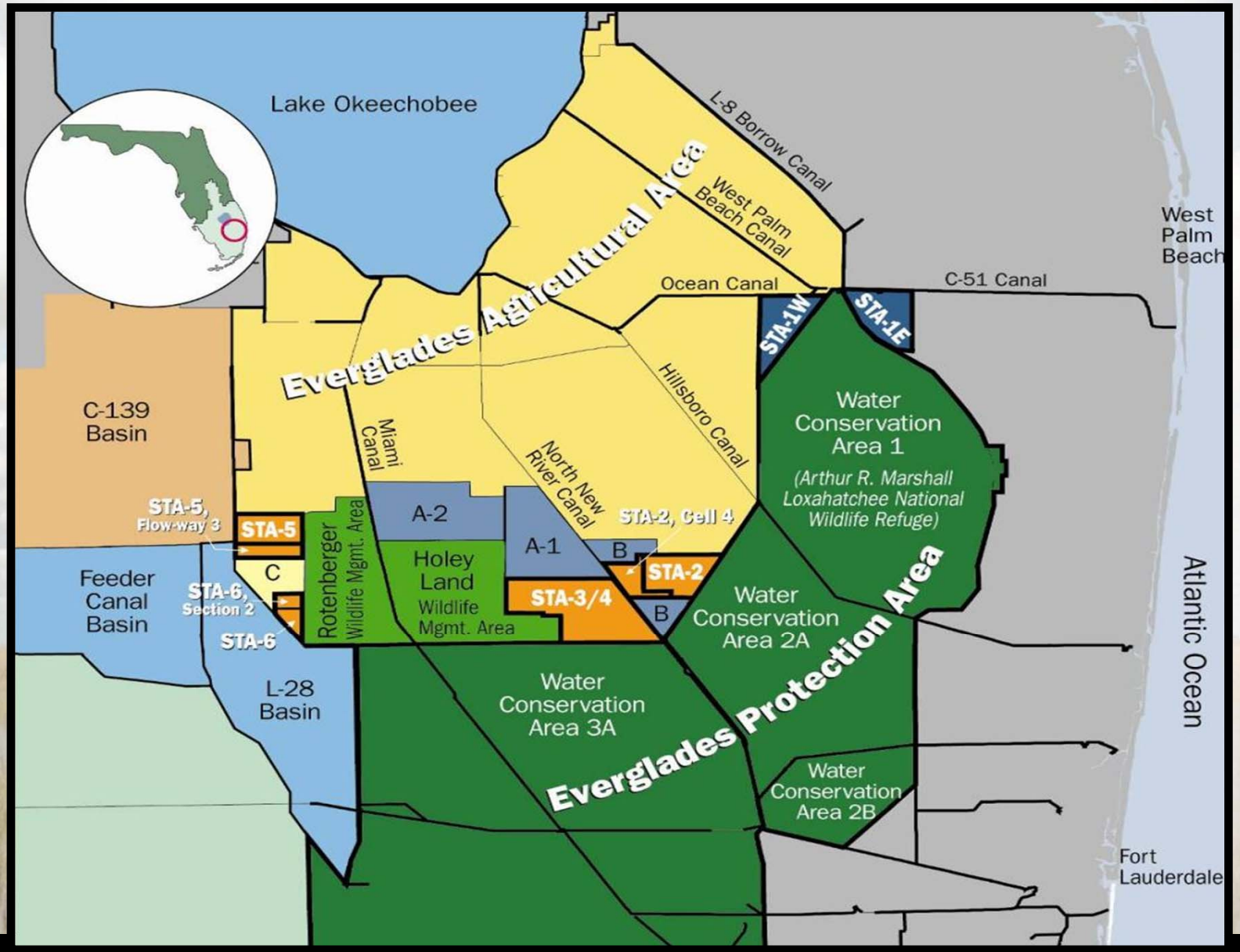
- Stormwater Treatment Areas (STAs)
- Shallow Storage with STA
- Deep Storage with STA
- Flow Equalization Basin
- Flexibility within Lake Operations
- Improved conveyance

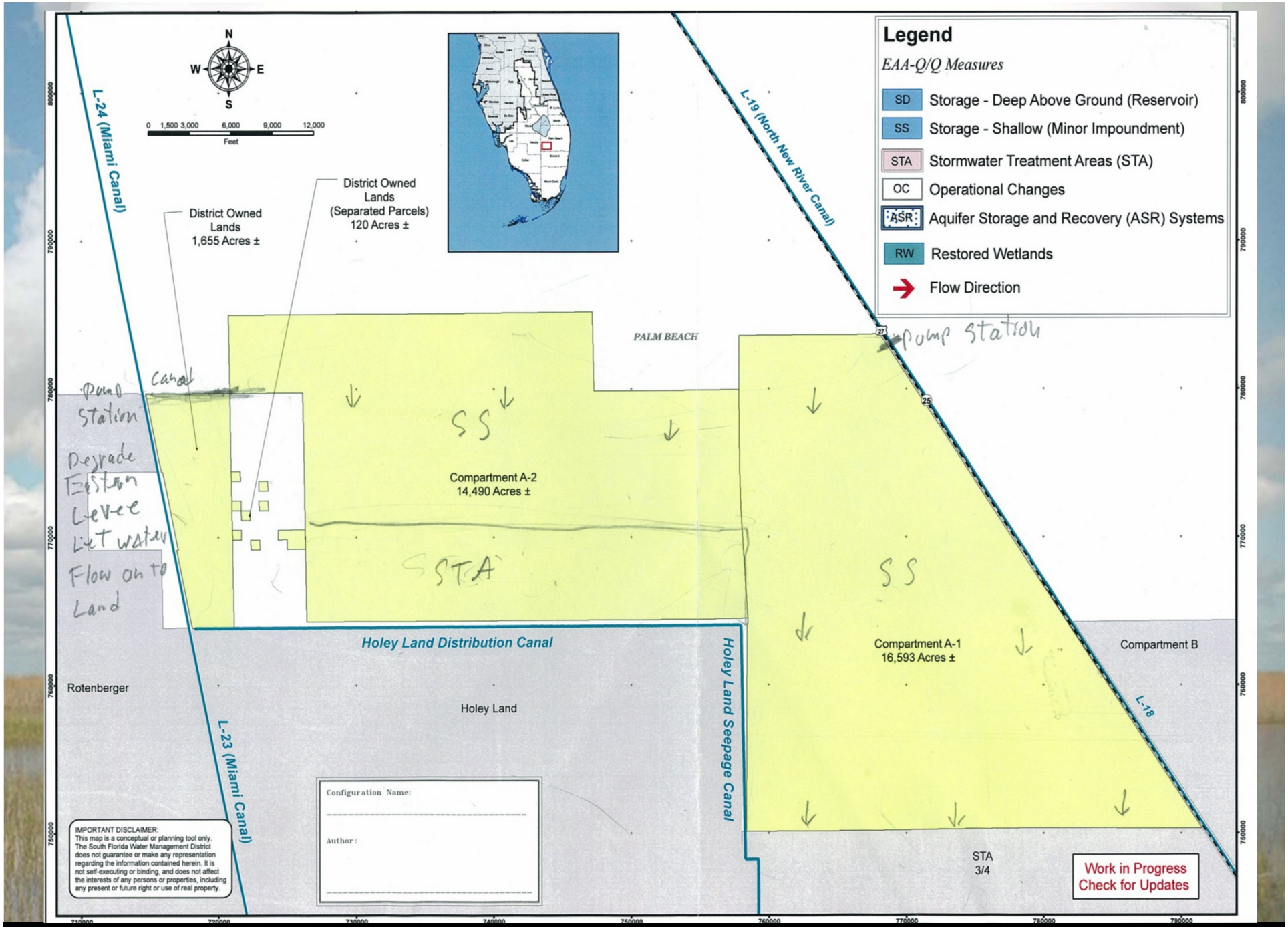
Screening Criteria for EAA Components



- Level 1 – Criteria based on CEPP objectives
  - Additional Flow to the Everglades
  - Everglades Dry Standard Score
  - Estuary Performance
  - Water Supply
- Level 2 – Other important considerations
  - Lake Okeechobee Performance
  - Adaptability
  - Onsite Habitat Value

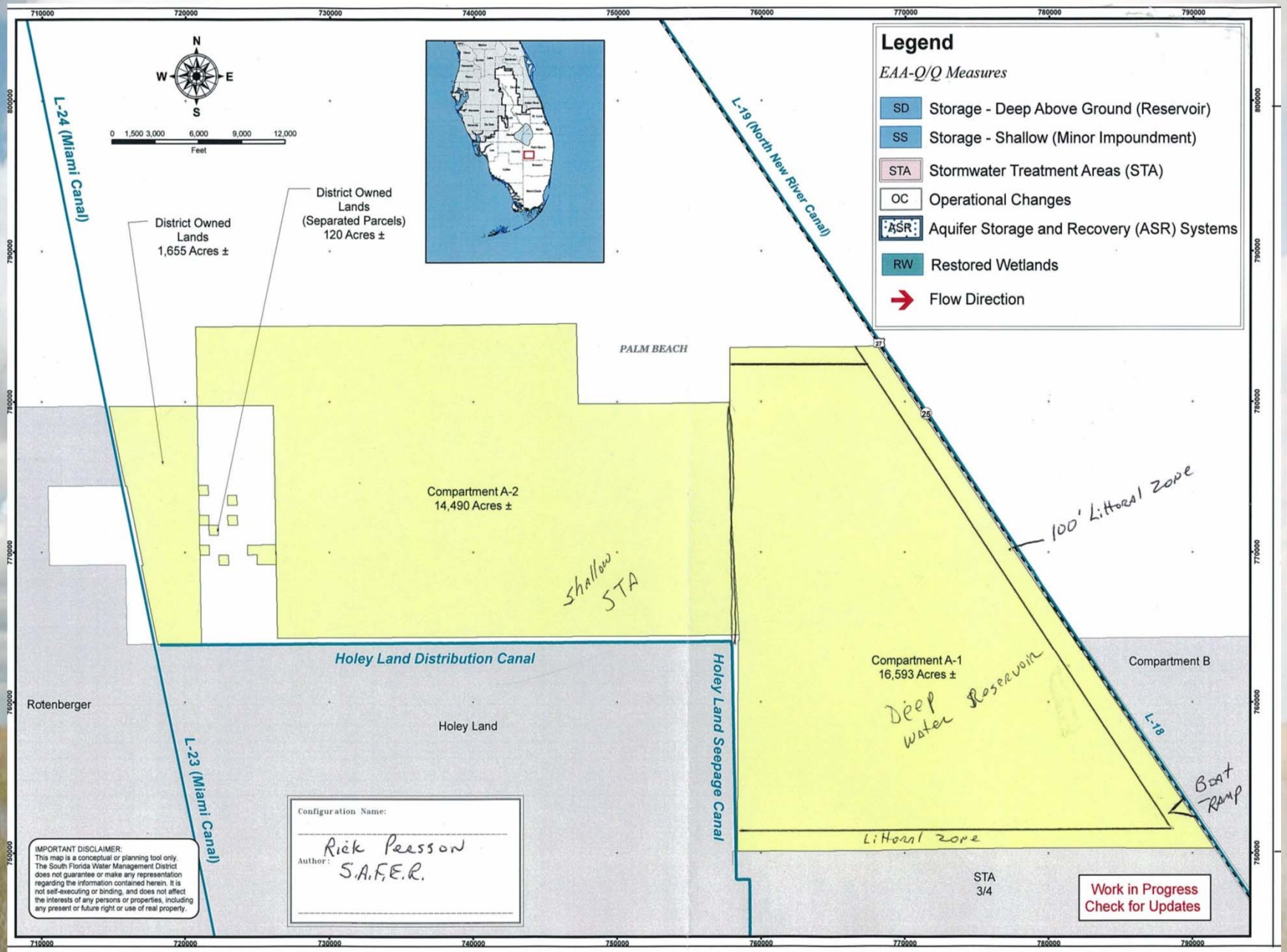
LOCATION OF TALISMAN PROPERTY





RESTORING THE HEART OF THE EVERGLADES

CENTRAL EVERGLADES


Legend
EAA-Q/Q Measures
SD Storage - Deep Above Ground (Reservoir)
SS Storage - Shallow (Minor Impoundment)
STA Stormwater Treatment Areas (STA)
OC Operational Changes
ASR Aquifer Storage and Recovery (ASR) Systems
RW Restored Wetlands
Flow Direction
N
S
E
W
0 1,500 3,000 6,000 9,000 12,000
Feet
L-24 (Miami Canal)
L-19 (North New River Canal)
District Owned Lands 1,655 Acres ±
District Owned Lands (Separated Parcels) 120 Acres ±
PALM BEACH
Compartment A-2 14,490 Acres ±
Shallow STA
100' Littoral Zone
Holey Land Distribution Canal
Holey Land Seepage Canal
Compartment A-1 16,593 Acres ±
Deep water Reservoir
Compartment B
L-18
Boat Ramp
Rotenberger
Holey Land
L-23 (Miami Canal)
Littoral Zone
STA 3/4
Configuration Name:
Author: Rick Peesson S.A.F.E.R.
IMPORTANT DISCLAIMER:
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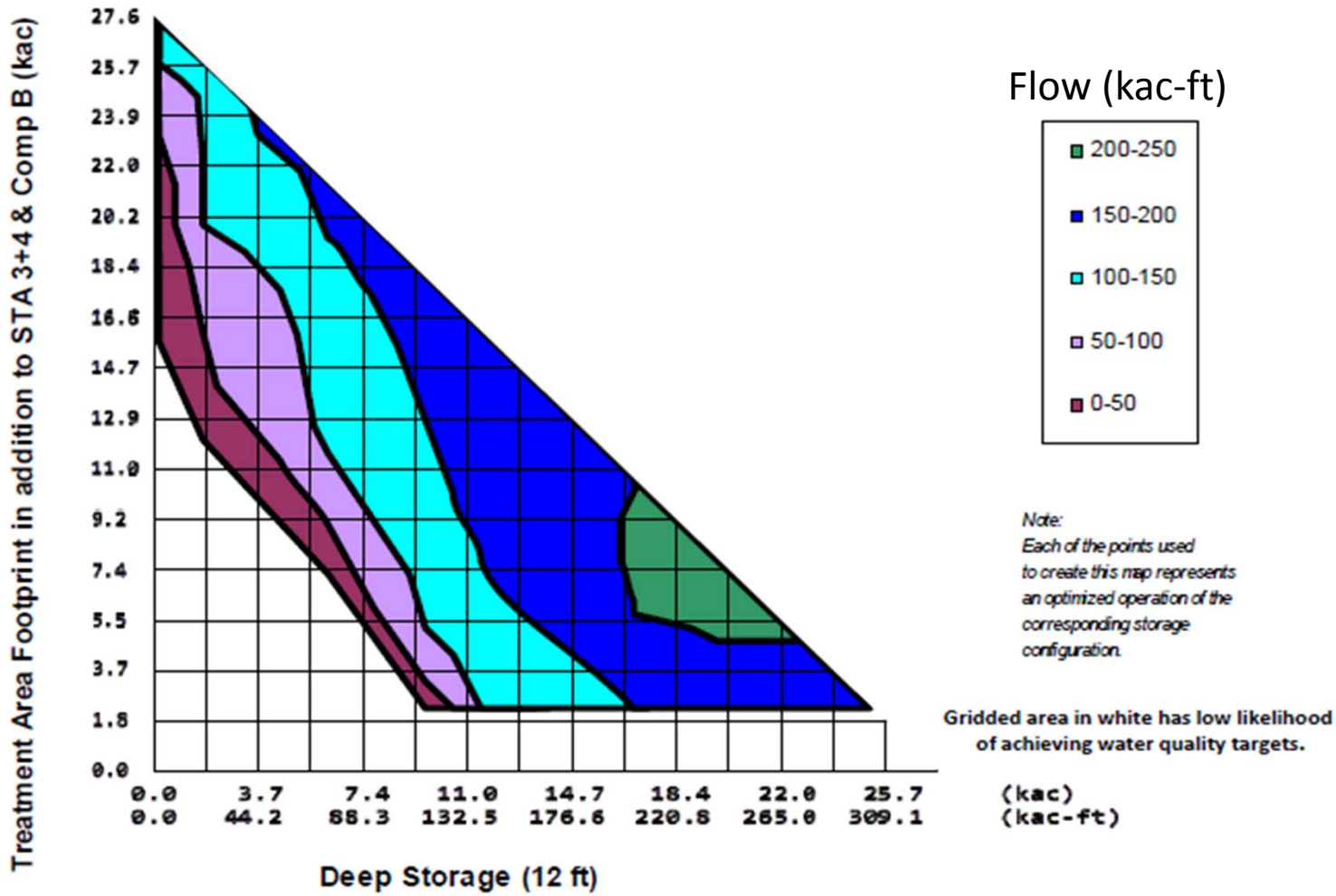
Work in Progress
Check for Updates

Graphic ID# = 4

Additional Average Annual Flow to Everglades (kac-ft)



NORTHERN ESTUARY
&
LAKE OKEECHOBEE SCREENING RESULTS

PERFORMANCE CRITERIA SUMMARY

Management Measure Configuration			Additional Flows to Everglades	Everglades Dry Standard Score	Estuary	Increased Water Availability	Objectives Sub-Total	Total Cost Million $
Flow-Through Wetland/FEB								
FEB	Reservoir	LO Ops						
28000		190-Est	3	2	Performs Similarly	1	**6**	360 - 560
		190-WS	3	2	Performs Similarly	3	**8**	360 - 560
		190-LO	3	2	Performs Similarly	2	**7**	360 - 560
4ft Shallow Storage & STA								
STA	Reservoir	LO Ops						
4000	24000	190-Est	2	2	Performs Similarly	1	**5**	550 - 750
		190-LO	2	2	Performs Similarly	2	**6**	550 - 750
		190-WS	2	2	Performs Similarly	3	**7**	550 - 750
14000	14000	190-Est	2	2	Performs Similarly	1	**5**	620 - 820
		190-LO	2	2	Performs Similarly	2	**6**	620 - 820
		190-WS	2	2	Performs Similarly	3	**7**	620 - 820
6ft Deep Storage & STA								
STA	Reservoir	LO Ops						
4000	24000	190-Est	2	2	Performs Similarly	1	**5**	800 - 1000
		190-WS	2	2	Performs Similarly	3	**7**	800 - 1000
		190-LO	2	2	Performs Similarly	2	**6**	800 - 1000
17000	11000	190-Est	2	2	Performs Similarly	1	**5**	840 - 1040
		190-WS	2	2	Performs Similarly	3	**7**	840 - 1040
		190-LO	2	2	Performs Similarly	2	**6**	840 - 1040
12 ft Deep Storage & STA								
STA	Reservoir	LO Ops						
4000	24000	140-Est	1	3	Performs Similarly	2	**6**	1550 - 1700
		140-WS	1	3	Performs Similarly	3	**7**	1550 - 1700
		140-LO	1	3	Performs Similarly	2	**6**	1550 - 1700
7000	21000	240-Est	4	3	Performs Similarly	1	**8**	1560 - 1700
		240-WS	4	3	Performs Similarly	2	**9**	1560 - 1700
		240-LO	4	3	Performs Similarly	2	**9**	1560 - 1700
11000	17000	190-Est	3	3	Performs Similarly	1	**7**	1570 - 1700
		190-WS	3	3	Performs Similarly	3	**9**	1570 - 1700
		190-LO	3	3	Performs Similarly	2	**8**	1570 - 1700
STA								
STA	Reservoir	LO Ops						
28000		140-Est	1	2	Performs Similarly	2	**5**	650 - 750
		140-WS	1	2	Performs Similarly	3	**6**	650 - 750
		140-LO	1	2	Performs Similarly	2	**5**	650 - 750

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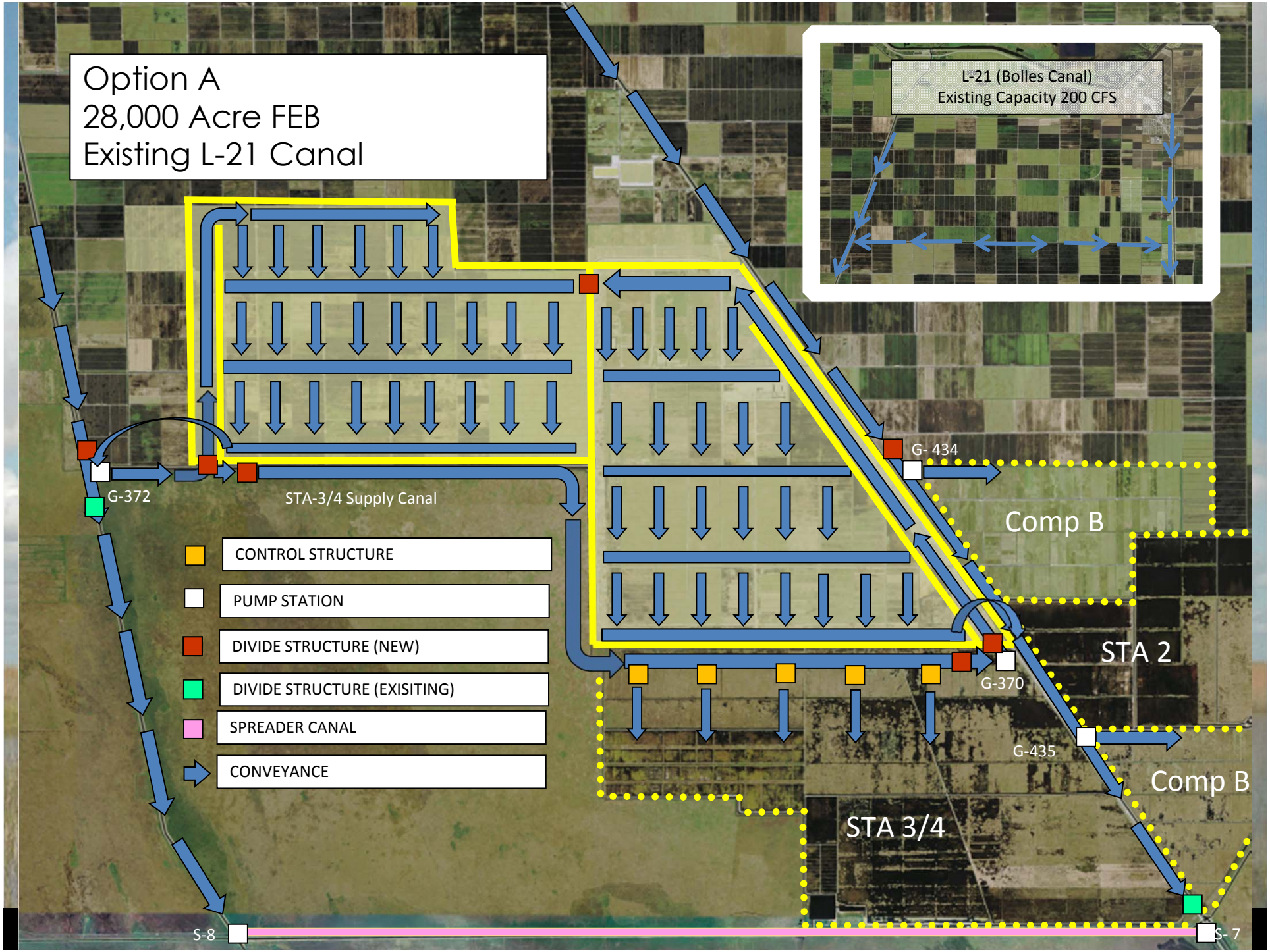
Level 2 Results

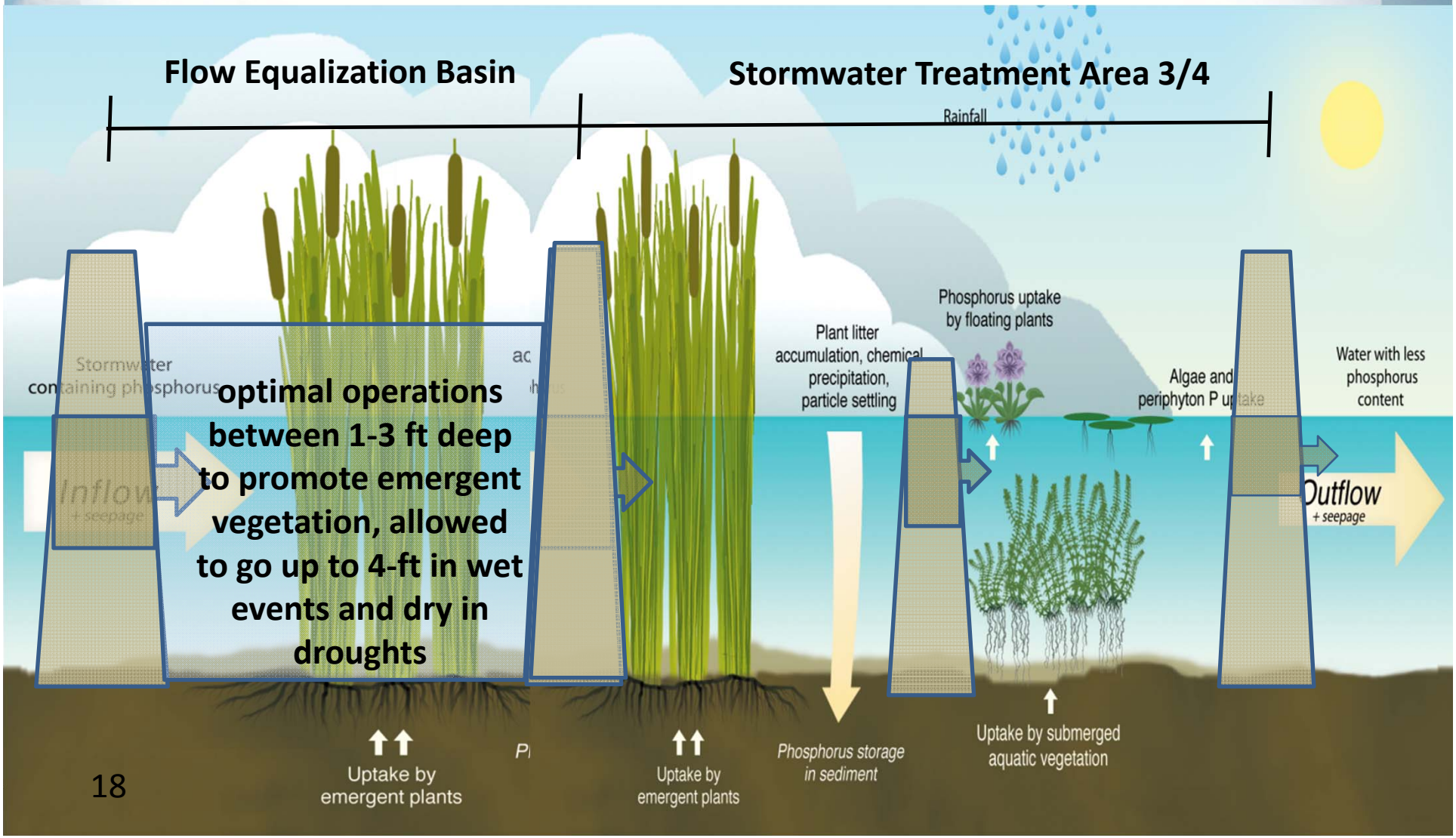
Management Measure Configuration			Objectives Sub-Total	Lake Okeechobee	Adaptive Management	Onsite Habitat	Total Score	Total Cost
Flow-Through Wetland/FEB								
FEB	Reservoir	LO Ops						
28000		190-Est	**6**	Performs Similarly	2	4	**12**	360 - 560
		190-WS	**8**	Performs Similarly	2	4	**14**	360 - 560
		190-LO	**7**	Performs Similarly	2	4	**13**	360 - 560
4ft Shallow Storage & STA								
STA	Reservoir	LO Ops						
4000	24000	190-Est	**5**	Performs Similarly	2	2	**9**	550 - 750
		190-LO	**6**	Performs Similarly	2	2	**10**	550 - 750
		190-WS	**7**	Performs Similarly	2	2	**11**	550 - 750
14000	14000	190-Est	**5**	Performs Similarly	2	3	**10**	620 - 820
		190-LO	**6**	Performs Similarly	2	3	**11**	620 - 820
		190-WS	**7**	Performs Similarly	2	3	**12**	620 - 820
6ft Deep Storage & STA								
STA	Reservoir	LO Ops						
4000	24000	190-Est	**5**	Performs Similarly	3	2	**10**	800 - 1000
		190-WS	**7**	Performs Similarly	3	2	**12**	800 - 1000
		190-LO	**6**	Performs Similarly	3	2	**11**	800 - 1000
17000	11000	190-Est	**5**	Performs Similarly	2	3	**10**	840 - 1040
		190-WS	**7**	Performs Similarly	2	3	**12**	840 - 1040
		190-LO	**6**	Performs Similarly	2	3	**11**	840 - 1040
12 ft Deep Storage & STA								
STA	Reservoir	LO Ops						
4000	24000	140-Est	**6**	Performs Similarly	4	3	**13**	1550 - 1700
		140-WS	**7**	Performs Similarly	4	3	**14**	1550 - 1700
		140-LO	**6**	Performs Similarly	4	3	**13**	1550 - 1700
7000	21000	240-Est	**8**	Performs Similarly	4	3	**15**	1560 - 1700
		240-WS	**9**	Performs Similarly	4	3	**16**	1560 - 1700
		240-LO	**9**	Performs Similarly	4	3	**16**	1560 - 1700
11000	17000	190-Est	**7**	Performs Similarly	3	3	**13**	1570 - 1700
		190-WS	**9**	Performs Similarly	3	3	**15**	1570 - 1700
		190-LO	**8**	Performs Similarly	3	3	**14**	1570 - 1700
STA								
STA	Reservoir	LO Ops						
28000		140-Est	**5**	Performs Similarly	2	4	**11**	650 - 750
		140-WS	**6**	Performs Similarly	2	4	**12**	650 - 750
		140-LO	**5**	Performs Similarly	2	4	**11**	650 - 750

NORTH OF THE REDLINE SCREENING RESULTS

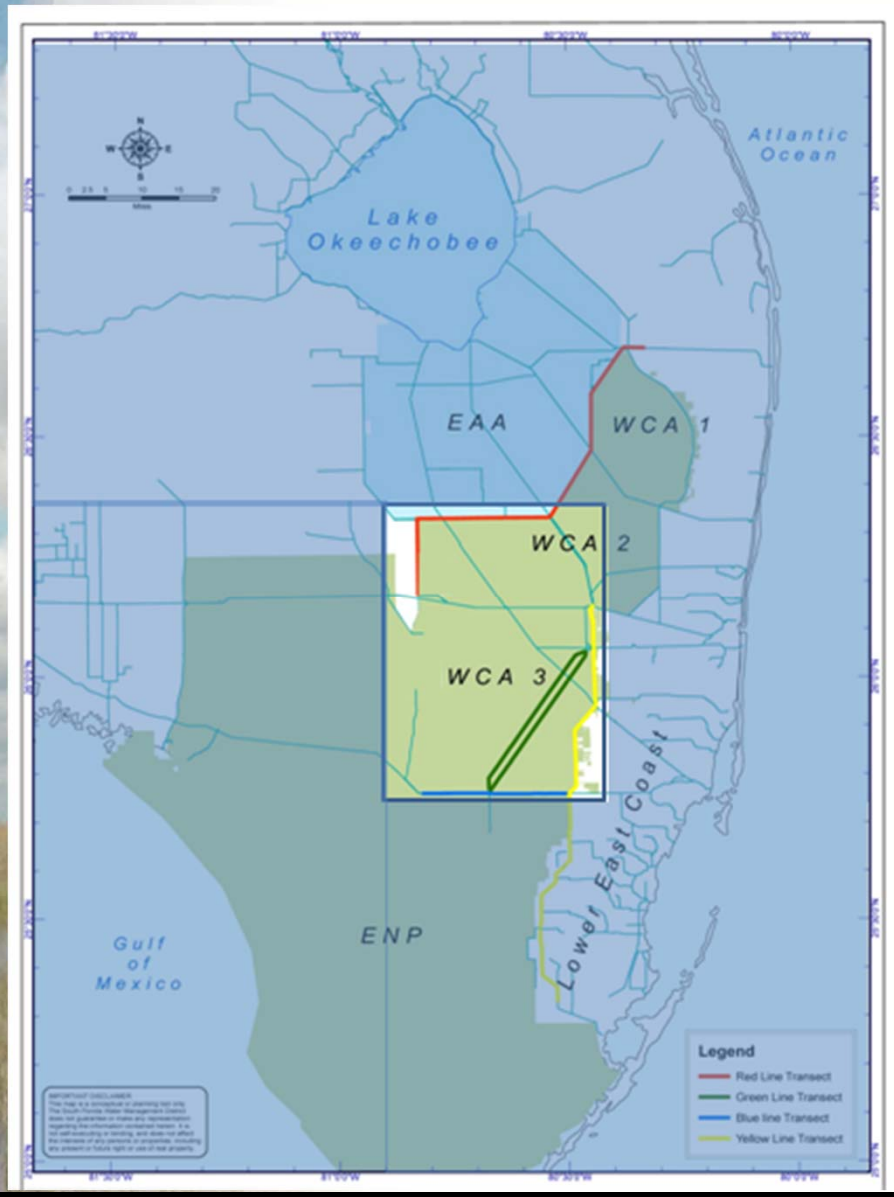
- All of the options rated better than base conditions for all objectives
- Top overall performers: 28,000 acre Flow-Equalization Basin and 21,000 acre 12-ft reservoir with 7,000 acre STA
  - No configurations cost less than these while producing greater benefit, i.e., "Cost Effective Plans"
  - The 12ft Reservoir provides the greatest benefits, however, the cost is prohibitive as a first increment and eliminated from further consideration
- Northern estuary performance better than base conditions, however, all CEPP options performed similarly
- Lake operation scenarios produce measurable differences for improvements to Agricultural Water Supply
- **28,000 acre FEB moves ~ an additional 190,000 ac-ft of undersireable discharges to estuaries south and improves flow to the central Everglades (CERP ~ 300,00 Ac-ft) = significant increment**

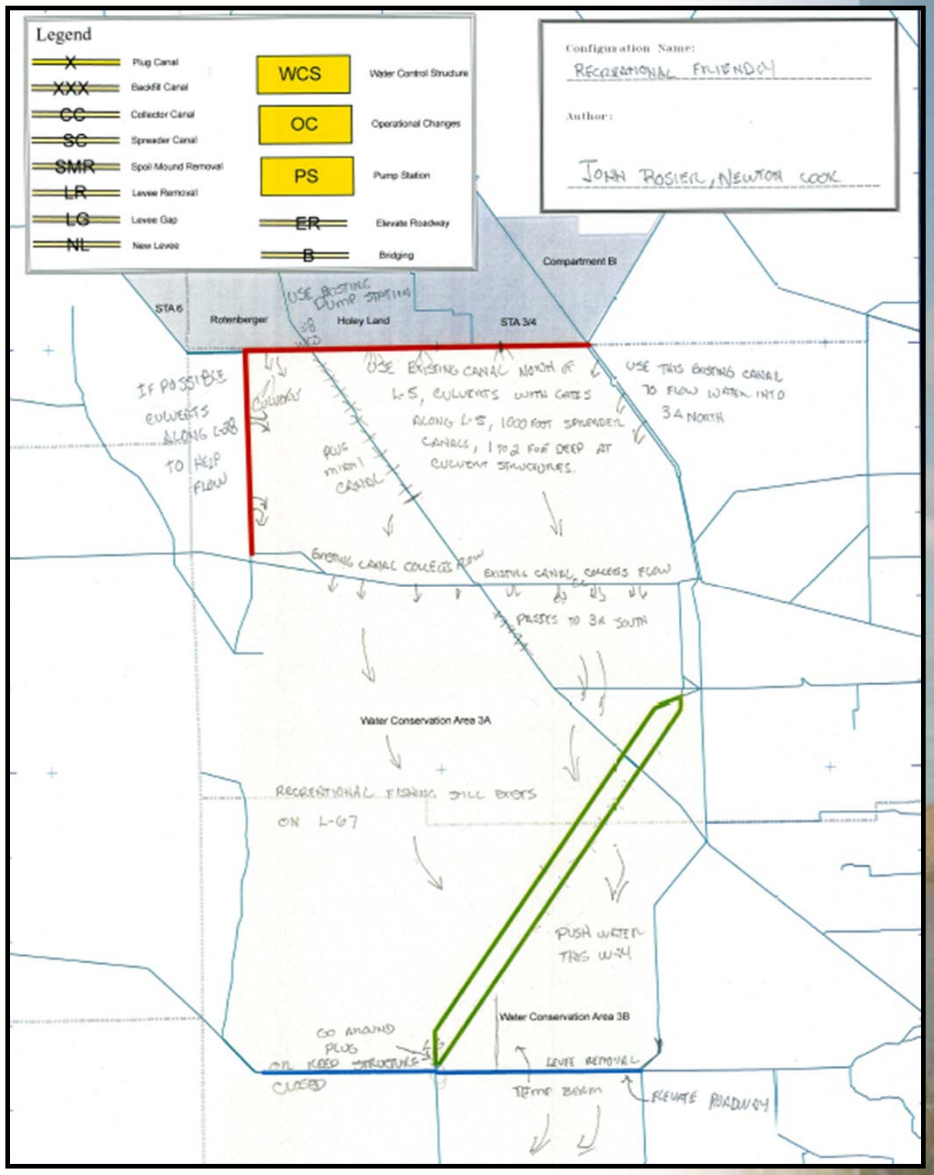

Option A
28,000 Acre FEB
Existing L-21 Canal
L-21 (Bolles Canal)
Existing Capacity 200 CFS
G-372
STA-3/4 Supply Canal
G- 434
Comp B
STA 2
G-370
G-435
Comp B
STA 3/4
S-8
S- 7
CONTROL STRUCTURE
PUMP STATION
DIVIDE STRUCTURE (NEW)
DIVIDE STRUCTURE (EXISITING)
SPREADER CANAL
CONVEYANCE

FLOW EQUALIZATION BASIN AND STA



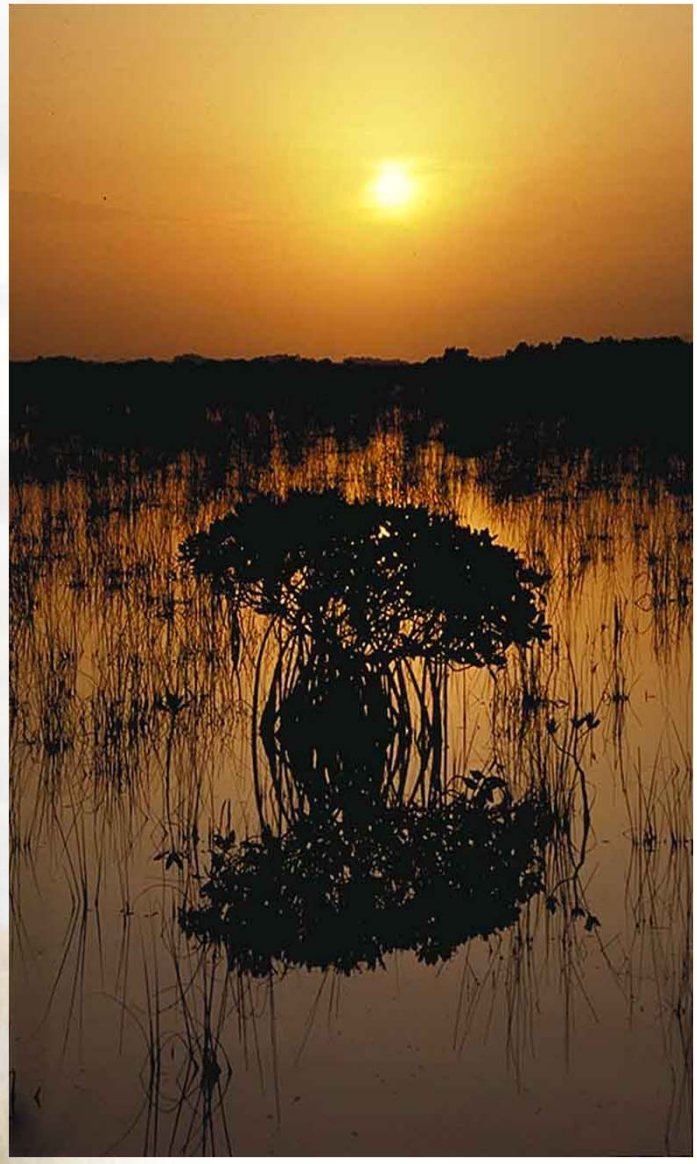
NEXT STEPS – SOUTH OF REDLINE





KEY MILESTONES

Task	Completion
Initial management measures screening	1 Apr 12
Component optimization and alternative development	30 Aug 12
Evaluate final array of alternatives and select preliminary TSP	30 Oct 12



THANK YOU