

Everglades Restoration Transition Plan (ERTP)

SFWMD Governing Board

April 13, 2011

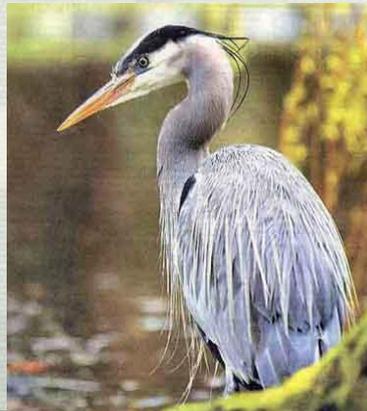
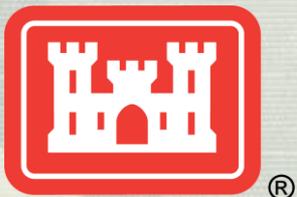
West Palm Beach, Florida

Donna George, P.E.
Project Manager

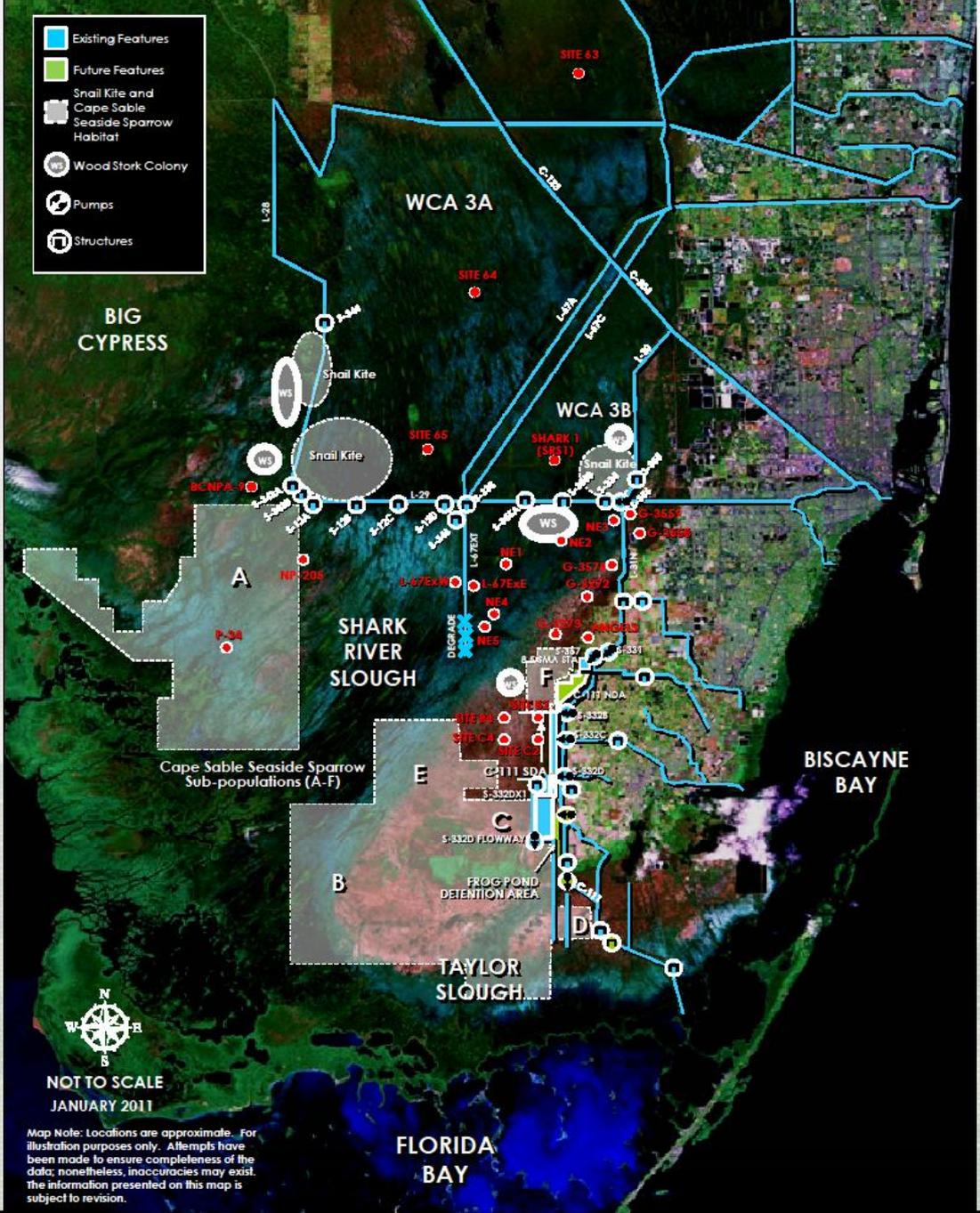
Dan Crawford
Hydraulic Engineer

James Riley
Environmental Quality Lead

John Zediak
Supervisor, Water
Management Section



-  Existing Features
-  Future Features
-  Snail Kite and Cape Sable Seaside Sparrow Habitat
-  Wood Stork Colony
-  Pumps
-  Structures




 NOT TO SCALE
 JANUARY 2011

Map Note: Locations are approximate. For illustration purposes only. Attempts have been made to ensure completeness of the data; nonetheless, inaccuracies may exist. The information presented on this map is subject to revision.



Presentation Overview

- **Action Purpose & Need**
- **Objectives**
- **Performance Summary**
- **Potential Effects on Northern WCA-3A**
- **Water Supply**
- **Water Quality**
- **Changes to Existing Operational Criteria**



Action Purpose & Need

- **Purpose of Action:**
 - Define water management operations within WCA-3A, ENP and SDCS consistent with protection of multiple listed species
- **Need:**
 - Expiration of Interim Operational Plan Biological Opinion on November 17, 2010
 - Relevant New Species Information
 - WCA-3A Interim High Water Criteria

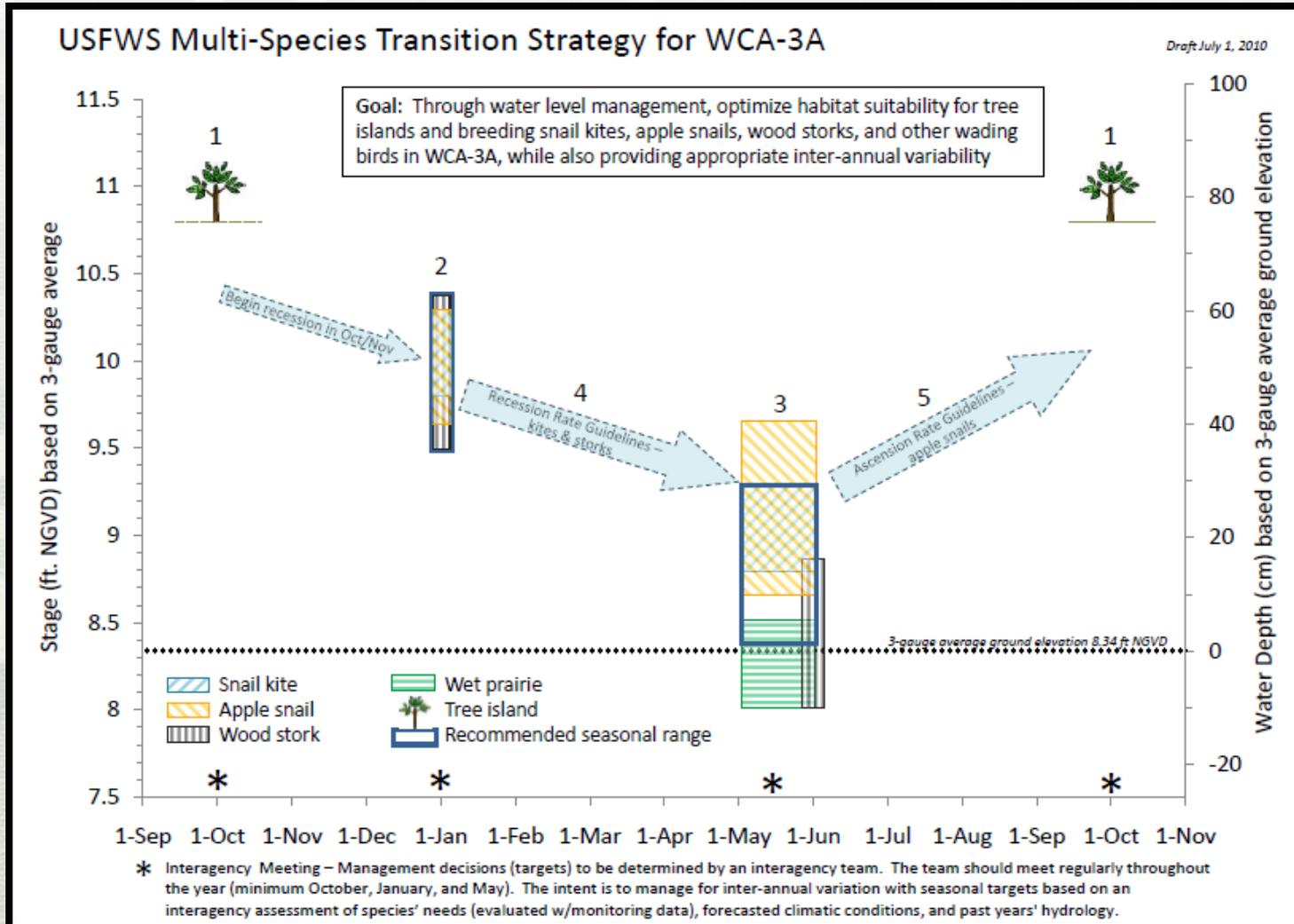


ERTP Objectives

- To improve conditions for the Everglade snail kite, wood stork and other wading birds and their habitats in WCA-3A
- To maintain nesting season requirements for the Cape Sable seaside sparrow
- To maintain other C&SF project purposes

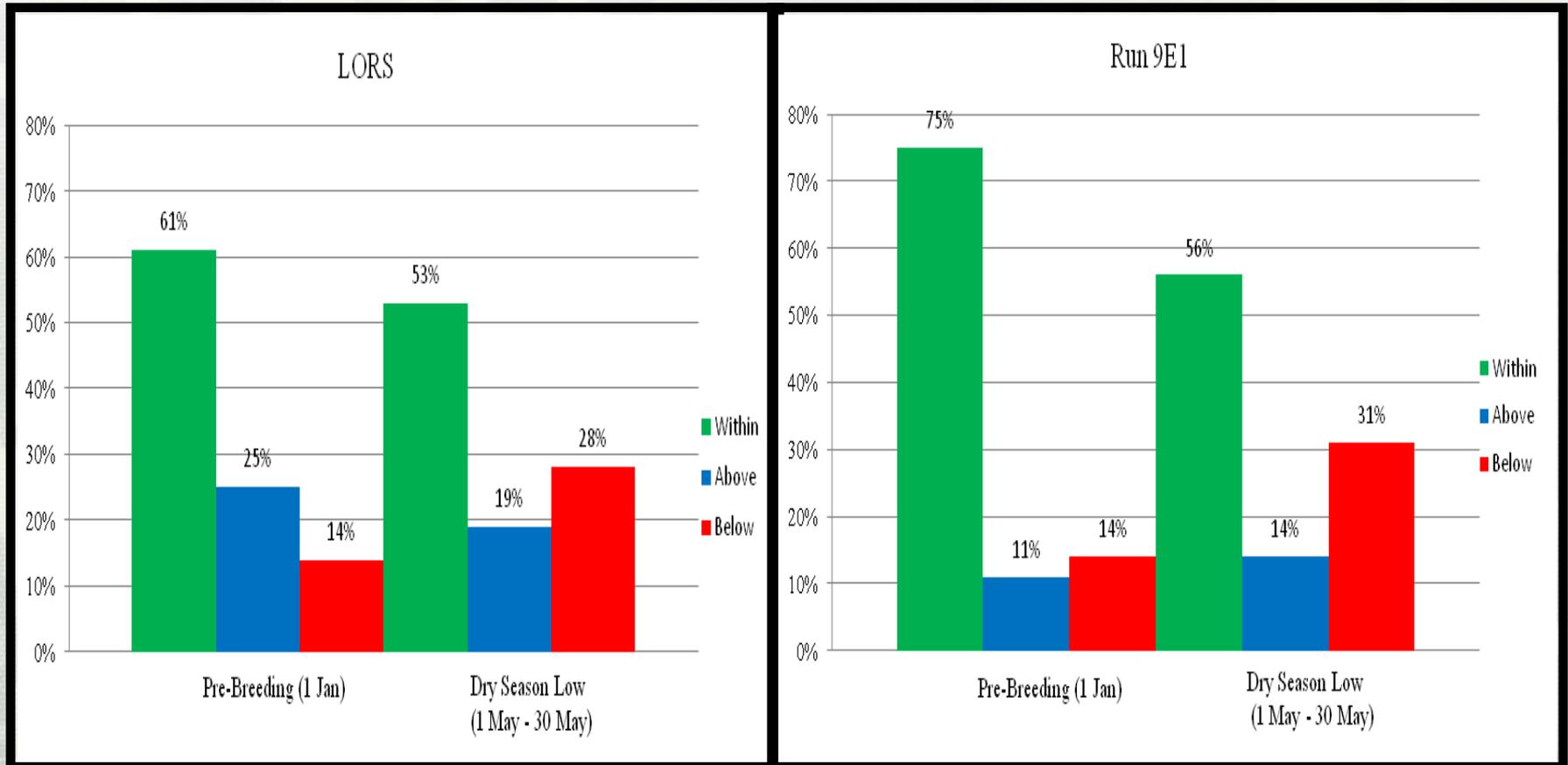


FWS Multi-Species Transition Strategy (MSTS)



SFWMM Results: MSTs Depths

Percentage of Years in which WCA-3A water depths are within, above or below the FWS Multi-Species Transition Plan recommended depth range



Performance Summary

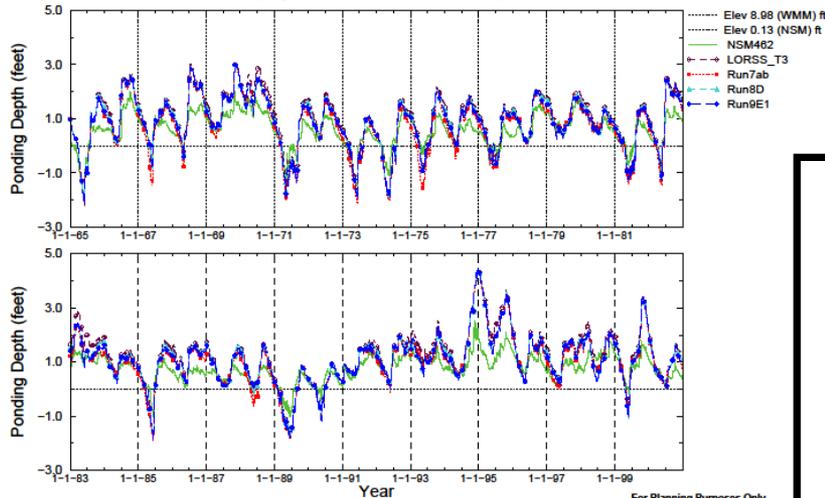
- **Multi-Species Plan**
- **Improved conditions within WCA-3A for snail kite, wood stork, wading birds and tree islands**
- **Maintained nesting season requirements for Cape Sable seaside sparrow**



Northern WCA-3A (Gauge 3A-3)

Normalized Hydrographs for North End of WCA3A

(Gage 3A-3, Cell Row 37 Col 25)

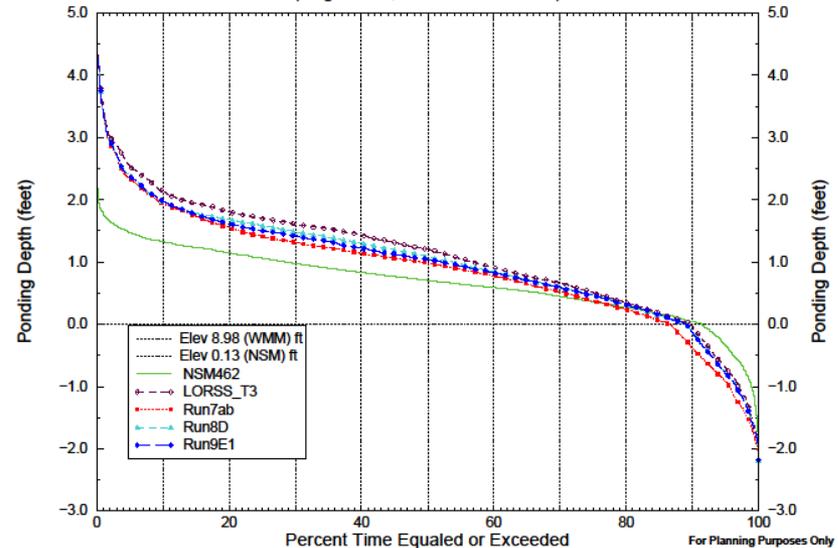


SFWM P.O.S. 1965 - 2000

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Normalized Duration Curves for North End of WCA3A

(Gage 3A-3, Cell Row 37 Col 25)

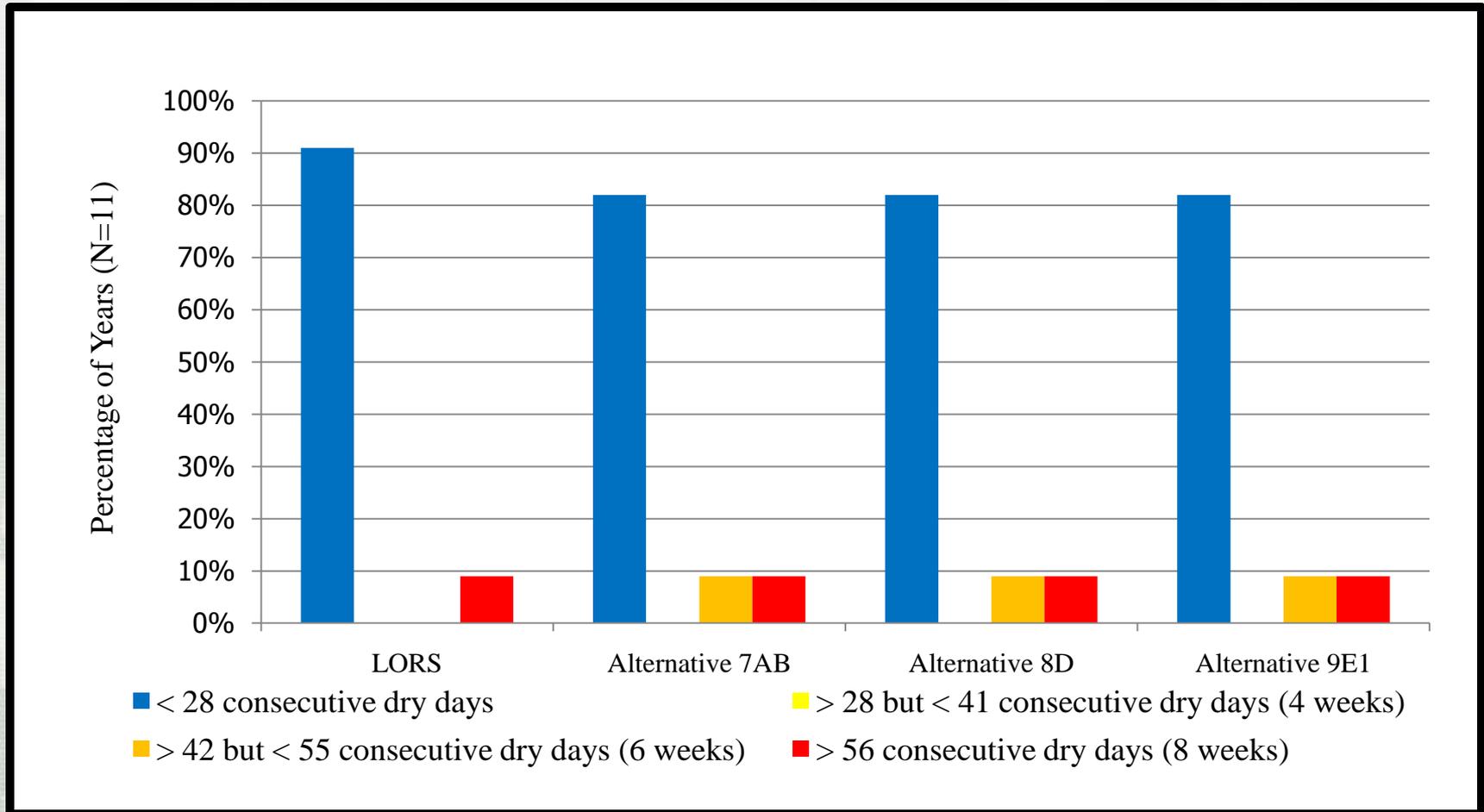


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Northern WCA-3A (Gauge 3A-3)



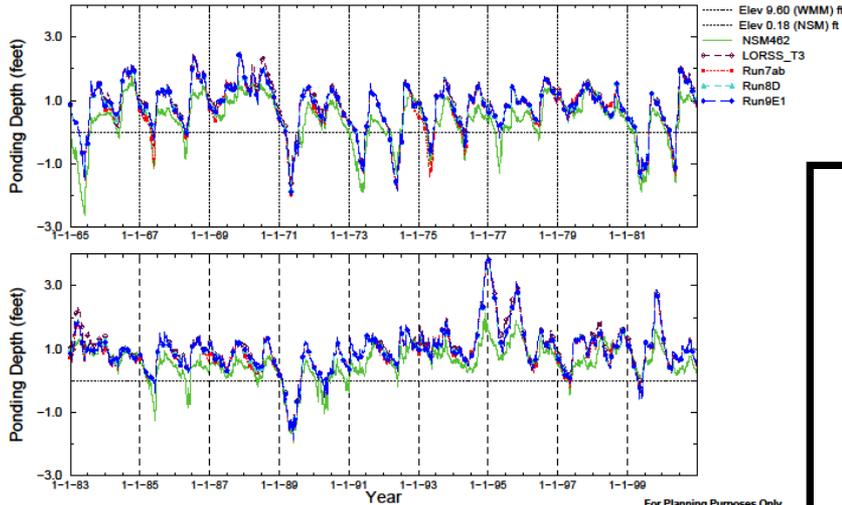
Comparison of percentage of years in which the number of consecutive dry days at Gauge 3A-3 fell within each of the four categories for the period between 1990 and 2000.



Northern WCA-3A (Gauge 3A-NE)

Normalized Hydrographs for North-East End of WCA-3A

(Gage 3A-NE, Cell Row 40 Col 23)

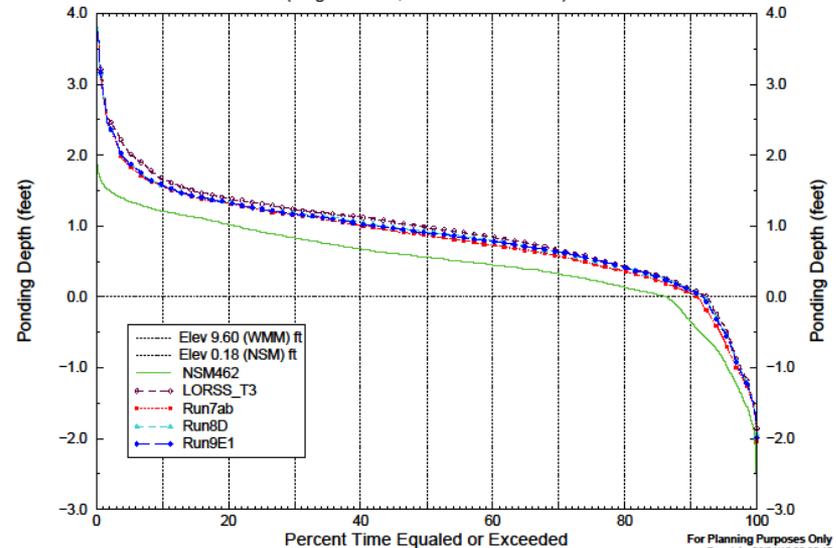


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SFWMM P.O.S. 1965 - 2000

Normalized Duration Curves for North-East End of WCA-3A

(Gage 3A-NE, Cell Row 40 Col 23)

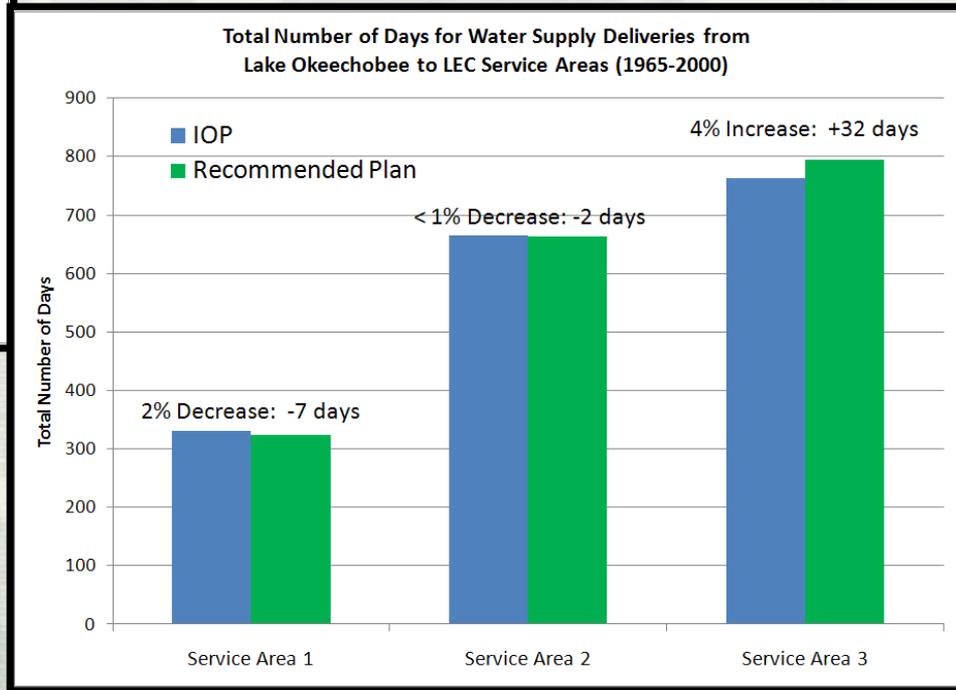
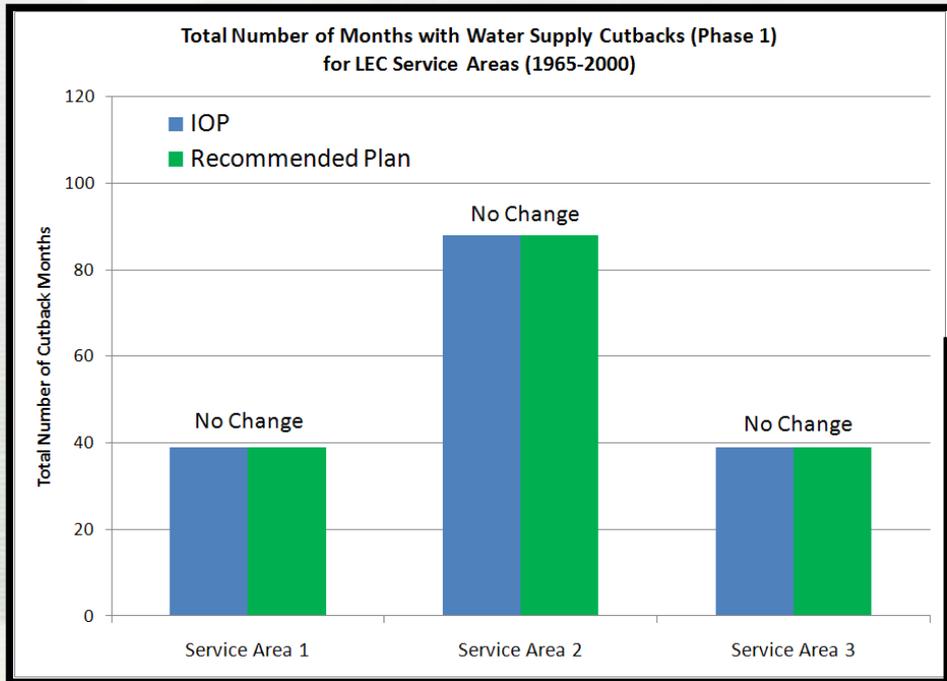


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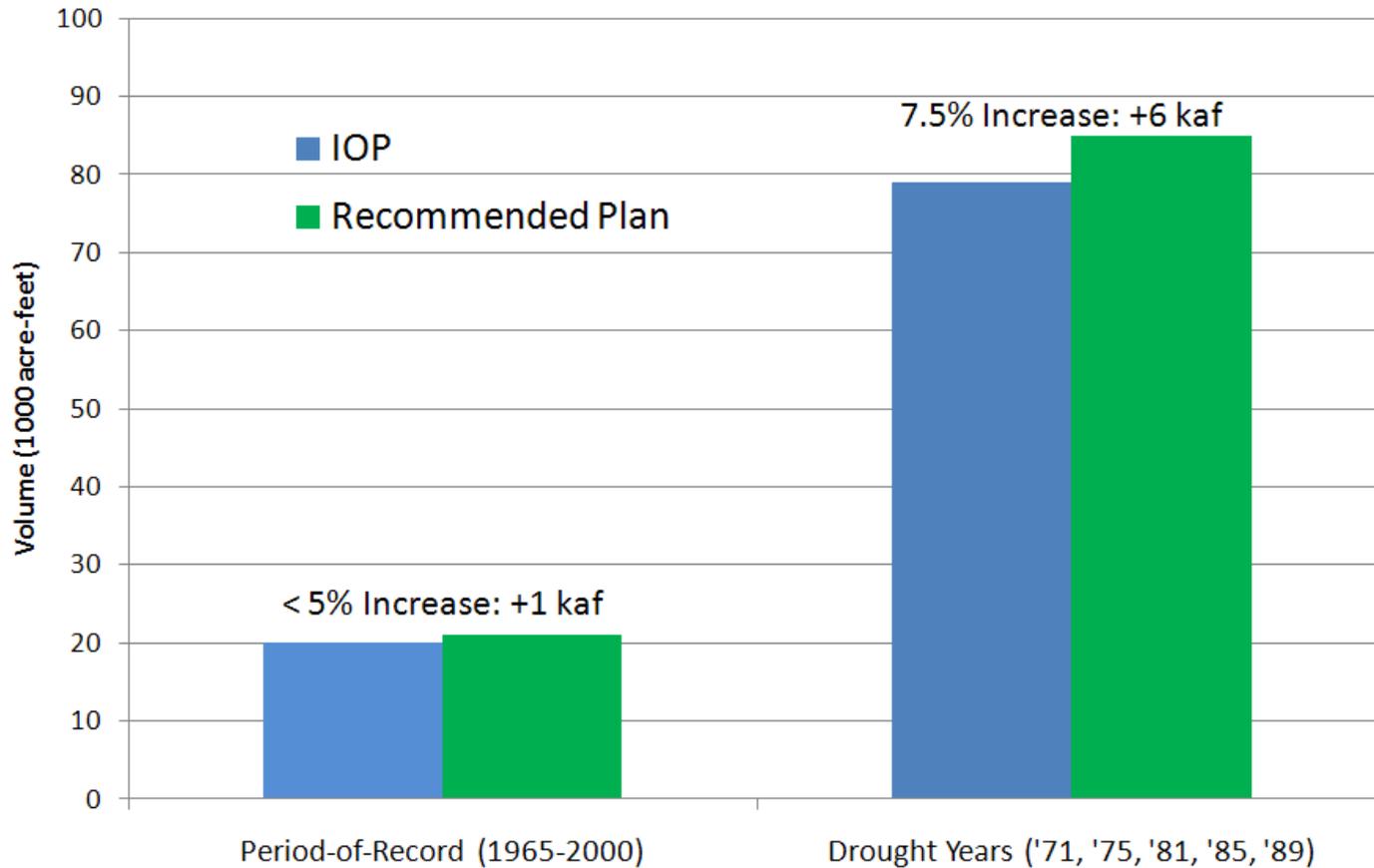


Water Supply



Water Supply

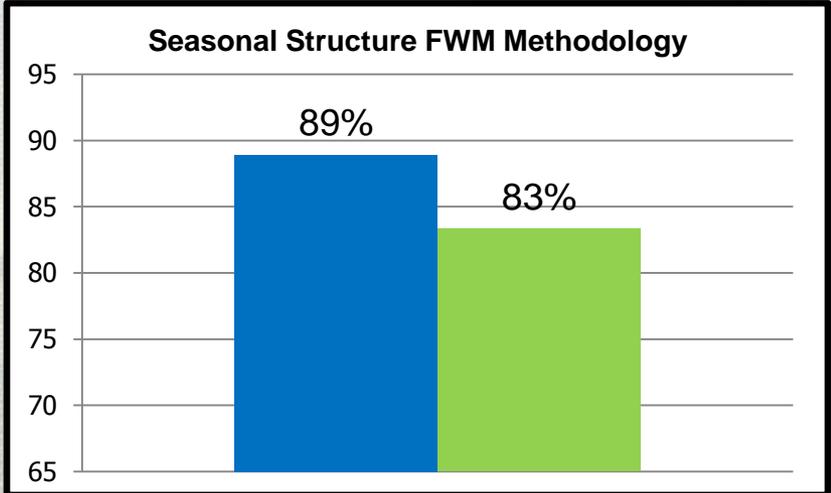
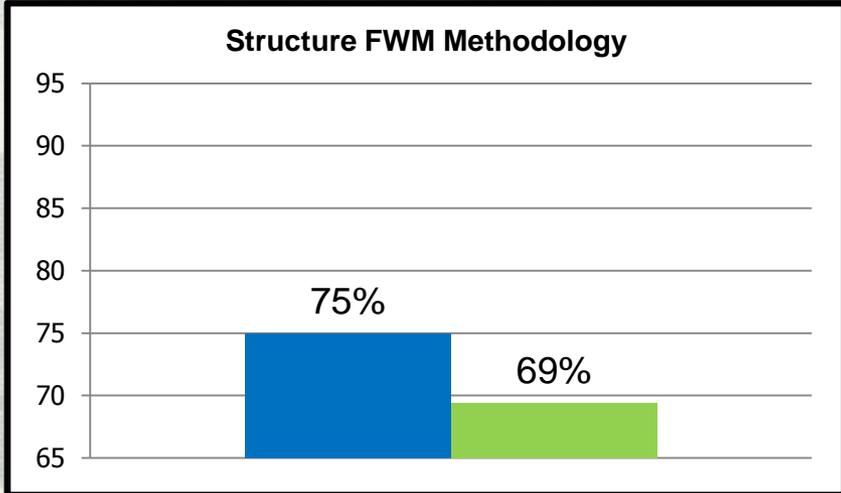
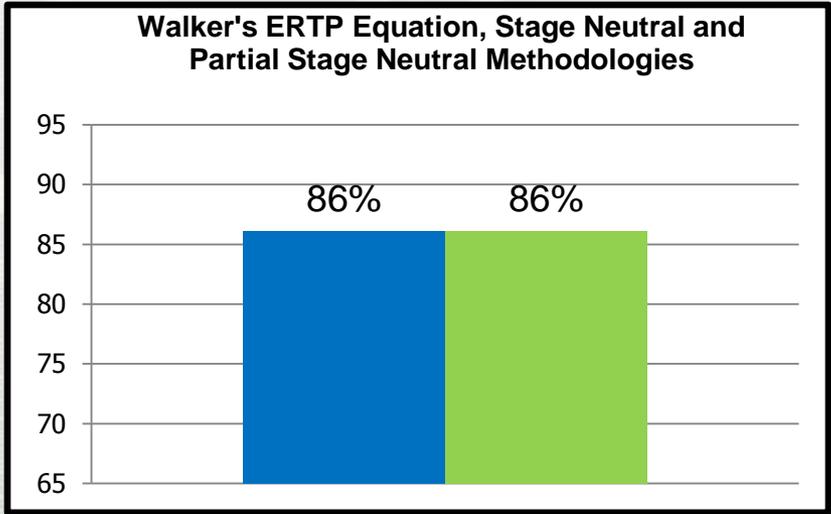
Average Annual Water Supply Deliveries to LEC Service Area 3 (Miami-Dade County) from Lake Okeechobee



Water Quality

Comparison of Predicted Percentage of Years of Flow Weighted Mean Limit Exceedance

- IOP
- Recommended Plan



Water Quality

- The Recommended Plan generally had the least impacts to water quality of all of the action alternatives
- Based on this analysis, implementation of the Recommended Plan results in NO additional flow weighted mean limit exceedances as compared to the current plan (IOP)

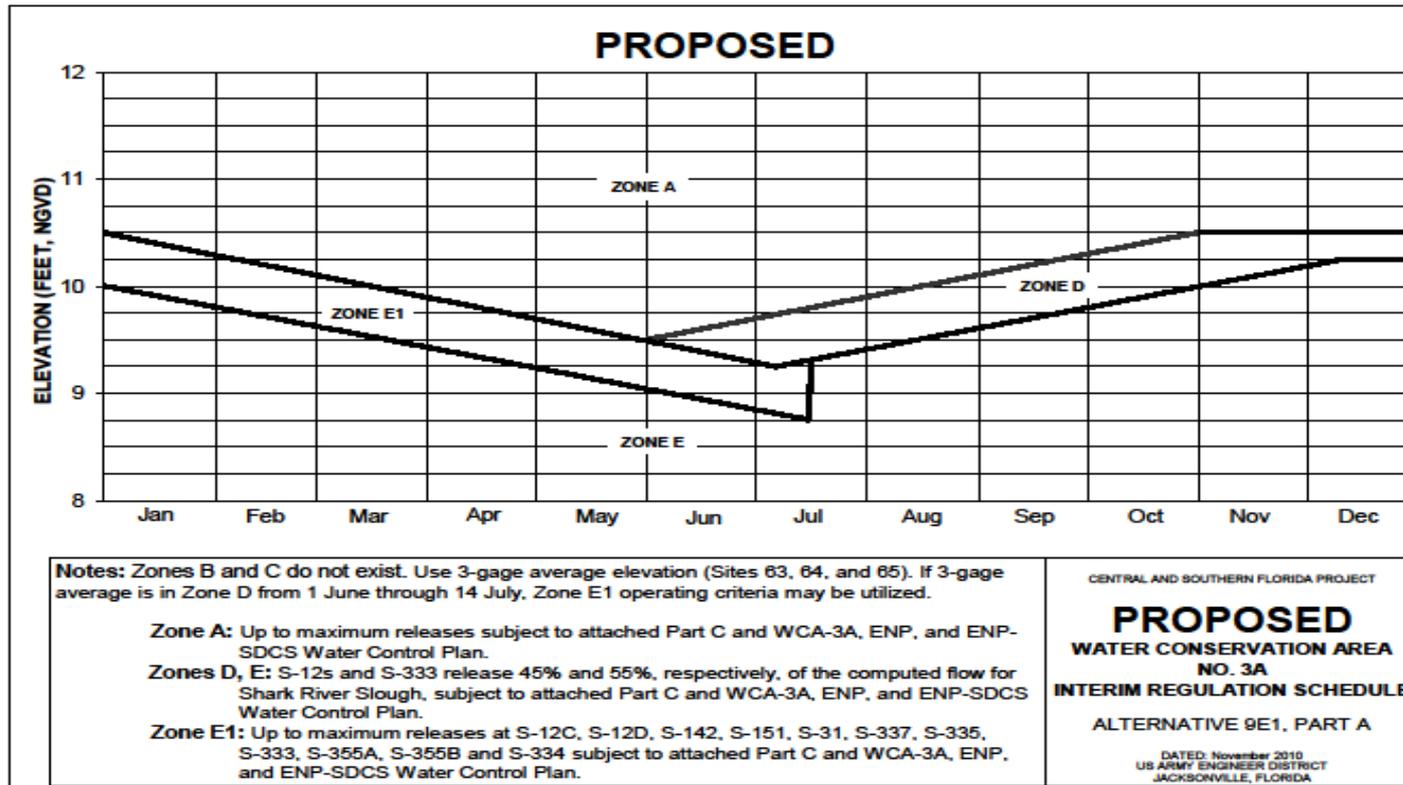


Changes to Existing Operating Criteria – WCA-3A

- **Zone E1 - expanded (replaces previous Zone E)**
 - Provides ability to make up to maximum releases from WCA-3A in January
- **Zone D - expanded (replaces previous Zone E)**
 - Provides ability to make releases from WCA-3A in November and December
- **Zone A - lowered 0.25 feet Nov – Dec and 0.50 feet Feb – Sept (removal of previous Zones B and C)**
 - Provides ability to make up to maximum releases when WCA-3A is lower



WCA-3A Regulation Schedule



Changes to Existing Operating Criteria: WCA-3A

- **S-12C - removal of closure period associated with CSSS**
 - Provides the ability to make releases when Rainfall Plan results in target flows
- **S-12A - ability to release up to 100 cfs when there are Rainfall Plan target flows**
 - Provides Miccosukee Tribe access to cultural areas
 - 1 November thru 14 July USACE requests consultation with FWS to avoid impacts on CSSS-A
- **S-346 - ability to open when S-12D is open and close when all S-12s are closed**
 - Improves conveyance downstream of S-12s



Existing Operating Criteria: ENP-South Dade Conveyance System

Change

- S-332D pumping limit from 1 February through 14 July increased (previously 165 cfs)
 - Provides the ability to pump up to 250 cfs from 1 February through 14 July

New

- S-332DX1 - culvert at the southern end of the Southern Detention Area and downstream of S-332D
 - Transfers water to Southern Detention Area from C-111 via S-332D
 - Assists in maintaining hydraulic ridge between ENP and L-31N/C-111
 - Provides the ability to benefit ENP water levels



ENP-South Dade Conveyance System



Additional Water Management Enhancements

- **WCA-3A Regulation Schedule and Periodic Scientists Calls inclusion of ecological goals associated with multiple species /their habitats**
- **Implementation of S-12's releases from East to West**
- **WCA-3A pre-emptive releases available when forecast for rainfall/inflow**
- **Dry season Rainfall Plan distribution to meet ENP recommendation (not limited to 45%-55%)**
- **Rainfall Plan calculation of 5,000 cfs/foot from 1 July thru 31 December – accounts for Zones B/C removal**
- **New gage to be installed between S-12A and NP-205**



**ERTP:
Comments Due April 18, 2011**

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OR

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Jacksonville, FL 32232-0019

