# CENTRAL EVERGLADES PLANNING PROJECT

## Working Group Sponsored Workshop

PRESENTED BY:

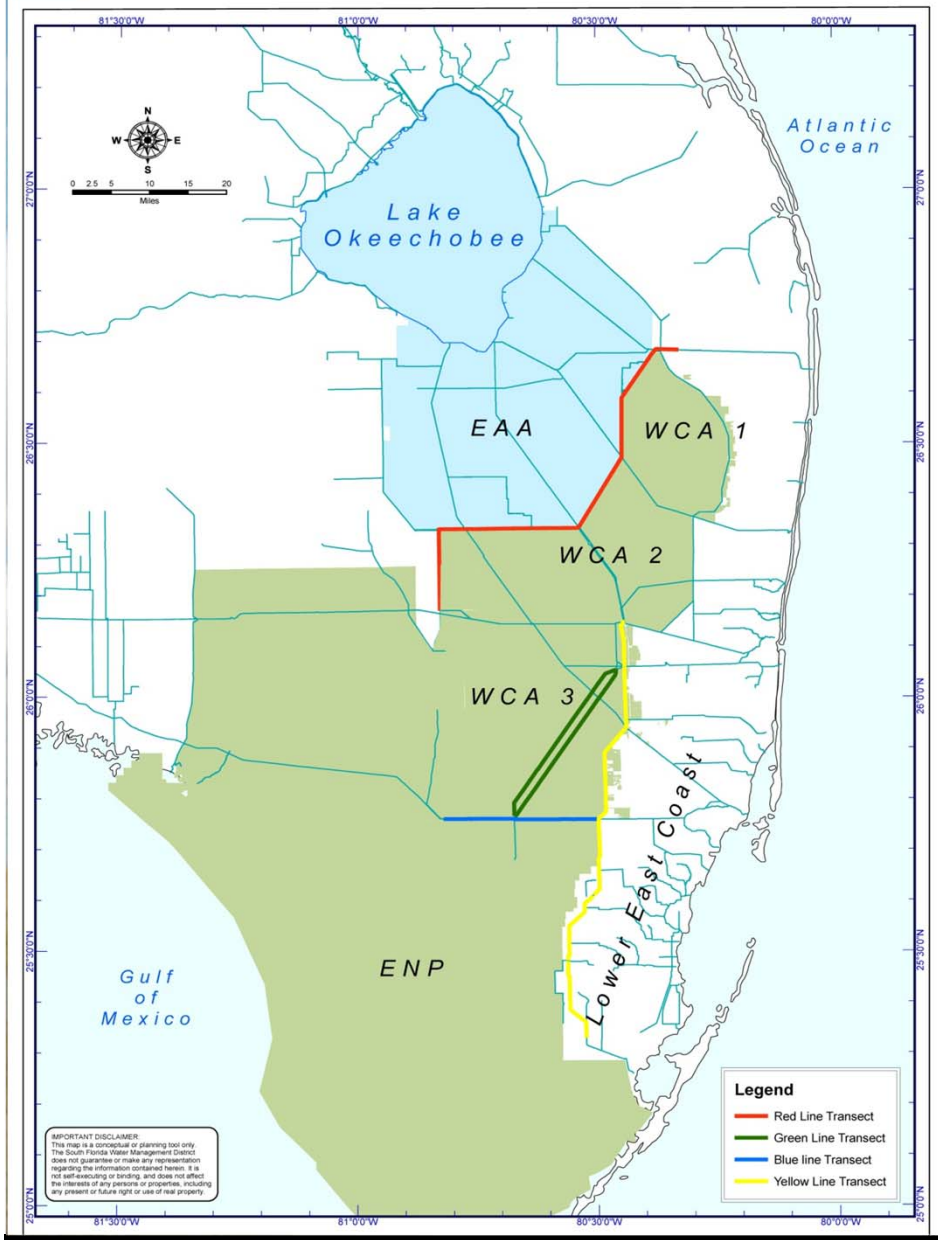
Kim Taplin
Chief, Central Everglades Branch, USACE

May 15, 2012

# GOALS AND OBJECTIVES

- **<u>GOAL: Enhance Ecological Values</u>**
- **Increase the total spatial extent of natural areas**
- **Improve habitat and functional quality**
  - Restore seasonal hydroperiods and freshwater distribution to support a natural mosaic of wetland and upland habitat in the Everglades system
  - Improve sheetflow patterns and surface water depths and durations in the Everglades system in order to reduce soil subsidence, the frequency of damaging peat fires, the decline of tree islands, and salt water intrusion
  - Reduce high volume discharges from Lake Okeechobee to improve the quality of oyster and SAV habitat in the northern estuaries
- **Improve native plant and animal species abundance and diversity**
  - Reduce water loss out of the natural system to promote appropriate dry season recession rates for wildlife utilization
  - Restore more natural water level responses to rainfall to promote plant and animal diversity and habitat function
- **<u>GOAL: Enhance Economic Values and Social Well Being</u>**
- **Increase availability of fresh water (agriculture/municipal/industrial)**
- **Reduce flood damages (agricultural/urban)**
- **Provide recreational and navigation opportunities**
- **Protect cultural and archeological resources and values**

# SPATIAL PERSPECTIVE




**REDLINE** –Everglades Agricultural Area (EAA) and the WCA 3A
*(L-4, L-5 and L-6 levees and canals)*

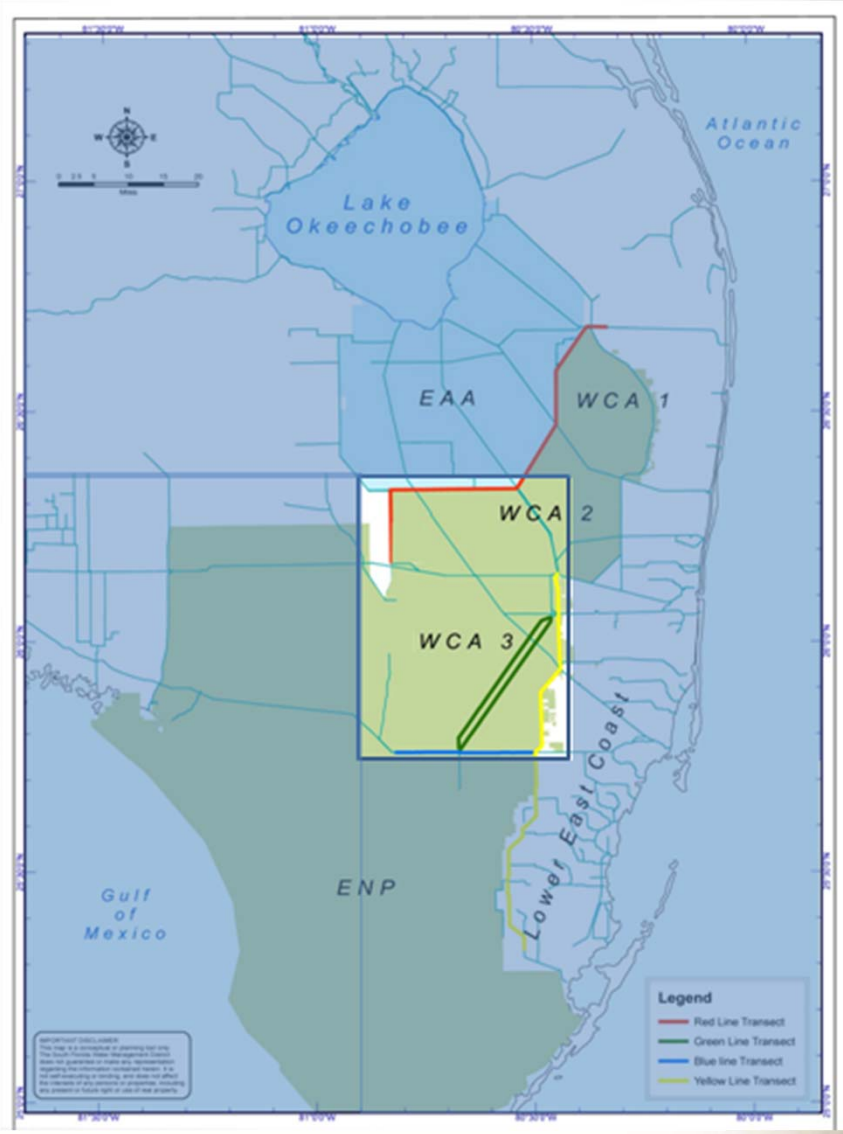
**GREENLINE** – WCA 3A and WCA 3B
*(L-67A and C levees and associated canals)*

**BLUELINE** - WCA 3A/3B and Everglades National Park (ENP)
*(Tamiami Trail roadway and L-29)*

**YELLOWLINE** –WCA 3A/3B and ENP to the lower east coast
*(east coast protective levee system, the L-30 and L-31N)*

# NEXT STEP

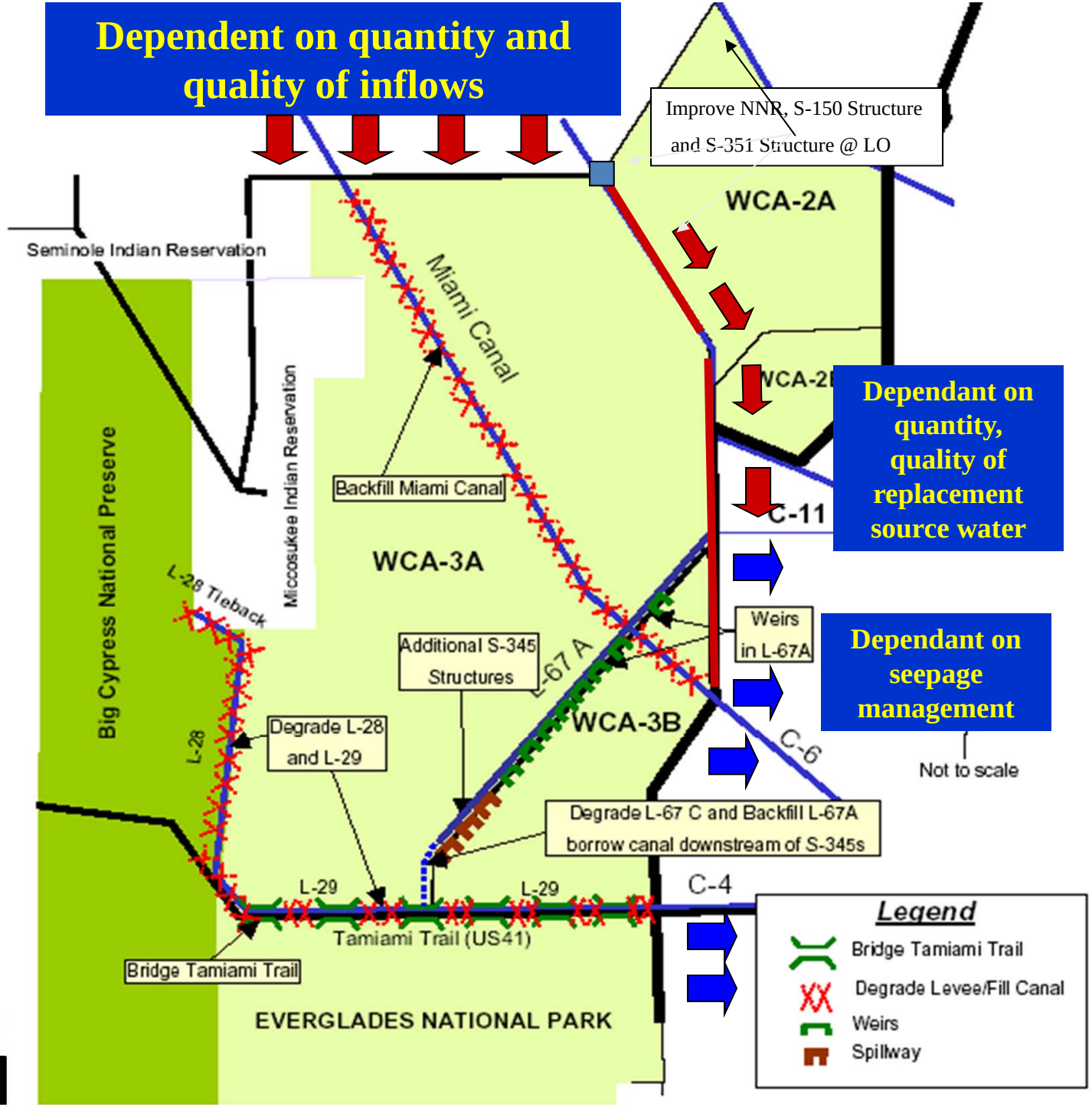
- CEPP Formulation
  - Initiate screening south of the Redline



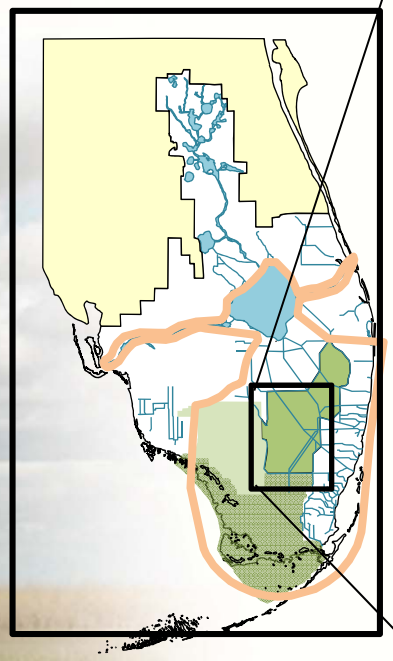
# Decomp YB Plan

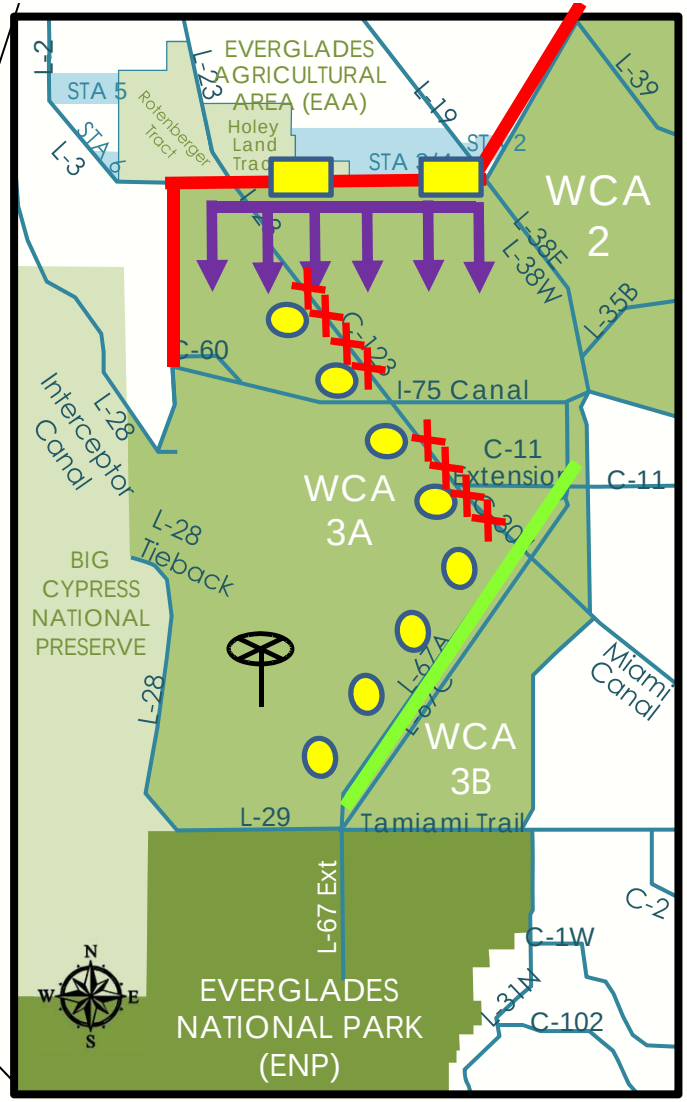
CEPP to recommend an appropriate initial increment

What is feasible?



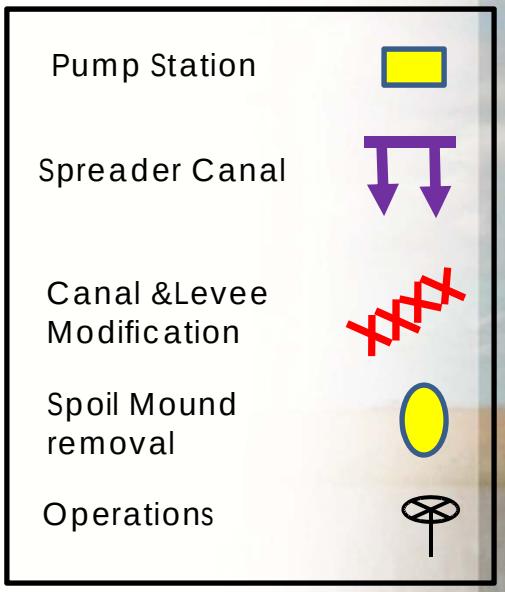
# South of Redline WCA-3A





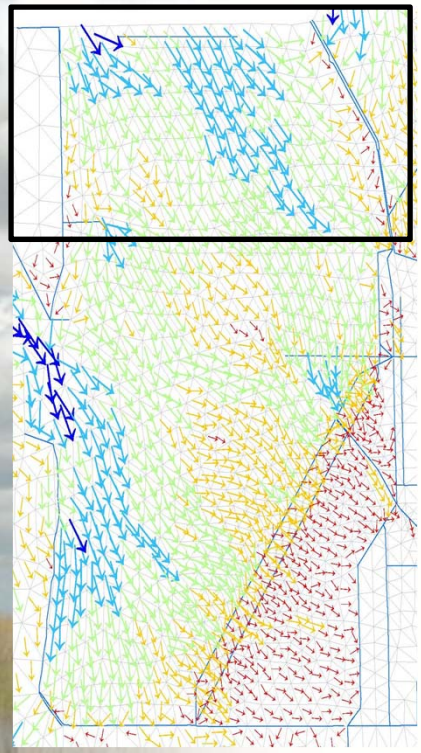

## Management Measures

- Pump Stations
- Spreader canals
- Canal plugs & backfill
- Spoil mound removal
- Operations

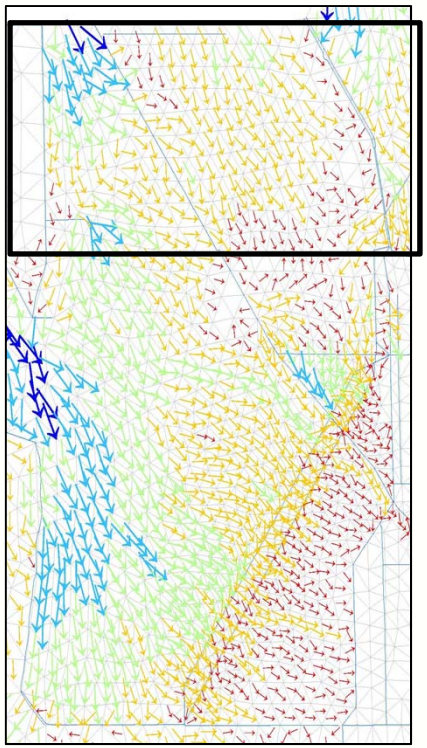



**What should be considered in development of a feasible initial increment?**

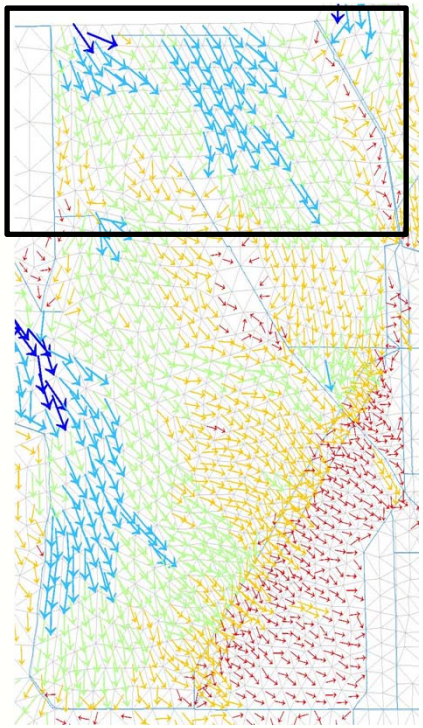
# What trends can we see from prior analyses? Decomp Miami Canal PIR Efforts – Dry Year (not pre-determined outcomes for CEPP)



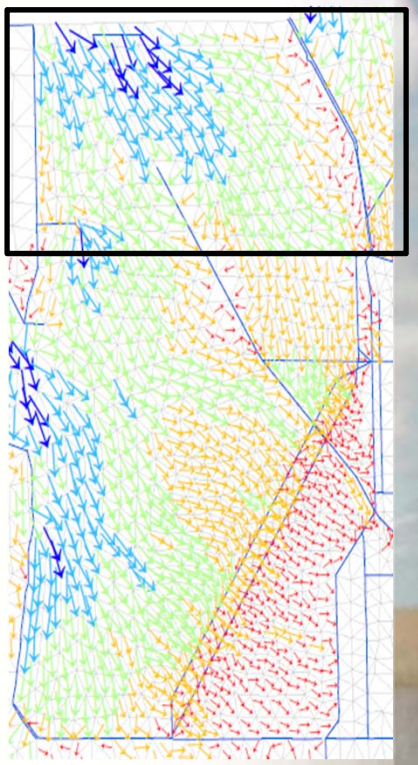
ALT A: Full HRF/Full MC



ALT G: Full HRF Only

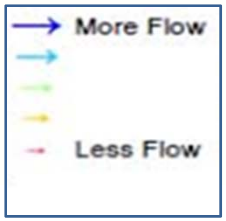


ALT B: Full HRF/North MC



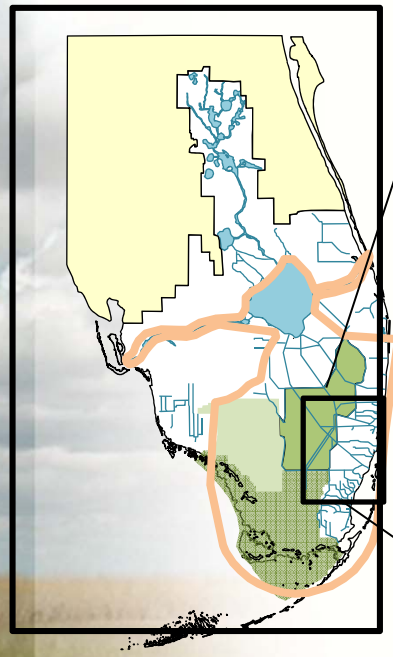
ALT F: West HRF/North MC

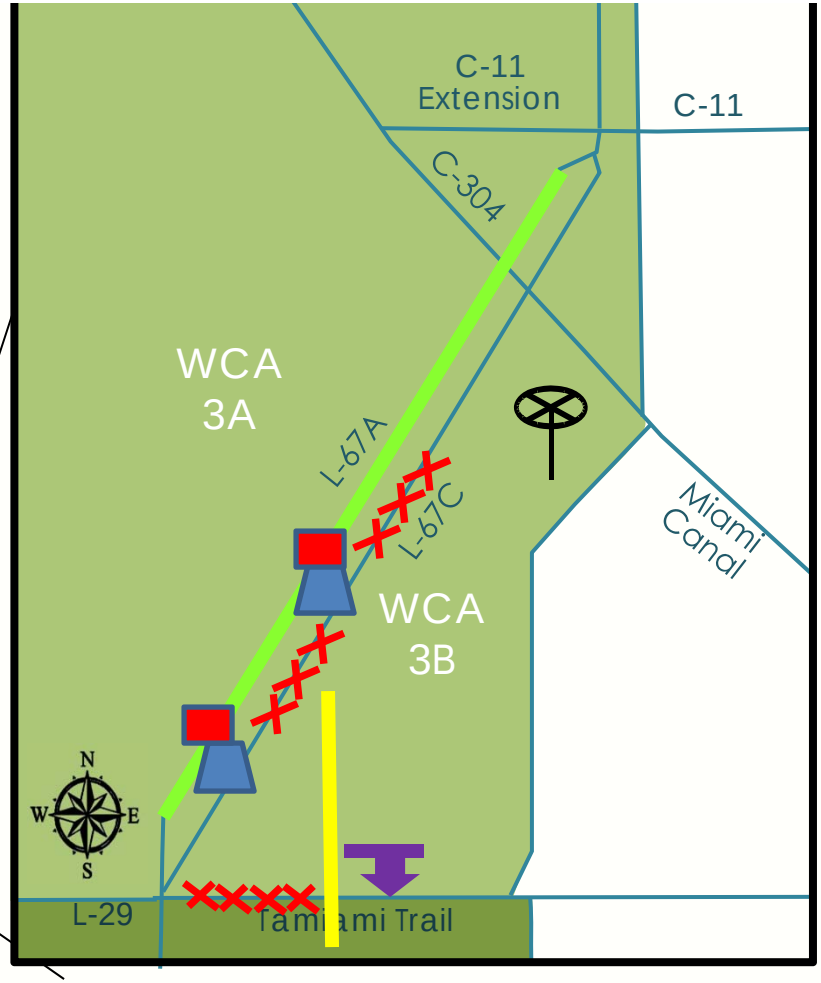
**Average Annual Overland Vector , Dry Year (1989)**




**Direction**
**Magnitude**

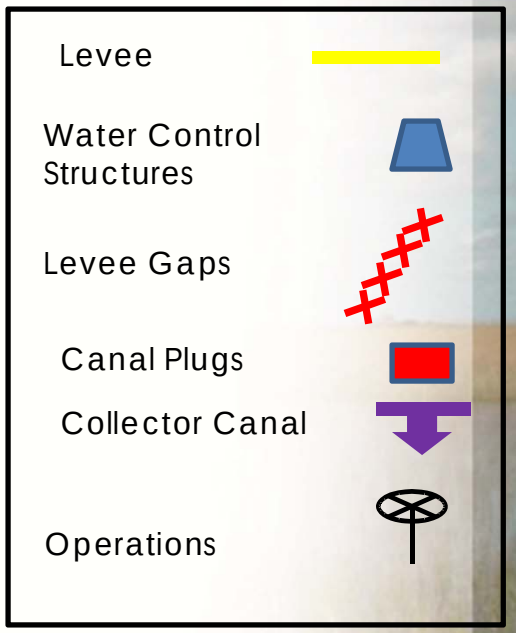
# South of Greenline WCA-3B





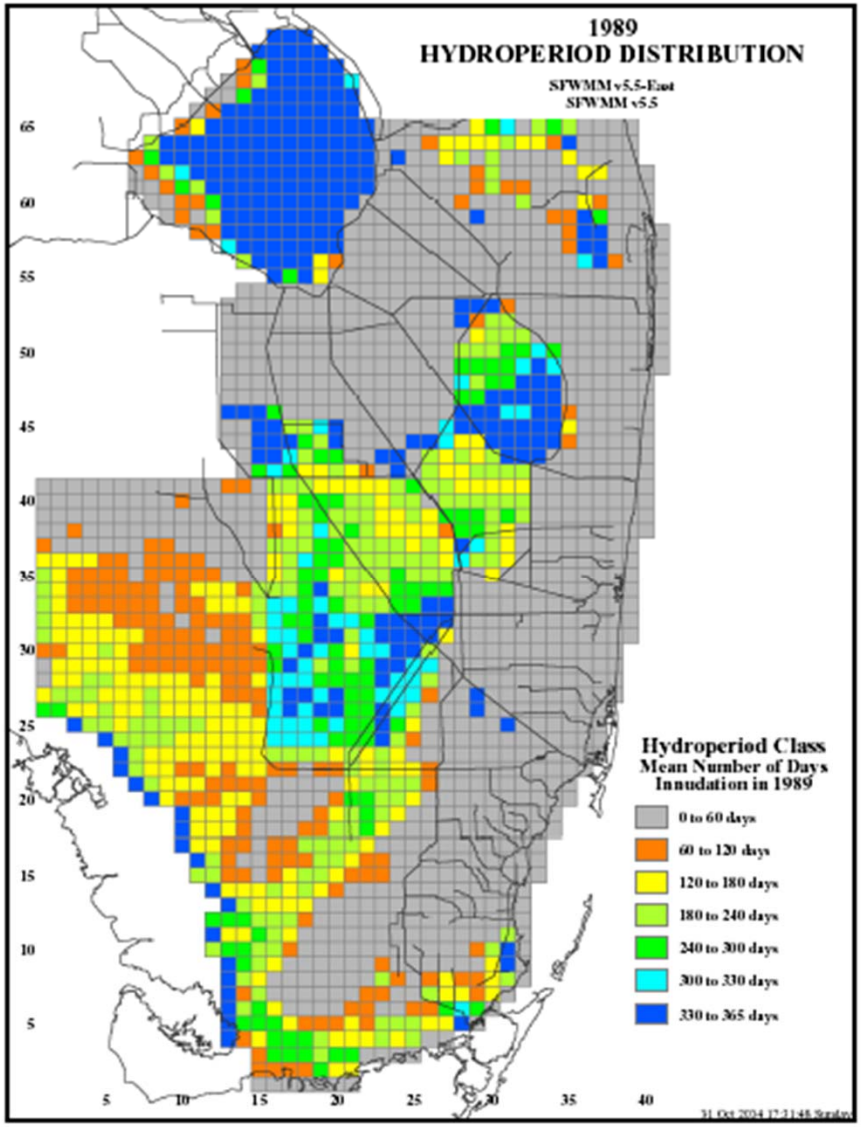

## Management Measures

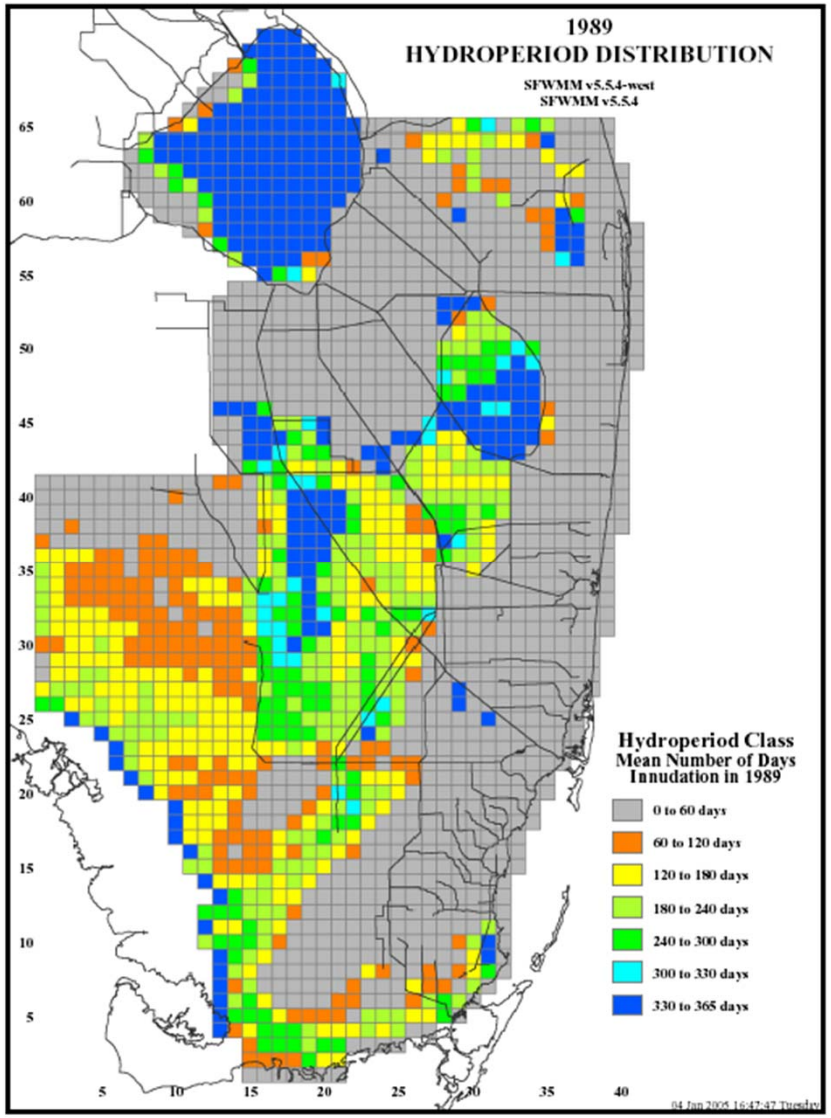
- Levee removal, gaps, gated water control structures, culverts, weirs
- Canal plugs & backfill
- Collector Canals & Modification of Ag canals
- Operations




**What should be considered in developing a feasible initial increment?**

# What trends can we see from prior analyses?
# CSOP – Dry Year – SFWMM Version 5.5
# (not pre-determined outcomes for CEPP)



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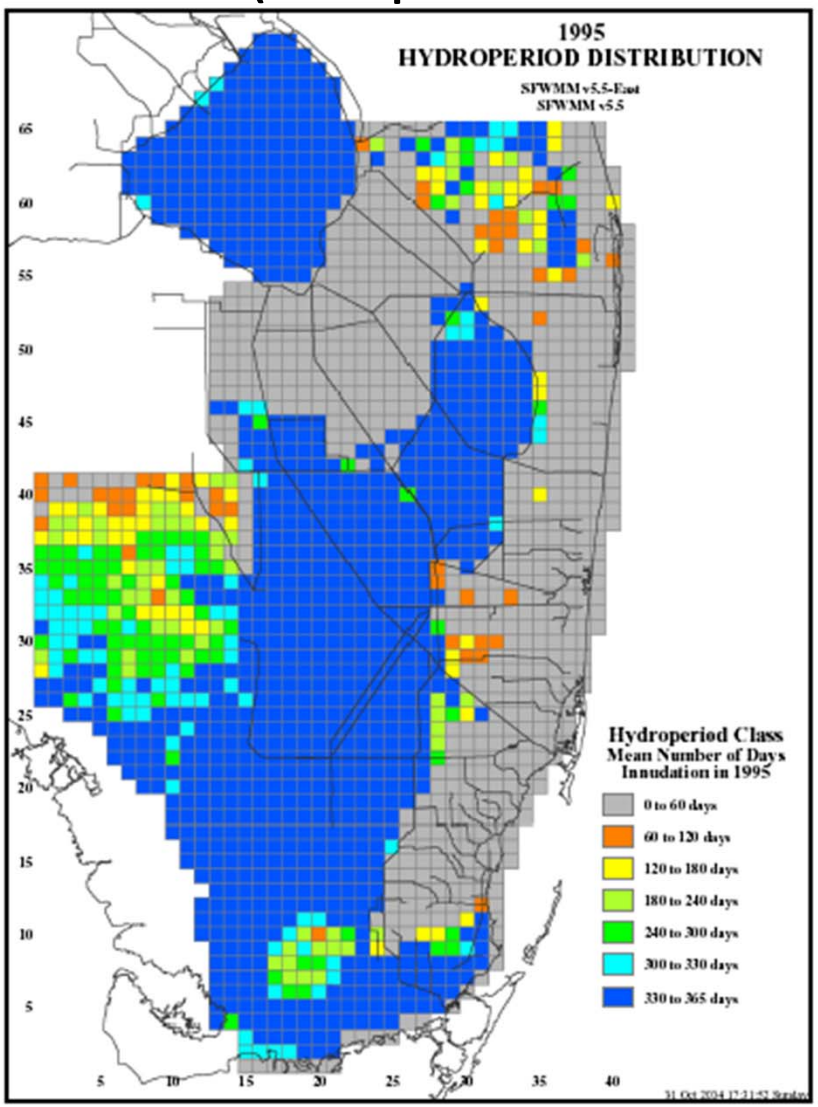


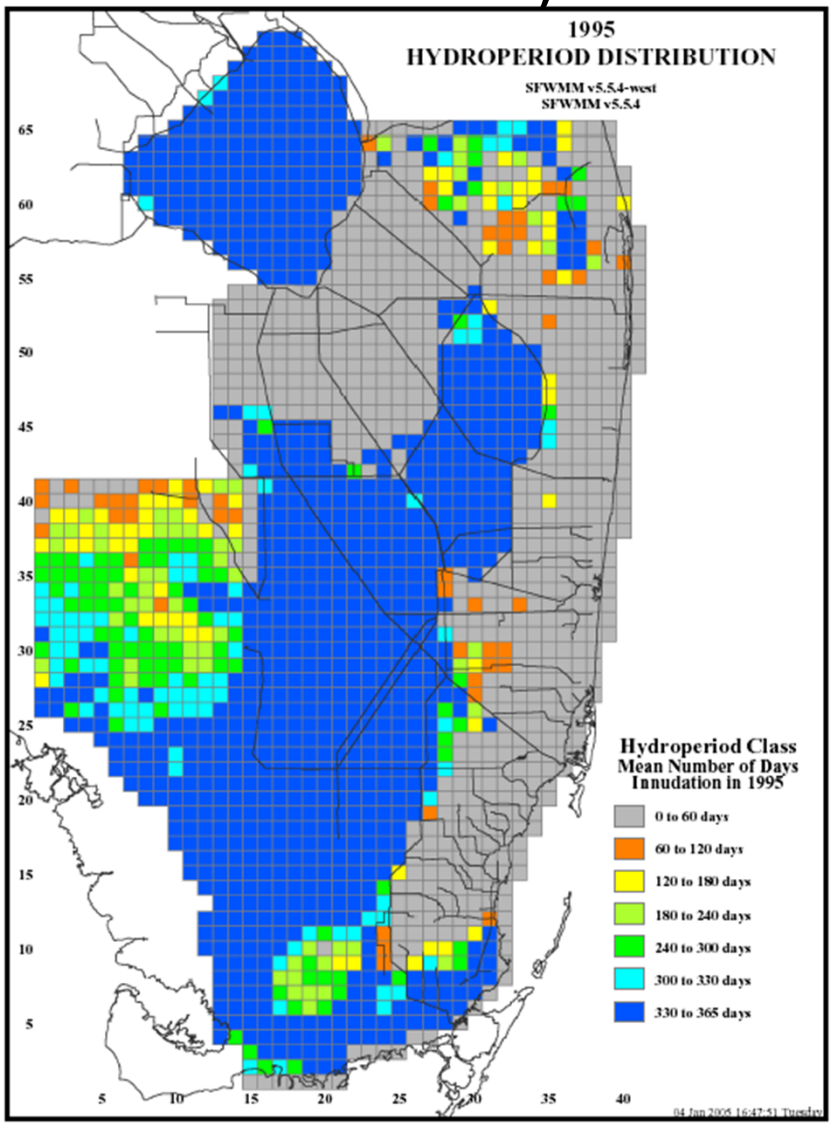

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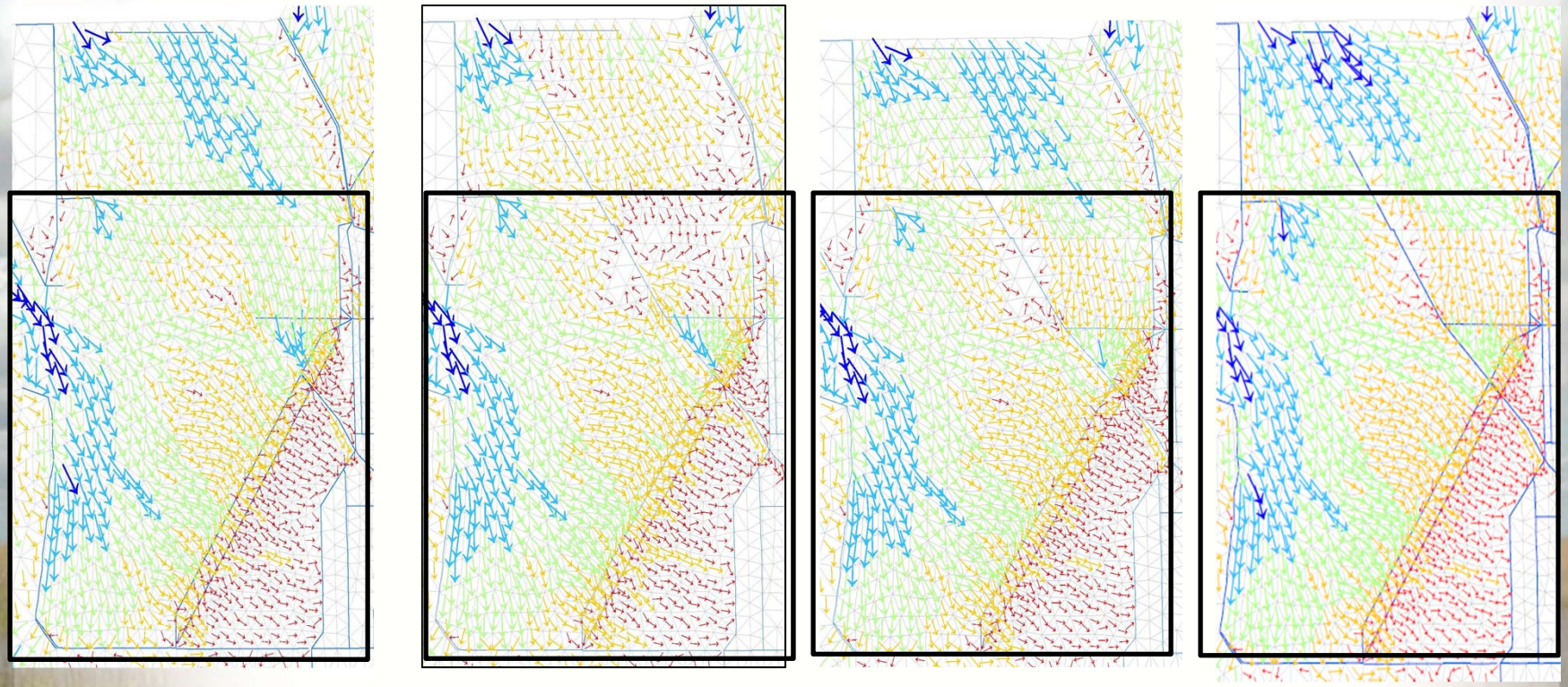

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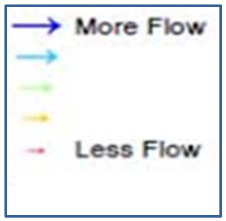


**Direction**
**Magnitude**

# CONFIGURATION EXERCISE