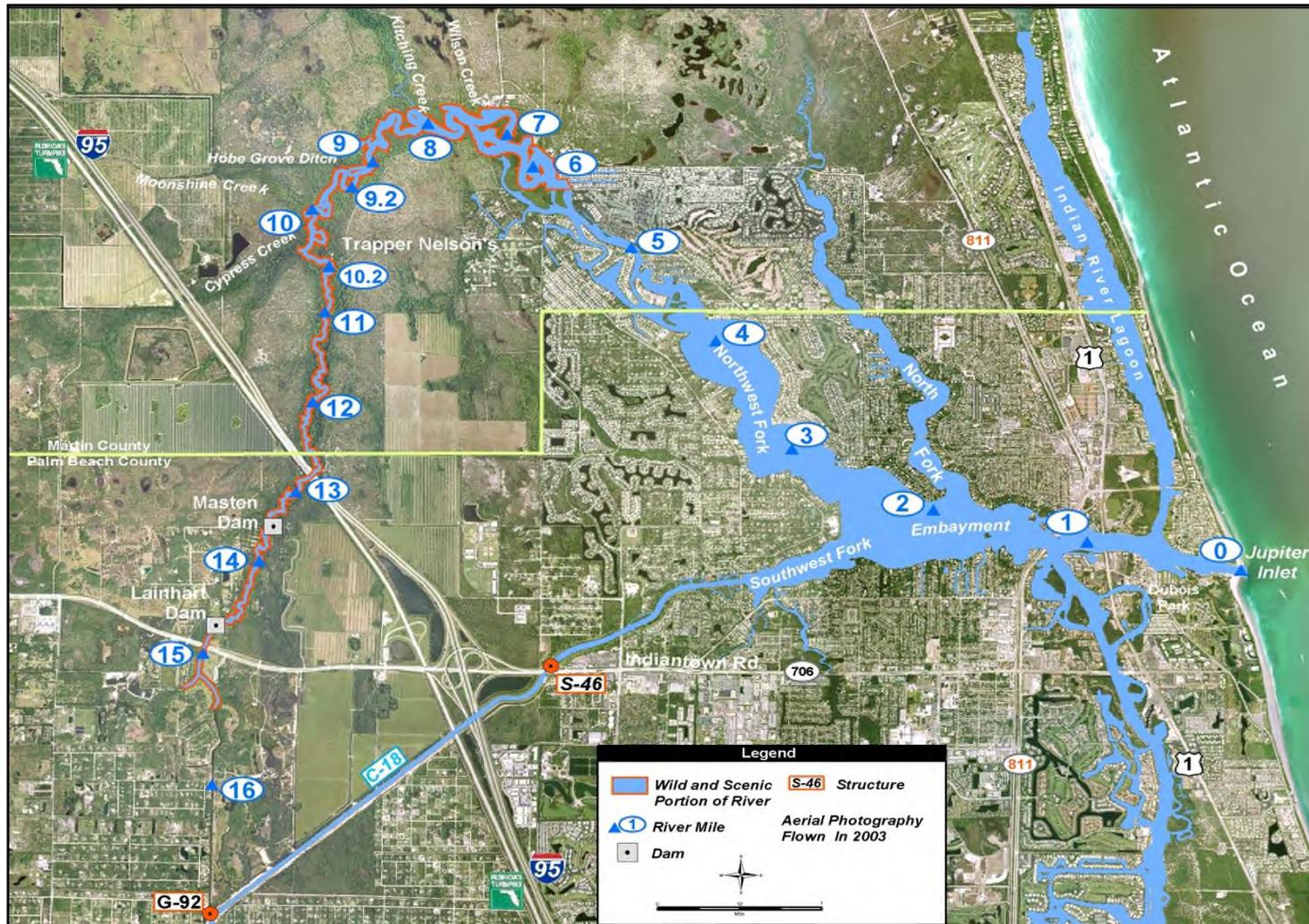


# Loxahatchee River Watershed Restoration Project: Plan Formulation Update

Jennifer Leeds, Section Leader  
Office of Federal Policy and Coordination  
South Florida Water Management District  
Water Resources Advisory Committee  
April 7, 2016

# Loxahatchee River



# SMART Planning

- Expedited planning approach designed to provide timely delivery of Project Implementation Reports
- Includes “3X3X3 Rule” directive
  - \$3 million budget
  - 3 years to complete
  - 3 levels of enhanced vertical teaming and engagement
- Incorporates traditional federal planning requirements
- Fully compliant with National Environmental Policy Act (NEPA)
- Involves stakeholder input
- Loxahatchee River Watershed Project “SMART Planning” initiated in January 2016

**Specific**

**Measurable**

**Attainable**

**Risk-Informed**

**Timely**

# SMART Planning Schedule

SMART Feasibility Study Process

18-36 Months

Project Team  
is here



# Stakeholder Process

- Opportunities to participate in sub-team meetings (weekly or as needed)
  - Plan Formulation
  - Ecological/Water Quality
  - Engineering/Economics
  - Modeling
  - Real Estate
- Project Delivery Team meetings expected every one to two months
- Public meetings as needed



# Project Goals and Objectives

- Restore wet and dry season freshwater flows to the Northwest Fork
  - Improve river watershed connections to natural areas and the regional water management system
- Improve regional hydrology, freshwater sheetflow and wetland hydroperiods
- Restore abundance and diversity of native wetland, river and estuary plant and animal species



# Project Lands Acquired

## ➤ Flow Ways 1 and 2

- Gentle Ben Easement – 335 acres
- PGA Frontage – 257 acres
- Mecca – approximately 1,800 acres (includes easements)



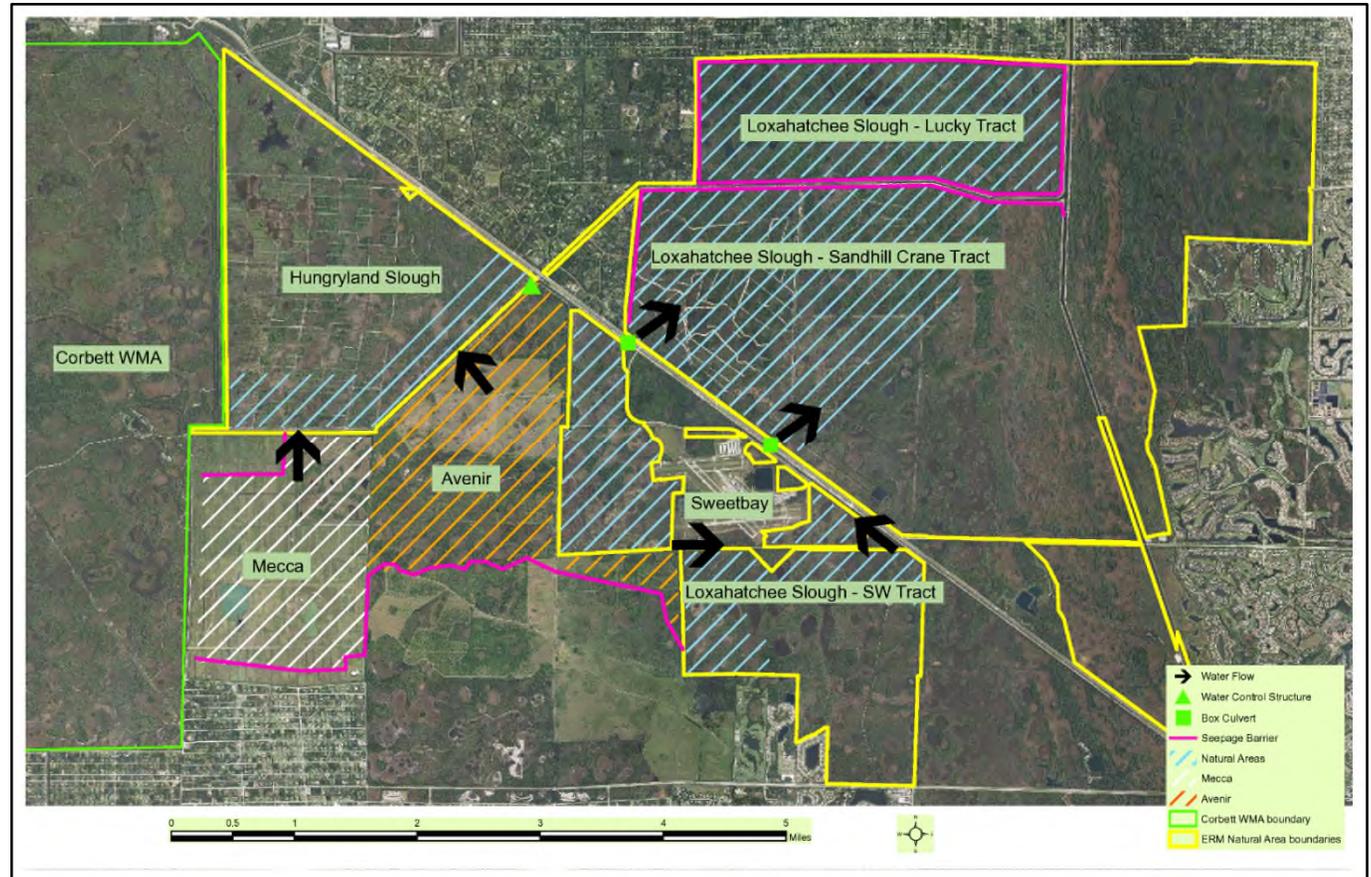
## ➤ Flow Way 3

- Nine Gems – 2,900 acres
- Culpepper – 1,280 acres
- Gulfstream – 1,410 acres
- Shiloh Farms/Cypress Creek – 1,987 acres



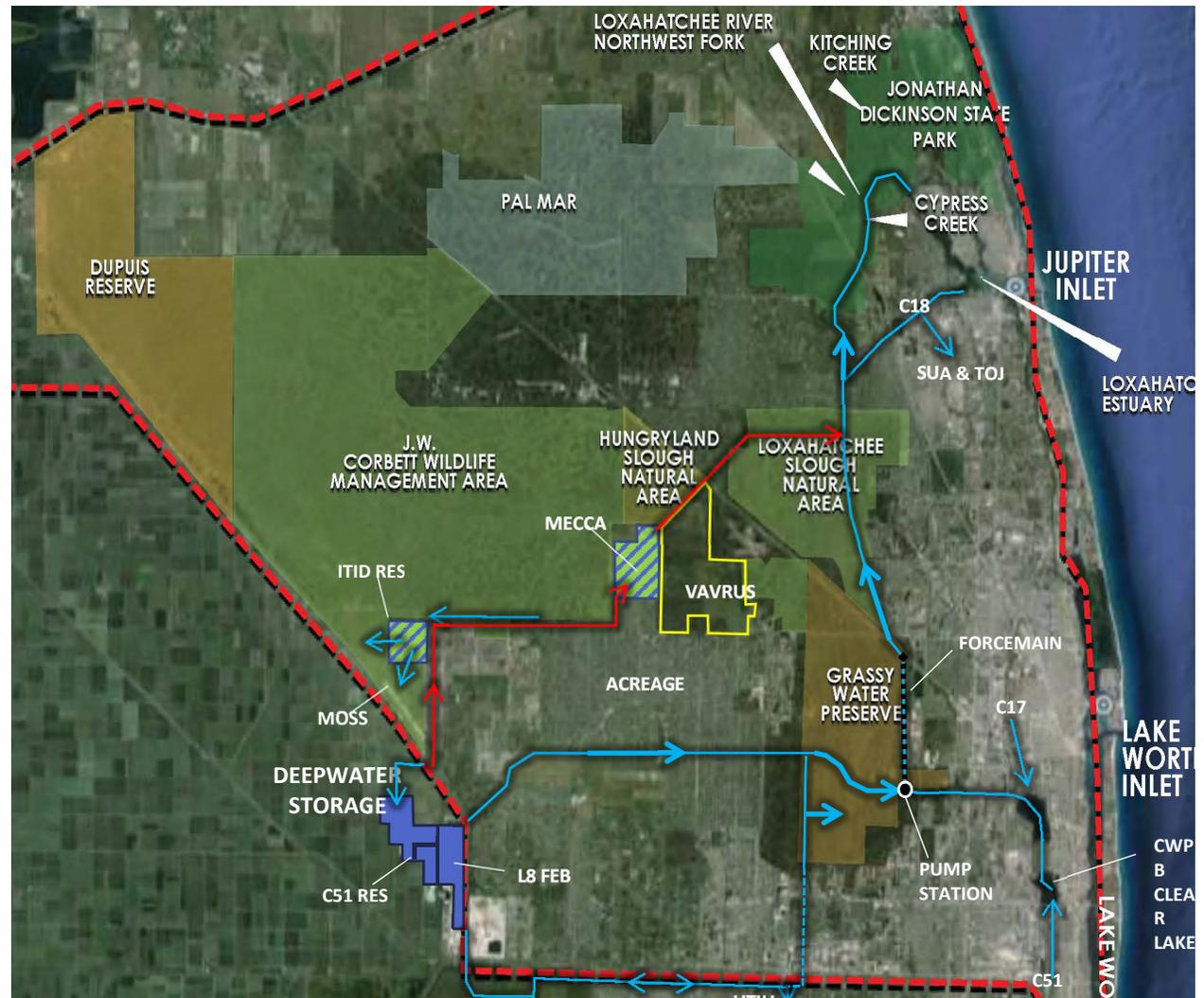
# Palm Beach County Environmental Resource Management Concept for Evaluation – Flow Way 2 Natural Lands Proposal

- Natural storage
- Seepage barriers, water control structures, box culverts
- Utilize existing canals to rehydrate wetlands and restore flows to Loxahatchee River



# Palm Beach County Task Force Concept for Evaluation – Flow Way 1 and 2 Project Proposal

- Combines Flow Way 1 and 2 management measures
- Deep storage in L-8 Basin
- C-18 W shallow storage
- Flows to Indian Trail Improvement District Reservoir allowing overflow to Moss property
- Incorporates water supply component for local utilities
- Original Yellow Book goal – reduce flows to Lake Worth Lagoon



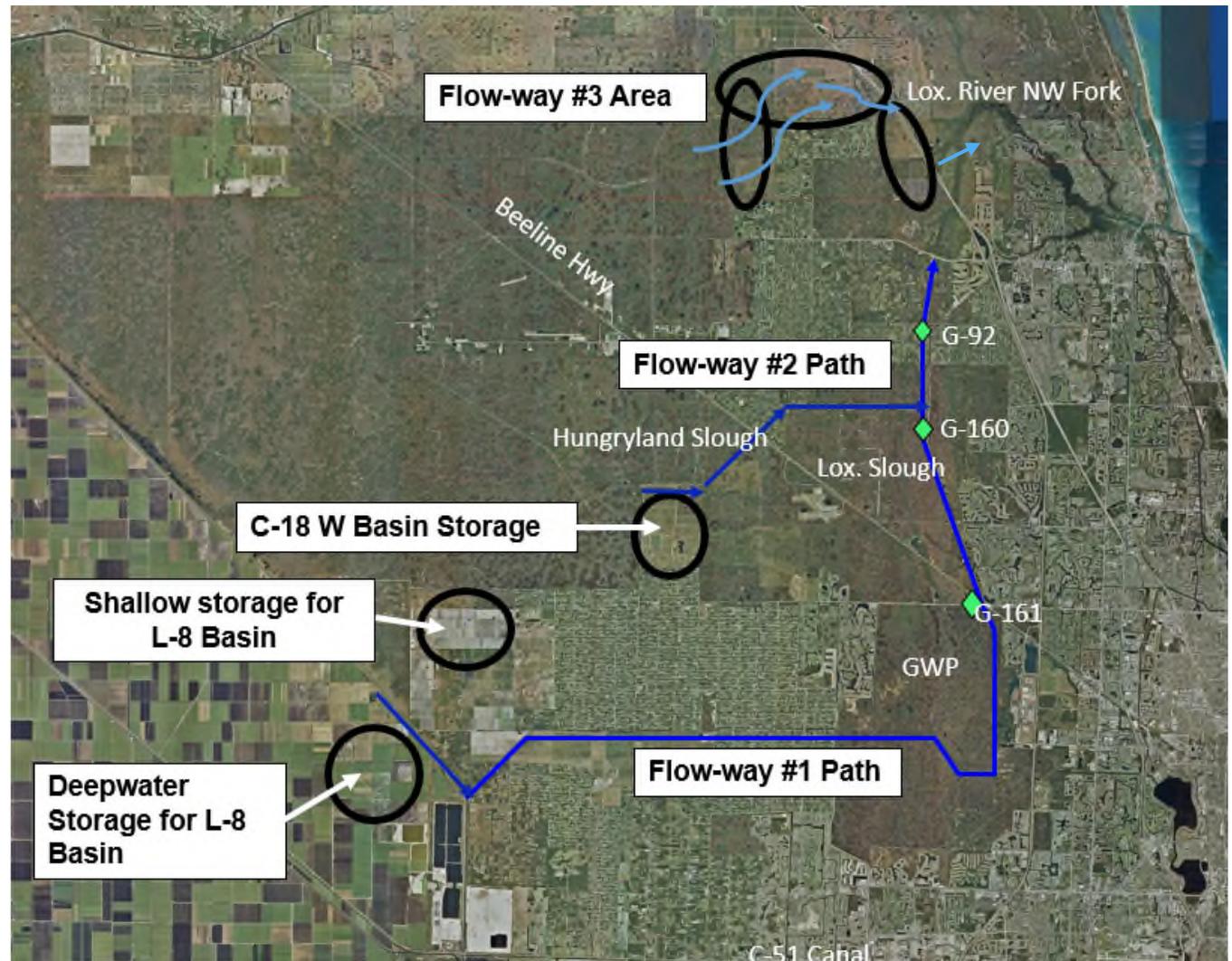
# Flow Way 1 and 2: Project Features for Further Evaluation

## ➤ Flow Way 1:

- L-8 Basin shallow and deep storage
- G-161
- G-160
- L-8 tie back, M-canal Grassy Waters Preserve
- Conveyance improvements

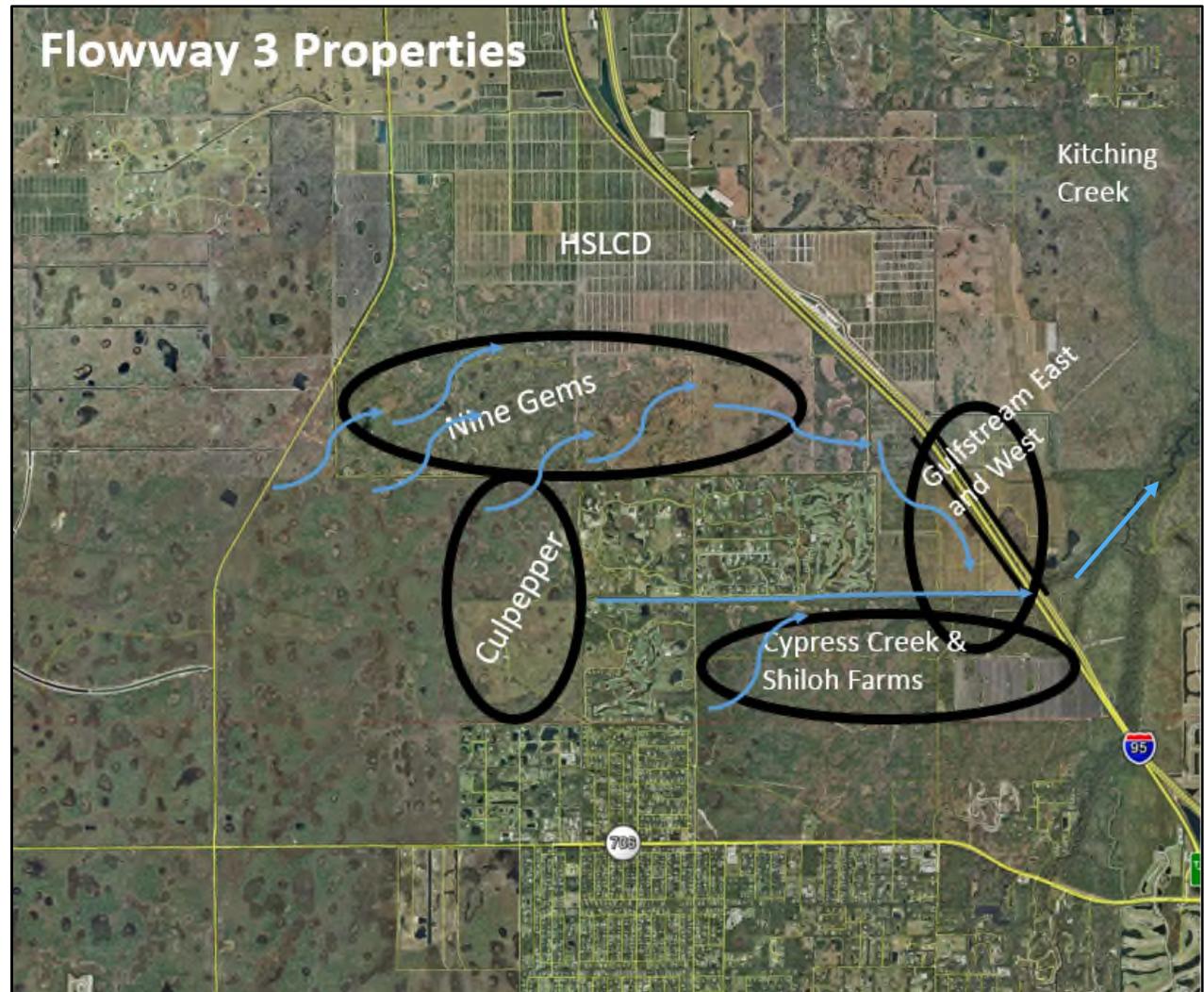
## ➤ Flow Way 2:

- C-18 W Basin storage
- G-92
- ASR
- Augment with L-8 Basin storage, shallow or deep



# Flow Way 3: Project Features for Further Evaluation

- Improves timing and distribution of flows to Cypress Creek, Kitching Creek and Moonshine Creek
- Re-connects tributaries and natural areas improving wetland hydrology and groundwater conditions



# Preliminary Array of Alternatives

- The Project Delivery Team identified a preliminary array of alternatives for further evaluation
- Preliminary array includes various storage options for Flow Way 1 and 2: shallow, deep, natural and ASR wells
- Includes two options for Flow Way 3:
  - FW3 E – reconnection of all lands acquired
  - FW3 B – lands east of I-95: Moonshine Creek reconnection and Cypress Creek Weir

Alternative	L-8 Basin Deep Storage	L-8 Basin Shallow Storage	C-18 W Storage	Lox (Natural Storage)	FW3 E	FW3 B
2		X	X + 2 ASR		X	
13		X + 2 ASR		X	X	
5			X + 4 ASR		X	
10	X		X			X
12	X	X		X	X	

## Next Steps

- Vertical Team approval of preliminary array of alternatives – April 25, 2016
- Refine the preliminary array of alternatives:
  - Determine volumes
  - Operational rules
  - Refine costs
- Modeling:
  - Existing conditions and future without project condition
  - Alternatives and potential iterations
- Benefit analysis of modeled alternatives
- Real estate analysis
- Cost effectiveness and incremental cost analysis
- Tentatively Selected Plan – January 2017

# Discussion

Northwest Fork of the  
Loxahatchee River

