



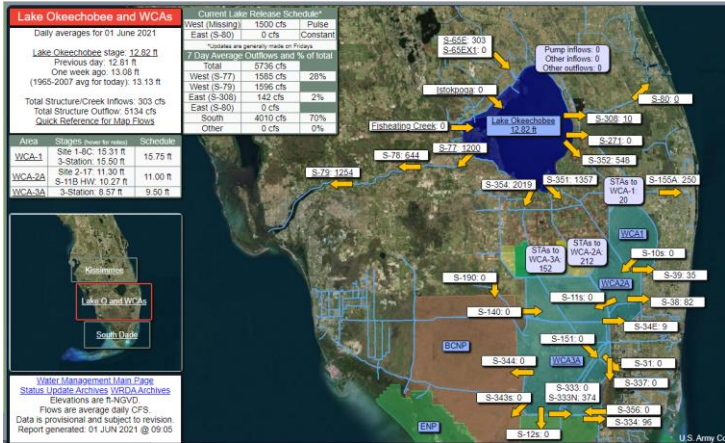
Palm Beach County Water Resources Initiatives

Joint Palm Beach County Water Resources Task Force and Broward
County Water Advisory Board Workshop Meeting

June 2, 2021

Palm Beach County – Key Water Resources Initiatives

Lake Okeechobee Operations



Lake Worth Lagoon Estuary Restoration



Loxahatchee River Restoration



Water Quality and Stormwater Management



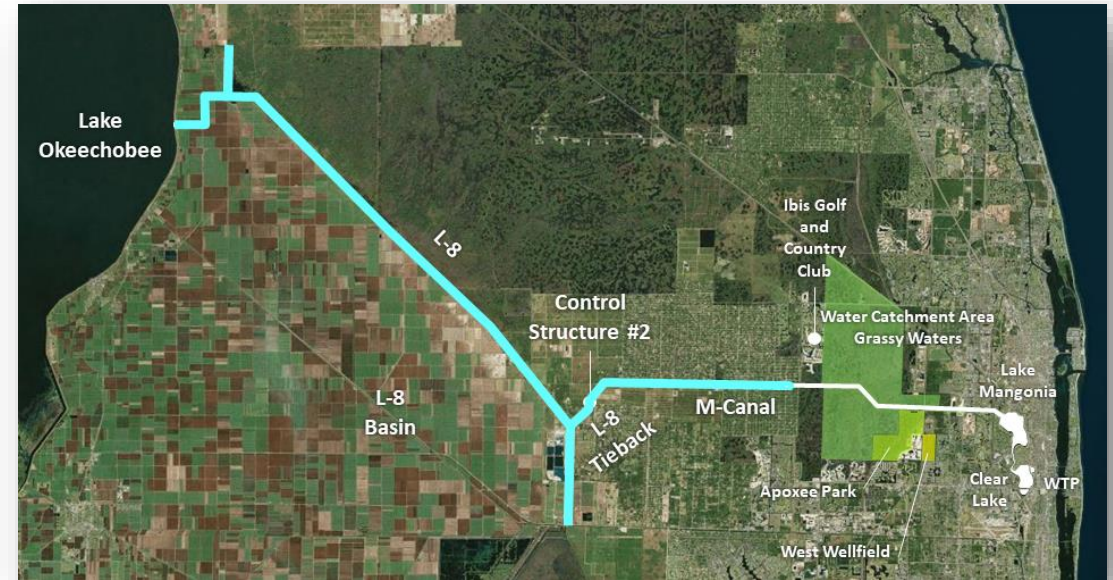
Water Supply and Conservation



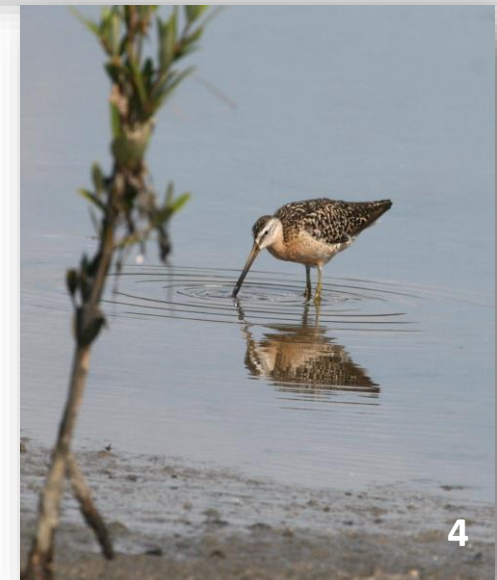
Resilience Planning



Lake Okeechobee Operations



Lake Worth Lagoon Estuary Restoration



Lake Worth Lagoon Estuary Restoration



Projects Intended to Improve the Lake Worth Lagoon Estuary

Restoring Tidal Flats



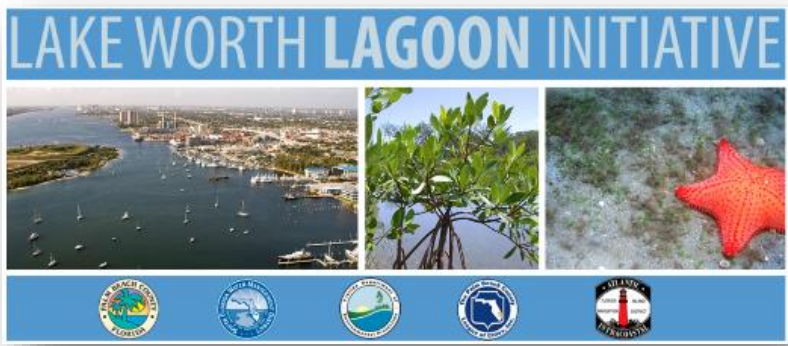
Creating Living Shorelines



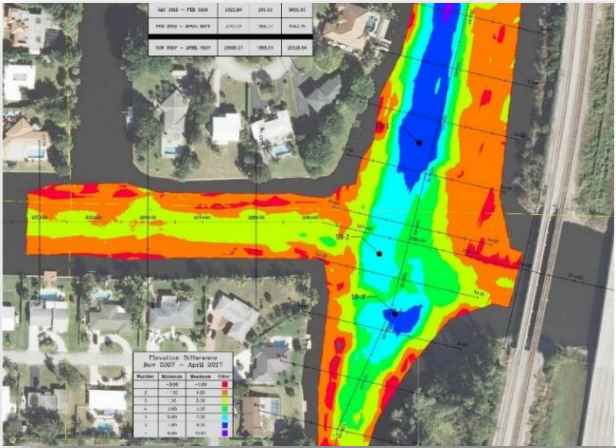
Constructing Islands



Lake Worth Lagoon Initiative



C-51 Sediment Trap



Comprehensive Everglades Restoration Plan (CERP)



Loxahatchee River Restoration



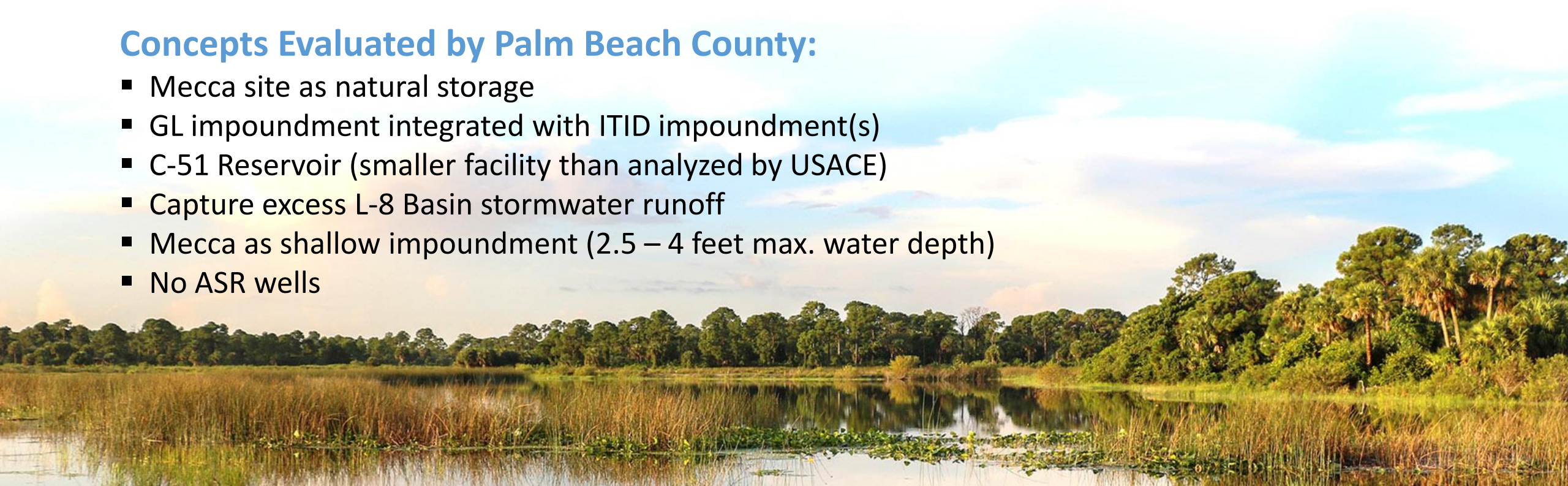
Loxahatchee River Restoration Local Initiative

Key Objectives:

- Optimize or improve the Loxahatchee Project by assessing additional alternatives and local initiative elements
- Provide technical information necessary to enable continued collaboration with USACE and SFWMD
- Demonstrate feasibility of alternatives to Mecca Reservoir, which lacks broad stakeholder support

Concepts Evaluated by Palm Beach County:

- Mecca site as natural storage
- GL impoundment integrated with ITID impoundment(s)
- C-51 Reservoir (smaller facility than analyzed by USACE)
- Capture excess L-8 Basin stormwater runoff
- Mecca as shallow impoundment (2.5 – 4 feet max. water depth)
- No ASR wells



CERP Projects Proposed in Palm Beach County

ID	CERP Component Name	Storage (acre-feet)	Aquifer Storage and Recovery (ASR)	Water Quality Treatment	Purpose
K and GGG	Water Preserve Areas / L-8 Basin	48,000	50 million gallons per day (mgd)	Yes	reduce high discharges to Lake Worth Lagoon (LWL); restore Loxahatchee Slough and River; augment regional water supply
X	C-17 Backpumping and Treatment			2,200 acre-feet STA	capture and store excess water discharged to LWL; restore Loxahatchee Slough; augment regional water supply
Y	C-51 Backpumping and Treatment			2,400 acre-feet STA	
LL	C-51 Regional Groundwater ASR		170 mgd	Yes	capture and store excess water discharged to LWL; augment regional water supply
VV	Palm Beach County Agricultural Reserve Reservoir and ASR	20,000	75 mgd	Yes	
N/A	Lake Worth Lagoon Restoration			Yes	sediment removal / trapping in C-51 Canal or LWL; improve water quality; enable success for additional County habitat restoration and enhancement projects

Water Quality and Stormwater Management

- Engineering and Public Works Department operates and maintains County stormwater system in a manner that reduces discharge of pollutants
- Environmental Resources Management Department conducts countywide water quality monitoring and leads NPDES MS4 permit compliance reporting
- Development of a Stormwater GIS database is ongoing



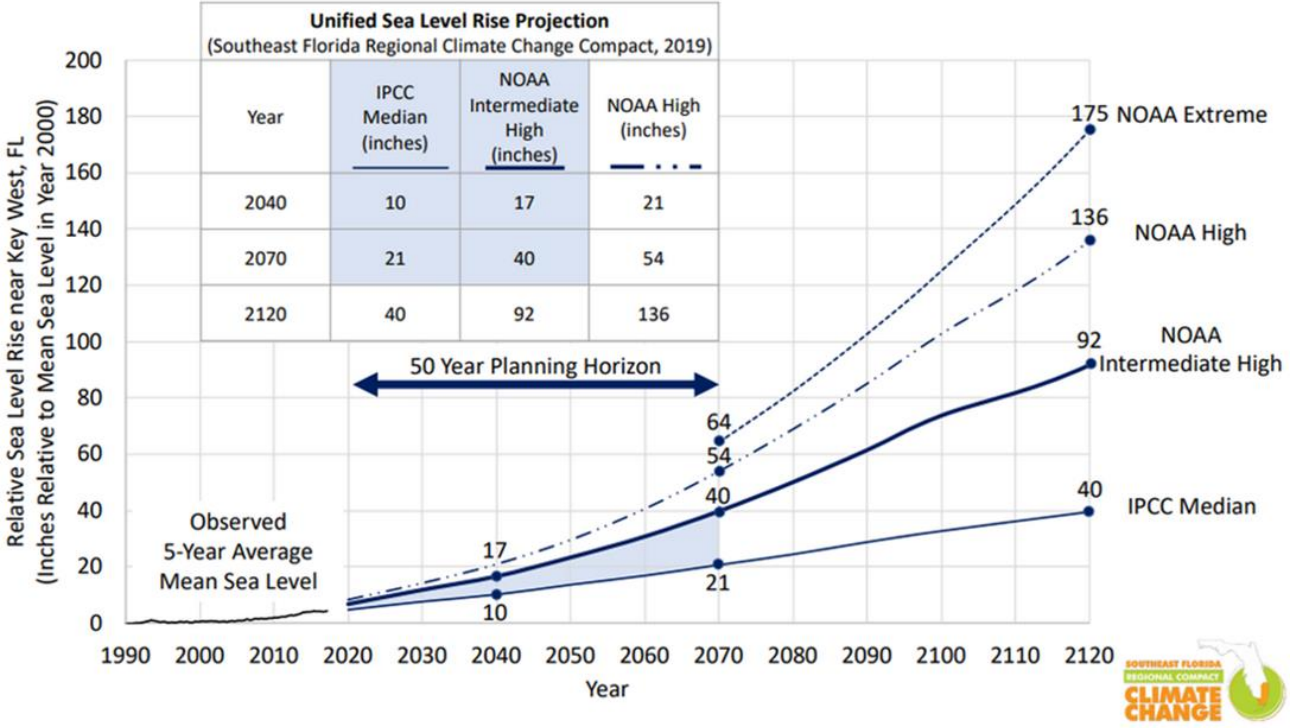
Water Supply and Conservation



Resilience Planning



FLORIDA DEPARTMENT of ECONOMIC OPPORTUNITY



COASTAL RESILIENCE PARTNERSHIP
SOUTHEAST PALM BEACH COUNTY



Palm Beach County Water Resources Initiatives

Jeremy McBryan, PE, CFM
County Water Resources Manager
Palm Beach County
jmcbryan@pbcgov.org
561-355-4600