

**NORTH PALM BEACH COUNTY
PDT LOCALLY PREFERRED OPTION
AND C-51 RESERVOIR UPDATE**

**PRESENTATION TO
LAKE WORTH LAGOON INITIATIVE**

Kenneth S. Todd, Jr., P.E.

Ernie Cox

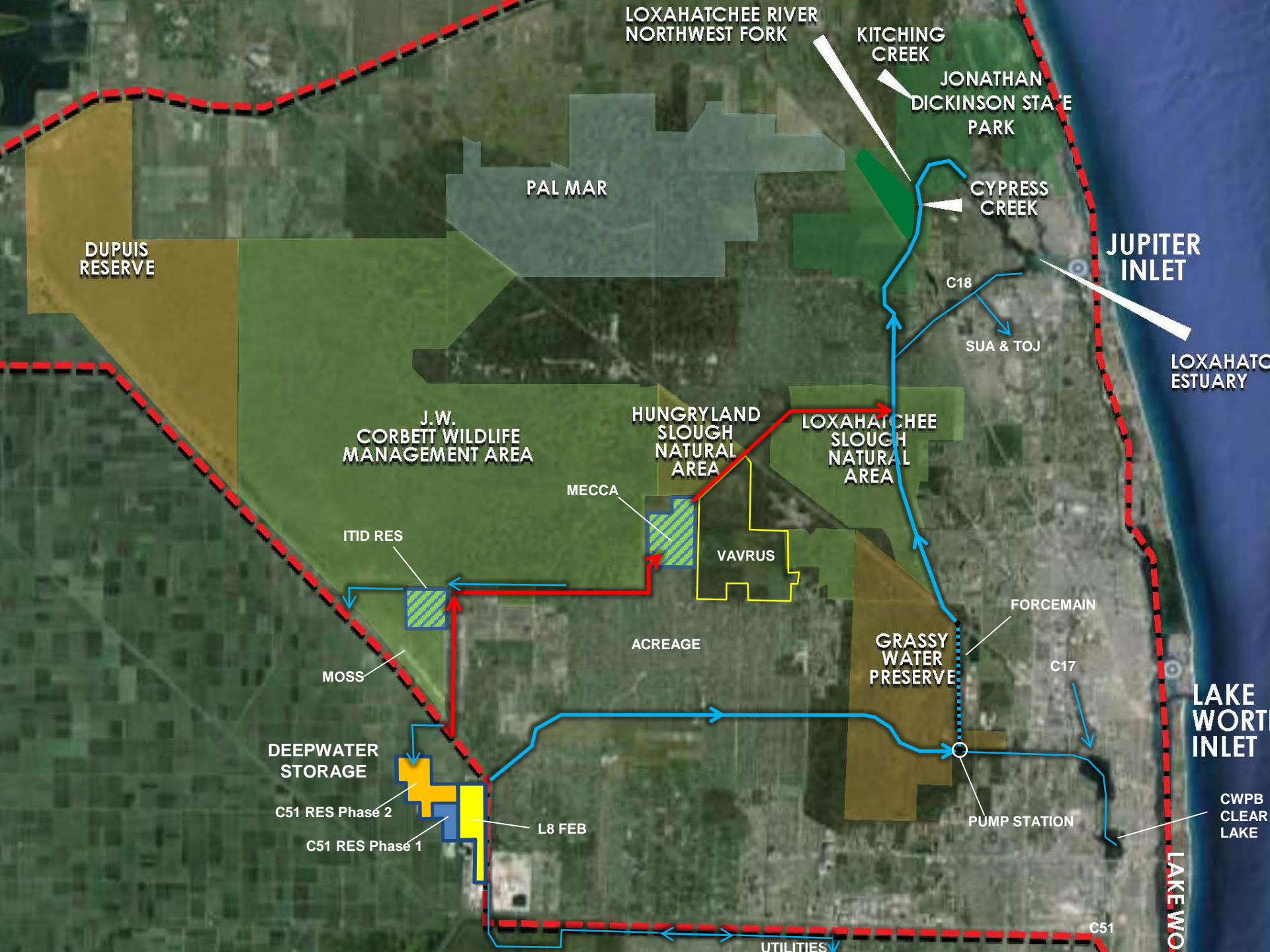
January 11, 2017

North County Environmental Issues

- Reduce flows into the Lake Worth Lagoon
- Restore flows to the Loxahatchee River
- Restore connectivity of Hungryland Slough, Vavrus Property and Loxahatchee Slough
- Use Mecca Site to help convey water north
- Protect & Preserve water supply
(i.e. recharging well fields) while providing an environmental benefit

Local Stakeholder Goals For Loxahatchee River Watershed Plan Still Matter

- **Provide Restoration Flows to Loxahatchee River**
- **Enhancement of Loxahatchee Slough**
- **Reduce Freshwater Flows to Lake Worth Lagoon**
- **Protect & Preserve Water Supply For Various Utilities**
- **Better Flood Protection For Western Communities**



Locally Preferred Option Benefits

- Cuts off Flow from Lake Okeechobee into L-8 Canal
- Use of Mecca site for storage
- Use of C-51 Reservoir reduces flow to LWL
- C-51 Reservoir provides opportunity to send water to southern well fields instead of wasting to tide
- C-51 Reservoir provides water for restorative flows to Loxahatchee River since L-8 Reservoir was repurposed to Everglades Restoration

Locally Preferred Option Benefits

- Provide aquifer recharge in the vicinity of Jupiter and Seacoast Wellfields
- Protect aquifers from salt water intrusion /sea level rise impacts
- Rehydrate /restore coastal wetlands
- C-51 Reservoir provides opportunity to further supplement flows to the Loxahatchee River during drought and enhance water quality delivered to the Loxahatchee River

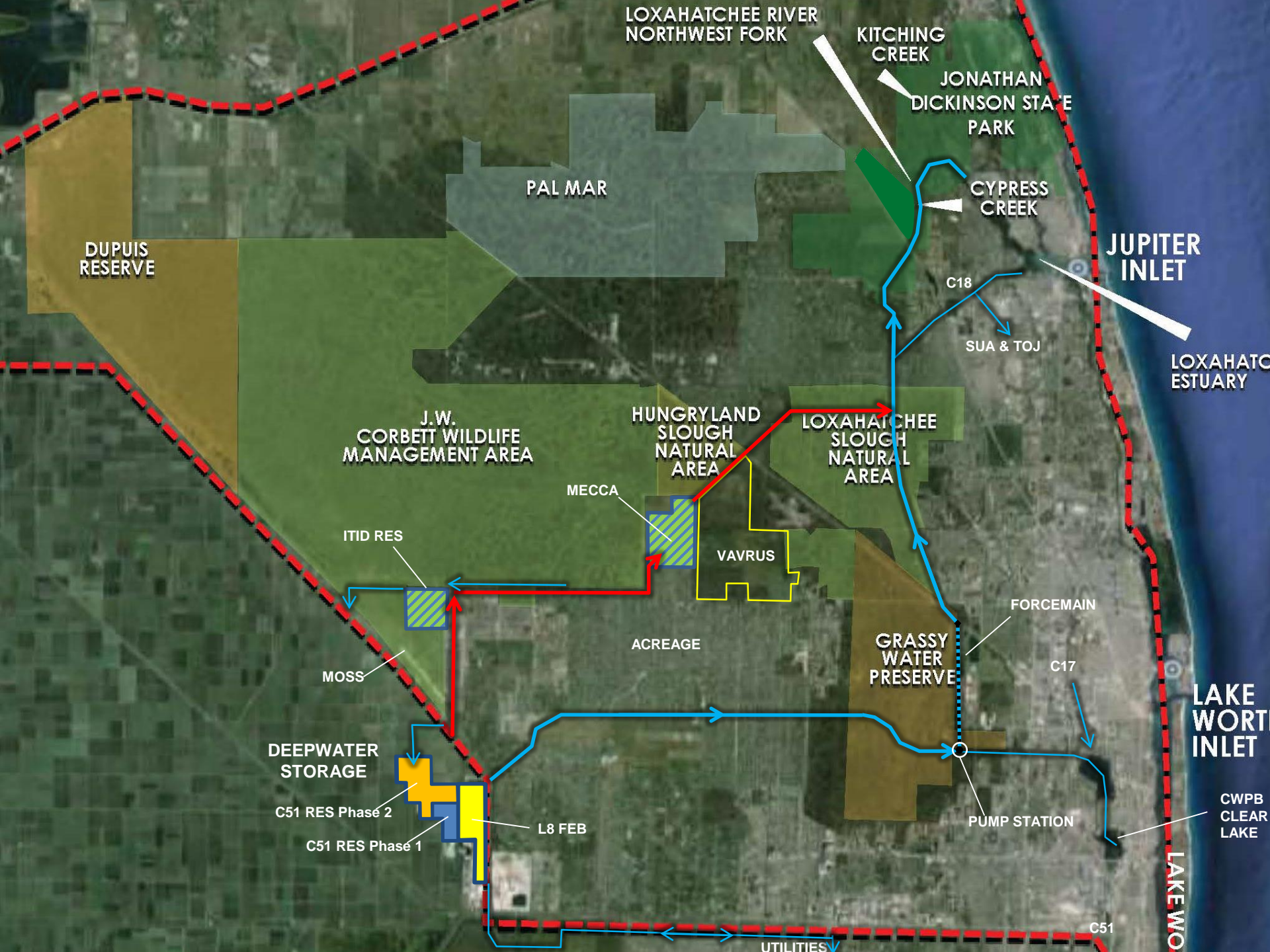
C-51 Reservoir Pilot Project

- New Program Per Senate Bill 552 – the “Water Bill”**
- Program at Sole Discretion of SFWMD**
- Project Stakeholders will be seeking Legislative Funding for up to 50% of project costs**
- Must Provide Water Supply and Environmental Benefits by reducing harmful fresh water discharges to tide**
- Designation of Pilot Project to be made by July 1, 2017**

- 8 Projects Submitted for Consideration by SFWMD**
- Staff to Develop Criteria for Evaluation of Projects**
- Staff to bring back recommendation in January 2017 for Governing Board Approval**

C-51 Reservoir Pilot Project

- Locally Preferred Option involves C-51 Reservoir Phase II**
- Pilot Project involves C-51 Reservoir Phase I**
- Must Provide Water Supply and Environmental Benefits by reducing harmful fresh water discharges to tide**
- Environmental Benefits of this project are reduced harmful fresh water flows to the Lake Worth Lagoon**
- Water Supply Benefits of this project is that fresh water is not wasted to tide that protects & preserves groundwater use by Lower East Coast utilities**



LOXAHATCHEE RIVER
NORTHWEST FORK

KITCHING
CREEK

JONATHAN
DICKINSON STATE
PARK

PAL MAR

CYPRESS
CREEK

JUPITER
INLET

DUPUIS
RESERVE

C18

SUA & TOJ

LOXAHATCHEE
ESTUARY

J.W.
CORBETT WILDLIFE
MANAGEMENT AREA

HUNGRYLAND
SLOUGH
NATURAL
AREA

LOXAHATCHEE
SLOUGH
NATURAL
AREA

MECCA

VAVRUS

ITID RES

ACREAGE

GRASSY
WATER
PRESERVE

FORCEMAIN

C17

LAKE
WORTH
INLET

MOSS

DEEPWATER
STORAGE

C51 RES Phase 2

C51 RES Phase 1

L8 FEB

PUMP STATION

CWPB
CLEAR
LAKE

LAKE WORTH

C51

UTILITIES

Questions?