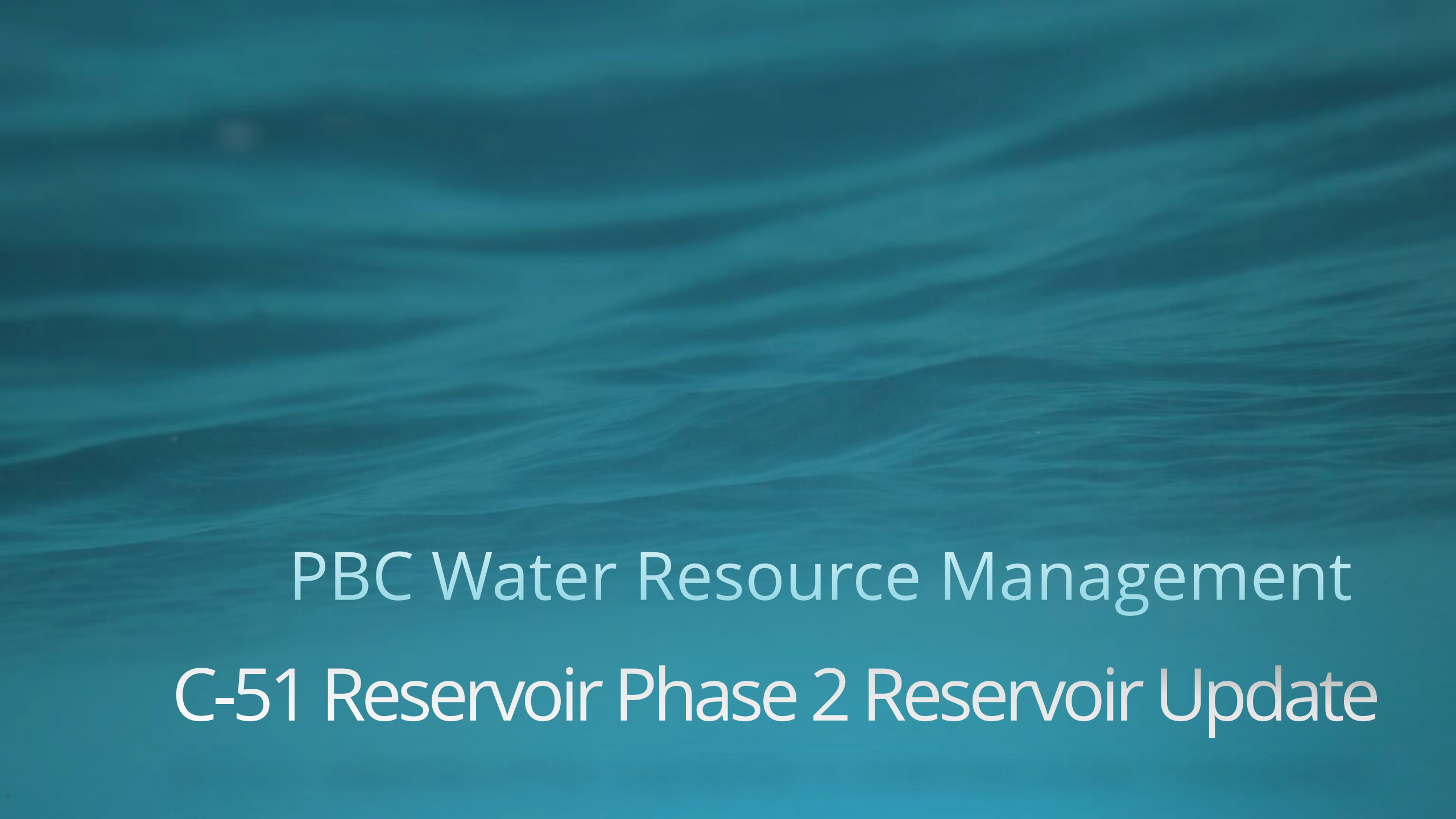




PBC Water Resource Management

C-51 Reservoir Phase 2 Reservoir Update

Executive Summary

With the 2026 legislative funding the C-51 Reservoir is now fully funded for the following:

- Construction of a 300 cfs inflow structure.
- Construction of a 150 cfs outflow pump station
- Construction of the canal connecting the reservoir to the L-8 Canal.
- Automation of the gates controlling flow through the culverts connecting to the L-8 Canal.
- Construction of Cell 14 increasing the storage volume from 14,800 to 20,000 acre-feet.
- Total cost of \$408,000,000 (\$20,400/acre-feet)

Executive Summary

Status of construction:

- Construction of Cell 12 and Cell 13 are complete.
- Construction of the canal connecting the reservoir to the L-8 Canal is about 80 percent complete.
- Design of the inflow structure, outflow pump station, L-8 Gate Automation are expected to be complete by the end of the year.
- Construction of all components are expect to be completed by December 2030.
- Funding currently includes 12 to 18 months of operational testing starting after construction.

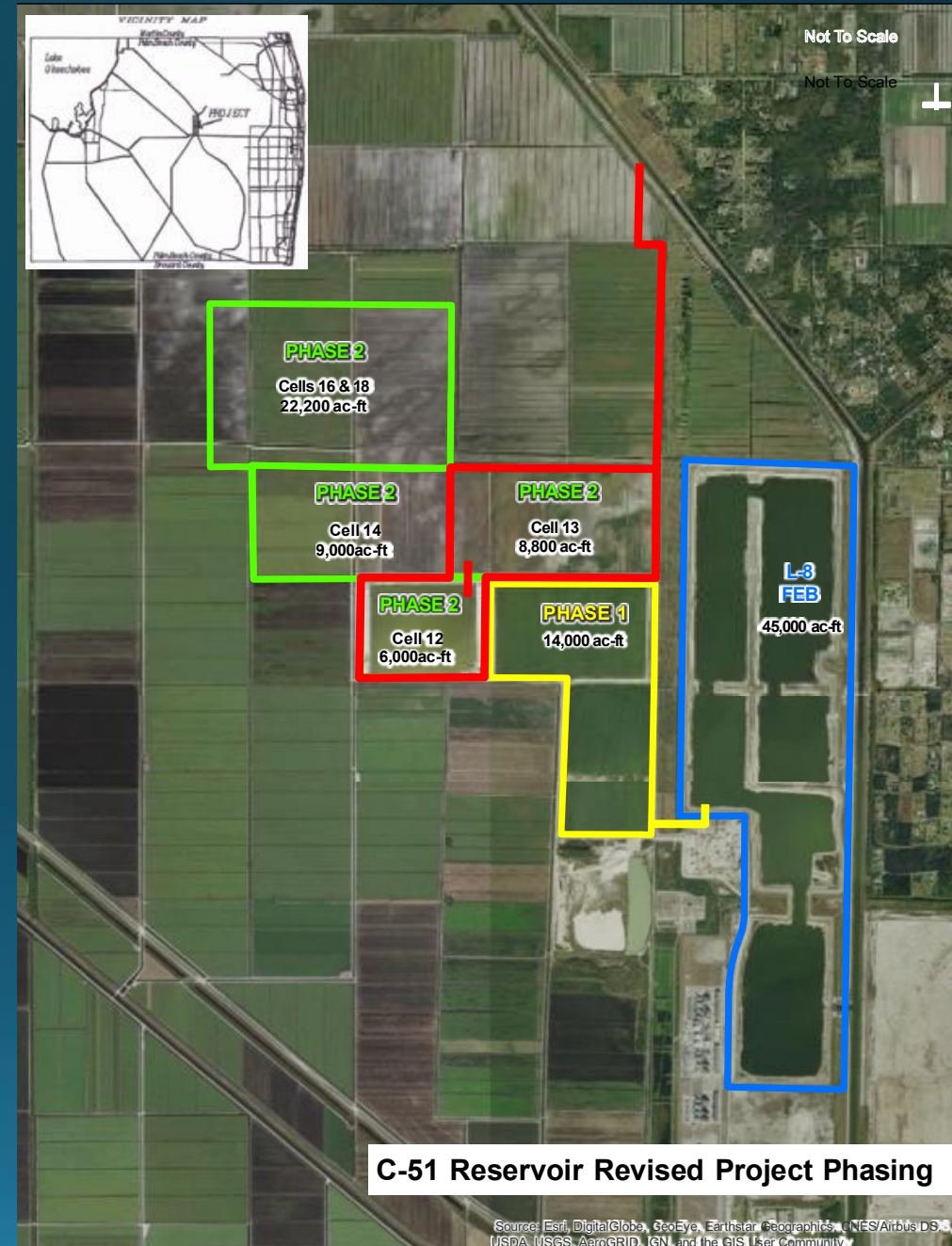
Background

The Comprehensive Everglades Restoration Plan (CERP) identified the need and benefits for 45,000 acre-feet of reservoir storage in the L-8 Basin.

- Receives runoff from 109,598 acres
- Receives runoff from basins that serve over 40,000 PBC residents
- Drains (by gravity) into Lake Okeechobee and C-51 Canal

Background

- SFWMD L-8 FEB - 45,000 acre-feet of storage for leveling of flow into STA-1.
- C-51 Reservoir Phase 1 – 14,000 acre-feet (AF) dedicated solely to water supply with associated allocation increases.
- C-51 Reservoir Phase 2 will be a multipurpose reservoir with a separate connection to the L-8 Canal
- Figure shows constructed Cell 12 and Cell 13 and soon to be under construction Cell 14

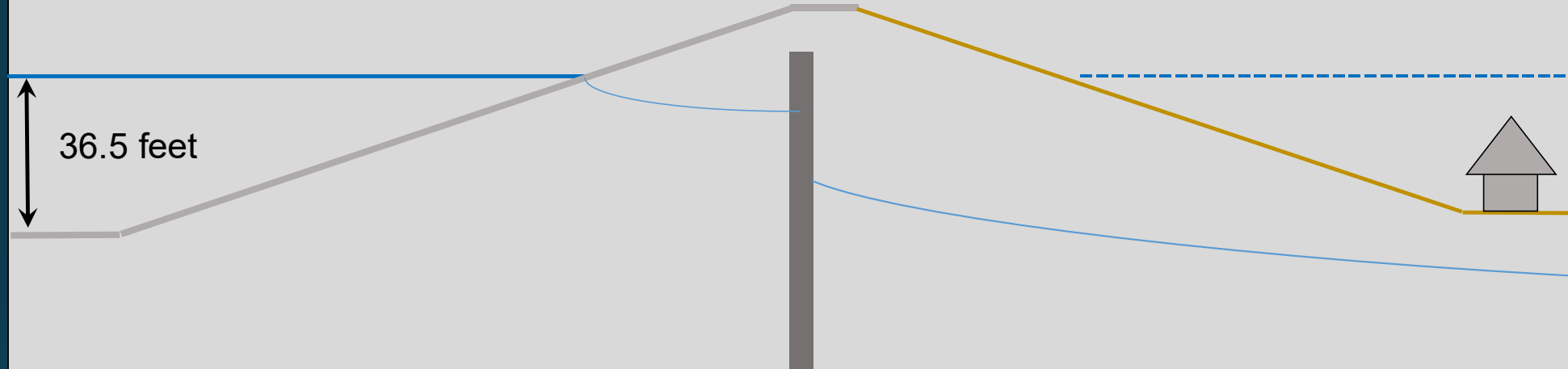


C-51 Reservoir - Cells 12, 13, & 14

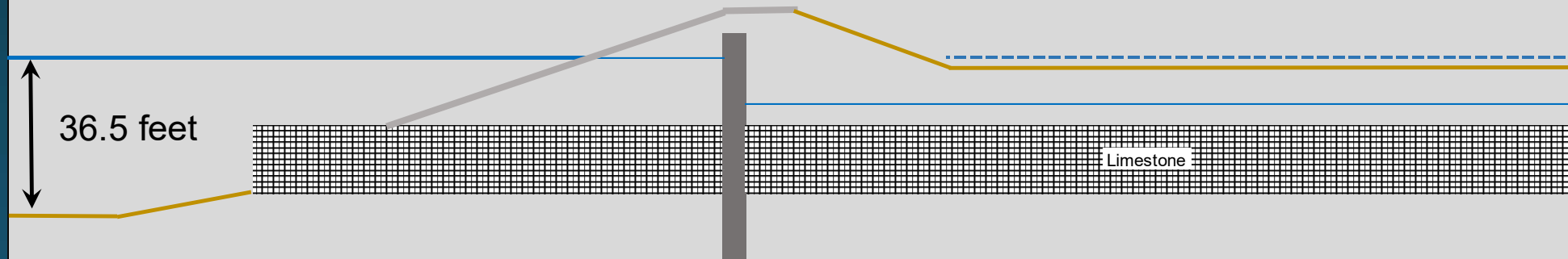
- Cells have a total storage depth of 36.5 feet with 4 feet above ground and 32.5 feet below ground (+16.5 to -20.0 feet NAVD)
- Storage of ~14,800 acre-feet (AF) equivalent to 4.8 billion gallons (BG) provided by Cells 12 and 13
- The addition of Cell 14 will provide about 5,200 acre-feet of additional storage volume increasing the total to about 20,000 acre-feet (6.5 billion gallons).
- Full perimeter seepage barrier installed down to an elevation of -30 feet NAVD (ten feet below the bottom of the reservoir).
- Reduce discharges to Lake Worth Lagoon, support restoration of Loxahatchee River, combat salt-water intrusion, increase water supply resiliency, expand operational flexibility, provide other water resource benefits

Not a High Hazard Dam

High Hazard Above Ground Reservoir (water level 35 feet above surrounding land)



Low Hazard Below Ground Reservoir (water level only 4 feet above surrounding land)



What Cells 12, 13, and 14 can do

How 20,000 acre-feet is large – it can provide the following concurrently:

- Seven days of 300 cfs drainage assistance to the L-8 Basin (by retaining the required storage volume)
- Provide Minimum Flow and Level (MFL) of 35 cfs for the Northwest Fork of the Loxahatchee River (NWFLR) for 81 days
- Also provide 9,000 acre-feet of storage for other water management needs

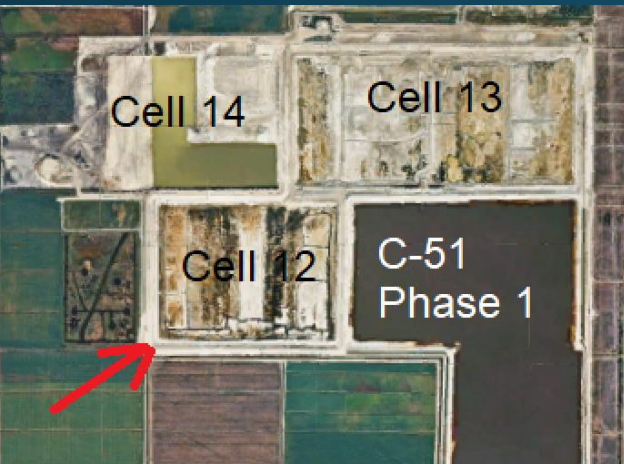
What Cells 12 and 13 can do

How 20,000 acre-feet is small – it can only provide the following while retaining storage for 5 days of L-8 Basin runoff at 300 cfs and 3-day 100-year rainfall:

- 24 days of 300 cfs drainage assistance to the L-8 Basin.
- 28 days of Lake Worth Drainage District's (LWDD's) annual allocation of 167 mgd (259 cfs).
- 30 days of Palm Beach County's Raw Water Demand during a 1 in 10 year drought.
- 0.53 inches on Lake Okeechobee surface area of 450,000 acres.

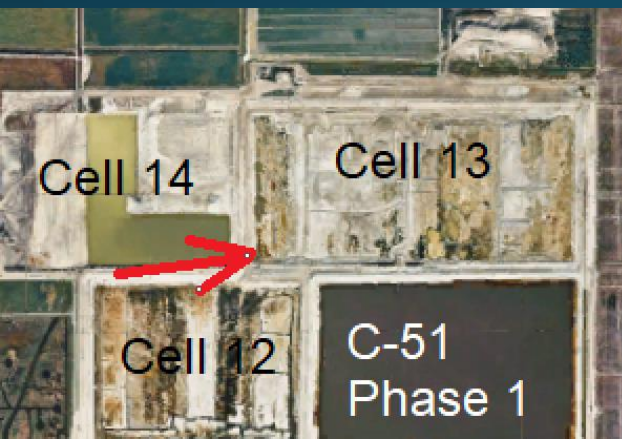
C-51 Reservoir Phase 2

Aerial from southwest corner Cell 12



C-51 Reservoir Phase 2 and 1

Aerial from southwest corner Cell 13



C-51 Reservoir Phase 1 Photograph (Driving on bottom at Elevaiton -20)



Thank you!

Questions?

For more information or to visit site, contact:

Ernie Cox, Family Lands Remembered

E-mail: ernie@familylandsremembered.biz