C-51 Reservoir Project Phase 1 Update

SFWMD LEC Water Supply Plan Update Stakeholder Meeting #2 - March 21, 2018

By Ernie Cox, Project Manager for Palm Beach Aggregates LLC
South Florida Water Challenge

• Lower East Coast Regional Availability Rule passed in 2006 requires all new water to be an Alternative Water Supply or other option described in the rule
• Floridan Aquifer Wells with Reverse Osmosis Treatment Very Expensive and Questionable Sustainability
• Reclaimed Water to Recharge Aquifers Even More Expensive
• Utilities joined together to evaluate C-51 Reservoir to capture excess storm water and recharge Surficial and Biscayne Aquifers to use existing well fields and treatment capacity
• C-51 Reservoir is preferred after extensive study
C-51 Reservoir – Palm Beach Aggregates and Local Sponsors

- Captures and stores excess surface water from the C-51 West Basin
- Proposes delivery of water as Alternative Water Supply

Below slide from November 3, 2016 presentation to WRAC by Len Lindahl
Water conveyed through a series of SFWMD, Lake Worth Drainage District, and other integrated canal systems

No structural improvements necessary to deliver Phase 1 water

Recharges local wellfields
Originally contemplated as part of CERP

2006 - Coordination of seven Broward and Palm Beach water utilities and counties

2007-2008 - Partners cost-shared in initial preliminary design and cost-benefit analyses with policy and regulatory issues coordinated with SFWMD

### Project History

**2013 – Present**

Governance and Finance Work Group created via resolution and adopted by participants

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Governance and Finance Work Group Report

- 2013 Joint Water Resources Task Force Meeting
- MWH Global Hired by Utilities
- Independent Cost Estimate
- Engineering Review
- Governance Structure
- June 2014 Report
- December 2014 Supplement
- “Top Off” Pump Discussions with SFWMD
- $161 million for Phase 1 to be paid only upon completion and acceptance for operations
- Based on December 2014 Cost Estimates
- Equals $4.60 capital cost per gallon
C-51 Reservoir Phase 1

- 14,000 acre-feet static storage
- 39,000 acre-feet dynamic storage
- 35 Million Gallons Per Day (MGD) for Alternative Water Supply
- 35 MGD would serve 233,333 households at 150 gallons per day per capita
- Majority of Excavation Complete
- $161 million cost derived from Third Party Independent Estimate
- Permits in place, construction plans approved, can be operational 24 months from construction start
Conveyance Routing
Lower East Coast

- Final routes not yet final: discussions ongoing as a component of Operating Plan
- Will use existing canals, pumps and structures, with improvements as needed
- Pending Operating Plan follows same approach as existing water supply deliveries to recharge well fields through canals
- 35 mgd is very small amount compared to capacity of canals and existing LEC permitted water supply
Current Capacity Allocation Agreement and Letters of Intent – Total of 35 MGD Available

- Broward County: 6 MGD (Executed Agreement)
- Sunrise: 5 MGD
- Lauderhill: 2 MGD
- Dania Beach: 1 MGD
- Total 14 MGD (21 MGD Remaining)
- Discussions with others in progress
- Opportunity to obtain alternative water supply consumptive use permits for duration of C-51 Reservoir CUP – until December 27, 2065
Permitting and Approvals for Phase 1 - In Place

- FDEP Environmental Resource Permit
- FDEP Consumptive Use Permit (50 year permit)
- Lake Worth Drainage District Agreement
- Governance & Finance Group Final Report
- C-51 Reservoir Inc. established and approved by IRS
- SFWMD Operations and Maintenance Agreement
- SFWMD Designated Pilot Project
- Easements Finalized with FPL
- 2017 Legislature – DEP Loan for $30 million
- 2018 Legislature – Operations, Option for SFWMD
- Broward County Capacity Allocation Agreement
- Broward County CUP for South Regional Wellfield
Permitting and Approvals for Phase 1 - Pending

- Sunrise, Dania Beach, Lauderhill Capacity Allocation Agreements and CUP Modifications
- Finalize SFWMD Operating Plan and Routes
- Central Broward Water Control District Agreement
- SB 10 Loan Documents - $30 million Loan
- Balance of Construction Financing after SB 10 Loan
- SFWMD Option of Storage for Environment
- Additional Participant(s)
- Target Construction Start Fall 2018 Pending Above
- Operational 24 months after construction starts