



TO: Honorable Mayor & Members of the
Fort Lauderdale City Commission

FROM: Lee R. Feldman, ICMA-CM, City Manager

DATE: December 17, 2013

TITLE: Resolution approving a Joint Funding Inter-local Agreement (ILA) for a
Third-Party Assessment of C-51 Reservoir Costs between Palm Beach
County and several utilities, and providing an effective date

Recommendation

It is recommended that the City Commission adopt a Resolution to enter into a joint funding ILA related to a Third-Party Assessment of C-51 Reservoir Costs between Palm Beach County and several utilities.

Background

For the last several years, a number of local utilities, engineering consultants, interested elected officials, and water management/control districts have worked in collaboration to move forward the C-51 Reservoir project. This project, located in Central Palm Beach County and accessed from Southern Boulevard, is adjacent and west of the L-8 reservoir which is managed by the South Florida Water Management District (SFWMD). The geology of this region has demonstrated to be effective at holding large quantities of water for these purposes without excessive seepage due to the compact geological formations under it.

The C-51 project was originally planned for a single phase delivery of approximately 75,000 acre-feet in volume, with the objective of intercepting stormwater that would otherwise be pumped to tide and re-routing it through the C-51 reservoir and through stormwater pumping stations and canal networks through Palm Beach, Broward and Miami-Dade Counties, providing recharge of the Biscayne aquifer. The utilities participating in the C-51 project would purchase capacity from the reservoir and presumably receive increased allocations for longer durations within modified Water Use permits from the SFWMD.

Palm Beach Aggregates, LLC (PBA), a rock mining company, is developing this reservoir and proposes a transition of use from a rock mining operation to a water supply reservoir and contracted for a preliminary design and cost estimate report for this new purpose in January 2012. Their report estimates this reservoir can supply about

200 million gallons of water per day (MGD) at a cost ranging from \$755 million to \$1.05 Billion (or \$3.78 per gallon to \$5.25 per gallon capital) and about 3 cents per thousand gallons operating cost. Recognizing water demands have reduced significantly from peak demand years of 2008 to 2010, PBA revised their approach to deliver the reservoir in four phases, with the first phase providing 35 MGD (Figure 2). With this phased approach, costs were re-estimated at approximately \$4.00 to \$4.50 per gallon for capital construction and 4 cents per thousand gallons to operate, and operations would be run by the SFWMD.

The joint funding agreement provides for a lump sum engineering fee for an independent consultant to evaluate those studies previously performed and to analyze many of the technical and financial parameters affecting PBA's delivery of the project. The land management and transactional costs required by the developer, technical engineering assumptions, bases for design and feasibility, and a review of land value needs to occur. Included in the statement of work is the interaction of this reservoir with other nearby reservoirs, seepage assumptions, and analysis of costs for design, construction, and life cycle, as well as its suitability for use as a water supply reservoir Exhibit 3.

This agreement is to be coordinated through the Palm Beach County procurement division. Any cause of action is to occur in Palm Beach County and the Palm Beach Office of the Inspector General has the authority to audit, investigate, monitor, and inspect the activities of entities contracting with the County as a necessary condition of the agreement. The cost share calculations for proportionate share to be paid by the City of Fort Lauderdale is \$18,750, which is determined on the basis of the number of customers served relative to other entities who have expressed interest in the project, but is subject to change depending on the final number of utilities participating, and the expected fees overall are limited to \$150,000.

MWH Americas, Inc., was selected by the C-51 governance and finance work group for this project to perform this technical and financial evaluation due to their familiarity with the C-51 project and their demonstrated record for completing both design and evaluation efforts for related projects for the SFWMD and other water management authorities.

Resource Impact

There will be a fiscal impact to the City in the amount of \$18,750.

FUNDS AVAILABILITY LOCATION:

FY	FUND	SUB FUND	FUND NAME	INDEX #	INDEX NAME	SUB OBJ #	SUBJECT NAME	AMOUNT
2014	450	01	Water & Sewer	PBS670101	Treatment Operations	3199	Other Professional Services	\$18,750.00
TOTAL								\$18,750.00

Strategic Connections

This item is a *Press Play Fort Lauderdale Strategic Plan 2018* initiative, included within the **Infrastructure Cylinder of Excellence**, specifically advancing:

- **Goal 1:** Be a sustainable and resilient community.
- **Objective 6:** Secure our community's water supply.
- **Initiative 2:** Participate in regional Long-Term Water Supply Strategies.

This item advances the *Fast Forward Fort Lauderdale Vision Plan 2035: We Are Ready*

Related CAM: #13-1040

Attachments: Exhibit 1 – Resolution
 Exhibit 2 – C-51 Interlocal Funding Agreement
 Exhibit 3 – Attachment A - Statement of Work
 Exhibit 4 – Attachment B - Proposed Cost Share
 Exhibit 5 – Figure 1 – Conveyance Illustration
 Exhibit 6 – Figure 2 – Phased Delivery Illustration

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