

**PALM BEACH COUNTY  
BOARD OF COUNTY COMMISSIONERS  
AGENDA ITEM SUMMARY**

**Meeting Date:** May 7, 2013 **Consent [ ]** **Regular [X]**  
**Public Hearing [ ]**

**Department:** Water Utilities Department

**I. EXECUTIVE BRIEF**

**Motion and Title:** Staff recommends motion to adopt: a Resolution by the Board of County Commissioners of Palm Beach County, Florida, Supporting Phase I Implementation of the Proposed C-51 Reservoir Project.

**Summary:** In October 2011, the Palm Beach County Board of County Commissioners (BCC) approved a Memorandum of Understanding (R2011-1670) directing staff to support on-going planning efforts associated with the C-51 Reservoir. In April 2013, the BCC gave staff direction to continue to participate in the planning aspect of the project with interested parties. Significant planning, modeling and analysis has demonstrated that water from the C-51 Reservoir is available as a future water supply source and to protect the Lake Worth Lagoon from harmful discharges. On January 18, 2013, a joint meeting of the Broward and Palm Beach County Water Resources Task Forces voted to support the project and recommended that interested parties approve a Resolution supporting further advancement of the project. The project will be implemented in three (3) phases to reduce costs to encourage implementation and use of the Reservoir by entities which currently need the water. Staff recommends approval of the attached Resolution, which does not bind the County to any future costs or course of action, but which expresses support for implementation of Phase I of the project. Palm Beach County Water Utilities Department does not need water from Phase I, but would like to continue to participate in the development of the project. Countywide (MJ)

**Background and Justification:** Since 2006 Broward and Palm Beach County water utilities, as well as the South Florida Water Management District (SFWMD), have been investigating the potential development of a large surface water reservoir to serve as a regional alternative water supply by capturing stormwater runoff for wet season storage and later distribution and use during the dry season. Due to the geographical location of the proposed reservoir just north of the C-51 canal in Central Palm Beach County, the 75,000 acre foot reservoir is known as the C-51 Reservoir.

As South Florida continues to develop and accelerate efforts to restore environmentally sensitive areas such as the Everglades, there is a continuing competition and projected shortage for existing suppliers of water. While South Florida has an abundance of rainfall, most of this water is discharged to tide and unavailable for use. Increased storage is the potential solution for making additional water available. Storage and re-distribution has been shown to be much more cost effective than other alternative water sources, particularly desalination of sea water or brackish water. In Central Palm Beach County, just north of C-51 canal and adjacent to the existing L-8 Reservoir owned and operated by SFWMD, there is an available rock mining site that can be converted into a deep reservoir due to unique geologic characteristics. It is this area that will be the site of the C-51 project. While much of the planning and evaluations have completed, the design details of each of the three proposed phases of the project, the conveyance details and the governance and financing structure of the project are still to be determined. For these reasons Palm Beach County needs to remain involved in project planning and development.

**Attachments:**

- 1. Resolution

**Recommended By:** Sharon Q. Lopez 4-21-13  
**Department Director** **Date**

**Approved By:** Sharon Q. Lopez 4-21-13  
**Assistant County Administrator** **Date**

## II. FISCAL IMPACT ANALYSIS

**A. Five Year Summary of Fiscal Impact:**

Fiscal Years	2013	2014	2015	2016	2017
Capital Expenditures	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
External Revenues	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Operating Expenses	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
In-Kind Match County	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>NET FISCAL IMPACT</b>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b># ADDITIONAL FTE POSITIONS (Cumulative)</b>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

**Budget Account No.:**      Fund                      Dept                      Unit                      Rsrc

Is Item Included in Current Budget?    Yes              No

Reporting Category      N/A

**B. Recommended Sources of Funds/Summary of Fiscal Impact:**

No Fiscal Impact

**C. Department Fiscal Review:**      *R. Egan*

### III. REVIEW COMMENTS

**A. OFMB Fiscal and/or Contract Development and Control Comments:**

*N. Oran*      4/23/2013  
OFMB      JS 4/22      *af* 4/22

*J. J. Jacobs*      4/24/13  
Contract Development and Control  
4-23-13      *B. Wheeler*

**B. Legal sufficiency:**

*L. O'Connell*      4/25/13  
Assistant County Attorney

**C. Other Department Review:**

\_\_\_\_\_  
Department Director

RESOLUTION NO. 2013-\_\_\_\_\_

**A RESOLUTION BY THE BOARD OF COUNTY COMMISSIONERS OF  
PALM BEACH COUNTY FLORIDA, SUPPORTING PHASE I  
IMPLEMENTATION OF THE PROPOSED C-51 RESERVOIR PROJECT**

**WHEREAS**, the Broward and Palm Beach Water Resources Task Forces were created for the purpose of identifying and evaluating cost-beneficial and effective regional water supply projects and conservation strategies; and

**WHEREAS**, in 2006, prior to the convening of the Task Forces, Broward and Palm Beach water providers were beginning to investigate the potential development of a large surface water reservoir project to serve as a regional alternative water supply by capturing stormwater runoff for wet season storage and later distribution and use during the dry season; and

**WHEREAS**, this project subsequently become known as the C-51 Reservoir given its proposed siting just north of the C-51 Canal in central Palm Beach County, and is contemplated to ultimately include 75,000 acre-feet of surface water storage at a site proximate to the existing L-8 Reservoir where geologic characteristics allow long-term surface water storage without significant seepage losses; and

**WHEREAS**, both Task Forces have been actively engaged in the advancement of the proposed C-51 Reservoir, having received numerous technical presentations, offered guidance and planning strategies, and conducted a site tour; and

**WHEREAS**, regional collaboration in the C-51 Reservoir planning effort has expanded beyond the initial seven (7) utilities and in 2010/2011 a Memorandum of Understanding (MOU) was jointly approved by the City of Fort Lauderdale, the South Florida Water Management District, Palm Beach County, and the Lake Worth Drainage District providing for committed support to ongoing planning efforts, this MOU was subsequently supported by seven (7) local governments, including Broward County; and

**WHEREAS**, these planning efforts included project cost estimates, analysis of water availability and conveyance options, environmental considerations, economic analyses, hydrologic modeling, geotechnical evaluations, and processes for water supply certification, with the results documented in technical reports; and

**WHEREAS**, these assessments have substantiated early estimations about the unique benefits of the C-51 Reservoir as an alternative water supply relative to other alternative water supply options, which include lower capital cost, lower maintenance costs, reduced energy demands, water resource enhancements via aquifer recharge, wellfield offsets, and general permitability; and

**WHEREAS**, most recently, the South Florida Water Management District, Broward County, Palm Beach County, and the Lake Worth Drainage District collaborated in the completion of the C-51 Preliminary Design and Cost Estimate Report dated June 2012, which estimates total water availability from the proposed C-51 Reservoir at 185 million gallons per day (mgd) and total construction costs of \$755 million; and

**WHEREAS**, while the benefits of the C-51 Reservoir were originally focused on environmental enhancements and alternative water supply development, there is an increasing appreciation of the benefits the C-51 Reservoir in the preservation of existing water supplies, especially in light of rising sea level pressures; and

**WHEREAS**, climate changes and rising sea levels are predicted to increase drought severity and saltwater intrusion into coastal wellfields, and storage provided in the C-51 Reservoir can help mitigate for these impacts while also providing stormwater mitigation and flood control protection during extreme storm events in an area that was inundated with the passage of Tropical Storm Isaac; and

**WHEREAS**, on January 18, 2013, a joint meeting of the Task Forces was convened for the purpose of considering these issues, receiving a project status update, receiving updated cost estimates, evaluating phased implementation, and considering next steps; and

**WHEREAS**, information presented at this meeting included a phased construction plan that would allow for Phase I construction to provide 14,000 acre-feet (35 mgd) of storage capacity in 2.5 years at an estimated cost between \$150.5 and \$186.5 million depending upon conveyance alternatives; and

**WHEREAS**, many entities expressed strong support for the project and the need to move from project planning to implementation; and

**WHEREAS**, the joint memberships of the Task Forces voted unanimously to support advancement of Phase I Implementation of the C-51 Reservoir project, and resolved that those members with more short term water supply or environmental needs should cooperate and jointly participate in the planning and implementation of Phase I.

**NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF PALM BEACH COUNTY, FLORIDA** that the Board hereby supports advancement of Phase I Implementation of the C-51 Reservoir project, and supports those members of the Task Force with more short term water supply or environmental needs to jointly cooperate in the development and structure for participation in the Phase I implementation. Those members with an interest in participating in Phase I shall convene a meeting or meetings to discuss the available options and determine how best to proceed with Phase I of the C-51 Reservoir, with updates at each scheduled meeting of the Task Forces.

The governmental entities adopting this Resolution recognize and agree that their participation in these meetings is voluntary and are encouraged to the extent deemed beneficial to the entity. The participating governments further recognize that any recommendations shall not be construed as imposing any mandates upon the participants or other government entities, and that it shall be the decision of each individual participant or government entity as to its participation in Phase I of the C-51 Reservoir.

This Resolution shall take effect immediately upon its adoption.

This foregoing Resolution was offered by Commissioner \_\_\_\_\_ who moved its adoption. The motion was seconded by Commissioner \_\_\_\_\_ and upon being put to a vote; the vote was as follows:

Commissioner Steven L. Abrams, Mayor -  
Commissioner Priscilla A. Taylor, Vice Mayor -  
Commissioner Hal R. Valeche -  
Commissioner Paulette Burdick -  
Commissioner Shelley Vana -  
Commissioner Mary Lou Berger -  
Commissioner Jess R. Santamaria -

The Chair thereupon declared the Resolution duly passed and adopted this \_\_\_\_\_ day of \_\_\_\_\_, 2013.

**PALM BEACH COUNTY, FLORIDA, BY ITS  
BOARD OF COUNTY COMMISSIONERS**

**APPROVED AS TO FORM AND  
LEGAL SELF SUFFICIENCY**

**ATTEST: SHARON R. BOCK,  
CLERK & COMPTROLLER**

By: \_\_\_\_\_

By: \_\_\_\_\_  
Deputy Clerk