C-51 Reservoir Project Update

Water Resources Task Force
July 17, 2014

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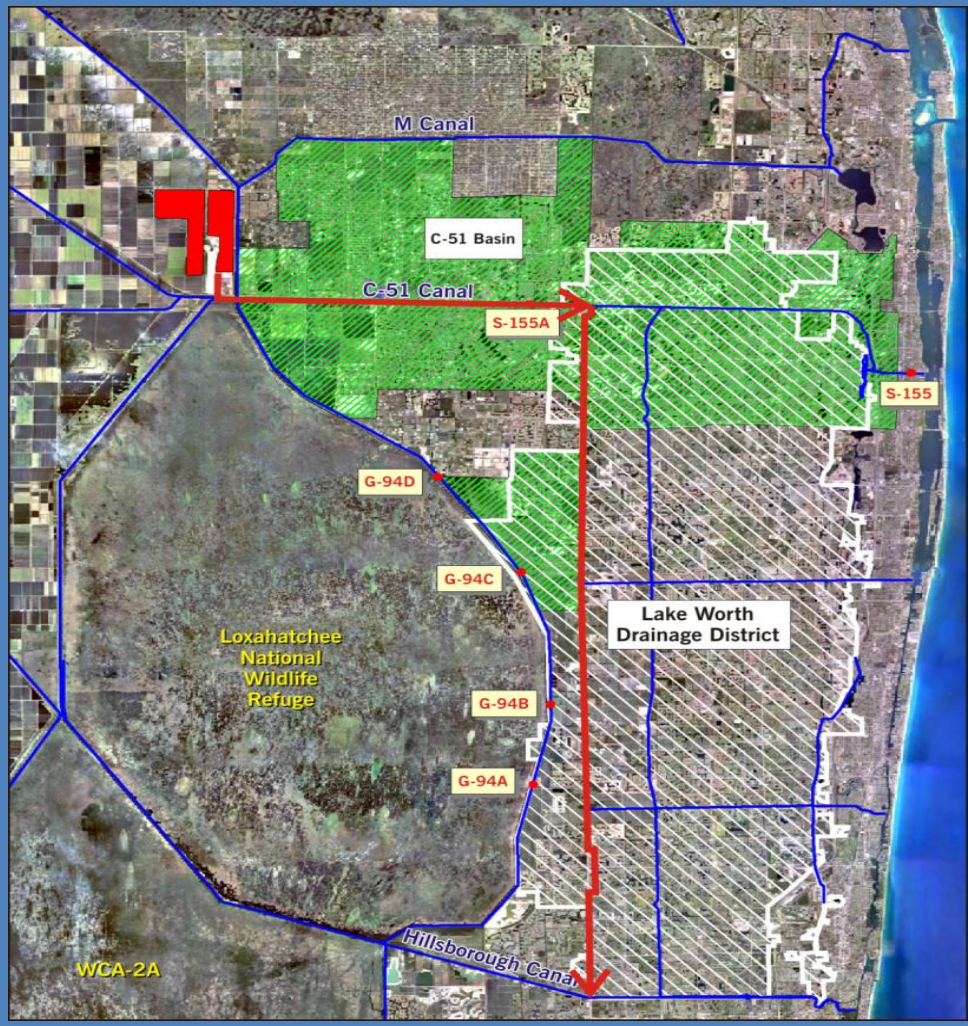
C-51 Project Summary

- Existing rock mine just north of West Palm Beach canal and adjacent to L-8 Reservoir - same favorable geology
- Capture excess flows in C-51 basin during wet times. Release stored water to maintain flows in the canals during the dry season.
- Increase regional availability of water along Lower East Coast
- Recharge wellfields
- Create freshwater head to maintain fresh/saltwater interface
- Utilizes existing infrastructure for conveyance with some improvements



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Palm Beach County Water Utilities

What Has Been Done To Develop The C-51 Project?

What Has Been Done To Develop The C-51 Project (Cont'd)?

What Has Been Done To Develop The C-51 Project (Cont'd)?

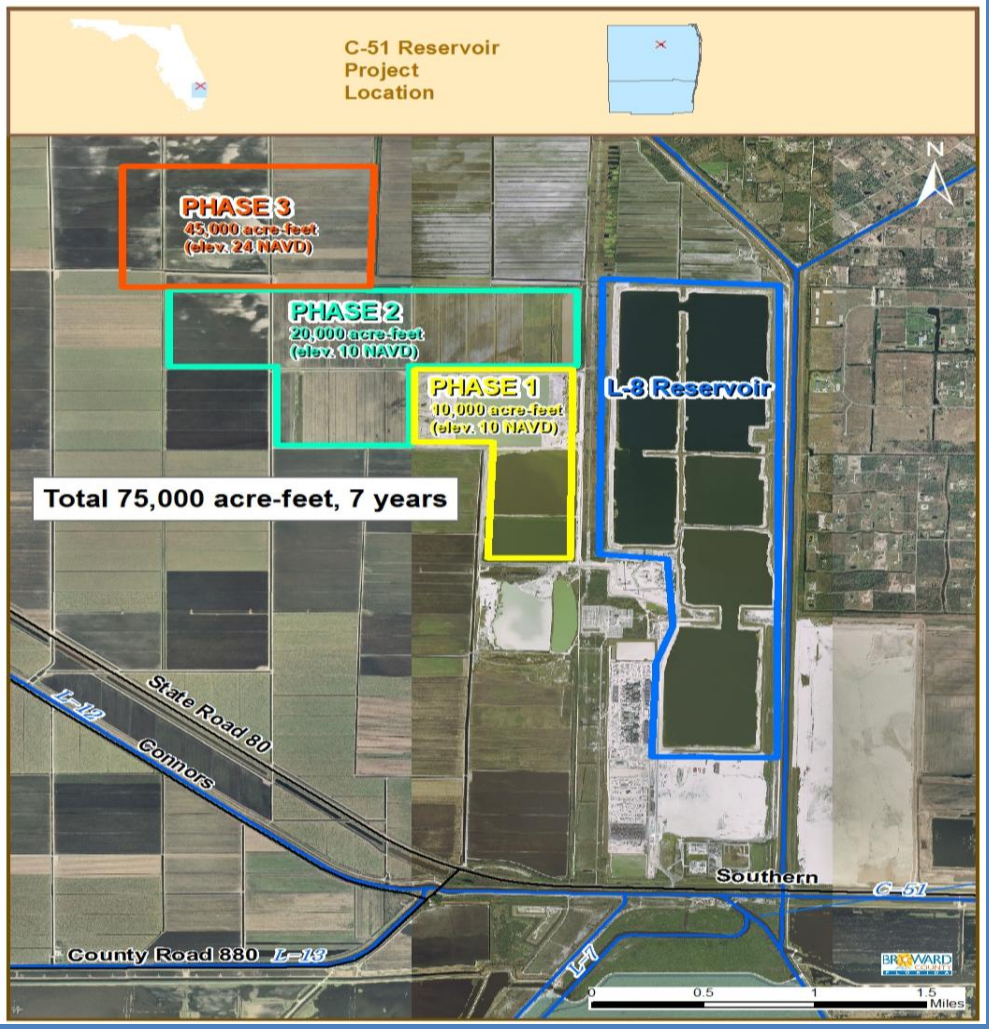
MWH Independent Cost Estimate Report

Issued June 2014

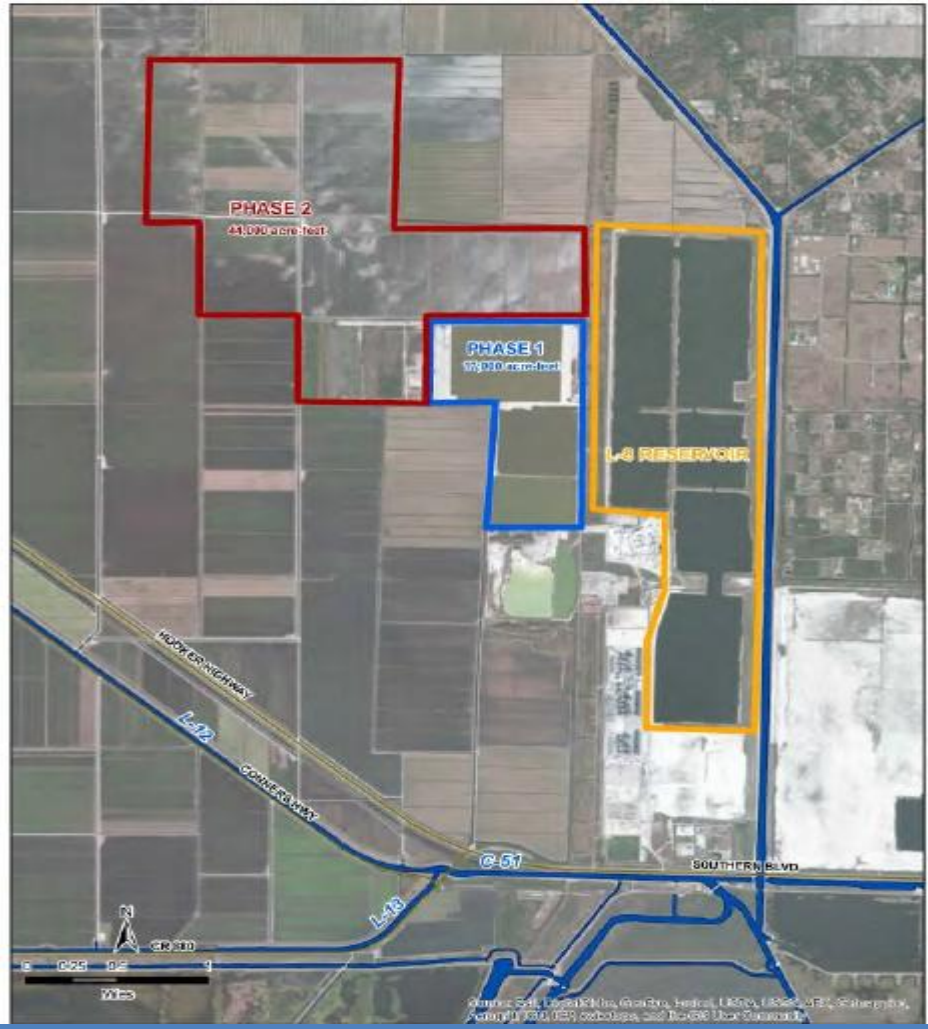
Updates Phased Project Approach and Presents Comparative Cost Analysis

Presented at June 18 meeting of Finance and Governance Work Group

Updated C-51 Project Phases



Initial Configuration



Updated Configuration*

* Based on changed regulatory , scheduling and cost realities

MWH Analysis of Financial Considerations

Results showed costs to be less than, although in the range of, the original PBA cost estimate

Land valuation accounts for large portion of discrepancies

MWH report includes "Value Proposition" for risk assumption by PBA

Acceptable and Saleable ROI

Affordable Cost Assumptions based on unit costs reserved on a take or pay basis

Table 2-1 – Summary of Financial Calculations for the C-51 Reservoir Project

Project Phases per Environmental Resources Permit	OPCC ($M)[1]	Storage Volume (Ac-Ft)	Dry Season Water Availability (MGD)[2]	Cost of Storage[3] ($/gal)	Annual Costs[4] ($/1000 gal)	
					Dry Season Benefit Only[5, 6]	Year Round Benefit[7]
ERP Phase 1	106.8	17,000	37	3.96	2.55	1.05
ERP Phase 2	182	44,000	96	3.00	N/A[8]	N/A[8]
ERP Consolidated (Total)	**286.4**	**61,000**	**132.5**	**3.26**	**2.11**	**0.87**

1. Assumes the rock pit cells are mined and the capital cost represents the conversion to a reservoir. See Tables 7-1 and 7-2 excluding contingencies.
2. Assumes stated daily water availability over a 150 day dry period.
3. Capacity will be a function of the storage as permitted by the SFWMD through individual utility water use permits.
4. Annual cost includes O&M costs provided by SFWMD and the LWDD, Annual Debt Service, and Reserves.
5. Assumes the Dry Season Stored Water Benefit fully offsets regional impacts (e.g. for Phase 1 a 1:1 or 37 MG of alternative water provides 37 MGD of Biscayne/Surficial Aquifer allocation. This ratio may be dependent on regulatory constraints.
6. From Table 8-5, Avg. Cost per KGal: Year 1 represents Phase 1 and Year 16 represents Total.
7. From Table 8-7, Avg. Cost per KGal: Year 1 represents Phase 1 and Year 16 represents Total.
8. Not applicable - the Phase 2 annual operating costs cannot be separated from the total annual costs as they are integrated.

Cost Comparison Between PBA and MWH Reports

Table 2-2 – Alternative Reservoir Configuration Costs Comparison

C-51 Configuration	Dry Season Water Availability[1] (MGD)	Cost of Storage ($/gal)	Project Capital Costs ($M)	Annual Costs ($M)[5]
ERP Phase 1[2]	37	3.96	146.2[6]	14.1
ERP Phase 2[2]	96	3.00	286.4[7]	N/A
ERP Consolidated[2]	132.5	3.26	432.6	41.9
PDCER[3]	163	4.08	755.6	N/A
PBA	35	4.30[4]	158.9	14.9

1. Assumes stated daily water availability over a 150 day dry period.
2. Current configuration and basis of this independent evaluation.
3. The PDCER Project Costs does not include:

   Project management, Design, Permitting, Construction Management, Interest on money during construction, Land costs

   Project Value - Includes Project Value as established by Palm Beach Aggregates
4. From Palm Beach Aggregates (2013, January 18)
5. Assumes 30 yr. bond at 6% interest with 2% cost of issuance. Includes debt service reserves and issuance insurance. Values from Tables 8-5 and 8-7, Total Annual Cost: Year 1 represents Phase 1 and Year 16 represents Total.
6. Project capital costs from Section 8.2.1 herein.
7. Project capital costs from Section 8.3.1 herein.

Financing Considerations

Total Phase 1 Project Capital Costs	$146,265,212
Cost of Issuance at 2.0%	3,159,423
Debt Service Reserve Fund	11,705,963
Total Amount to be Financed	$161,130,598
Repayment Term (Years)	30
Interest Rate	6.0%
Annual Debt Service	$11,705,963

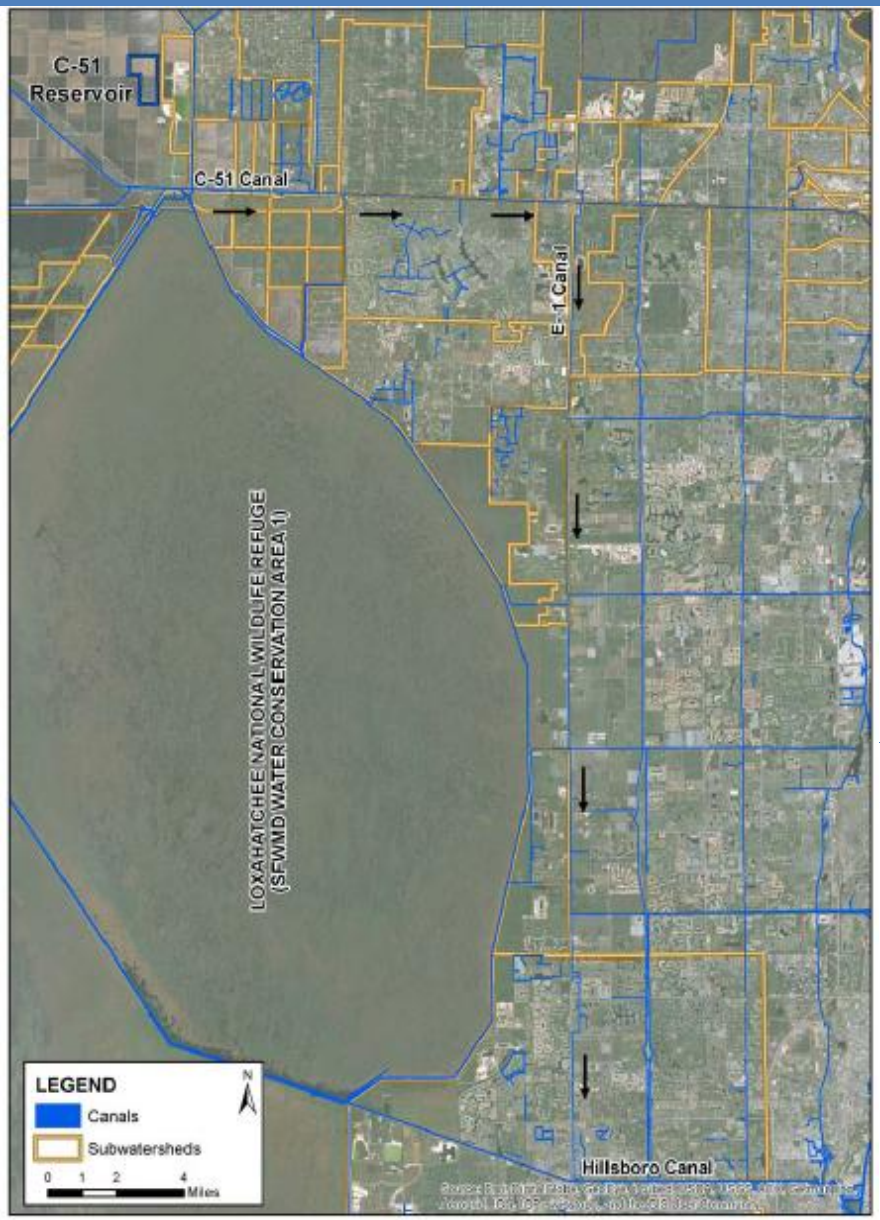
In developing the estimate of annual capital-related costs, it was also assumed that the cost recovery rate may need to include a provision for achieving a debt service coverage ratio of 1.15x annual debt service to enhance the credit position of the bond financing; however, since there are no significant renewal and replacement costs associated with the C-51 Reservoir facilities anticipated during the repayment term, it was further assumed that such amounts would be rebated to the project participants on an annual basis. The C-51 Reservoir cost recovery rates per thousand gallons (kgal), as set forth herein, include the calculation of unit costs both with and without the debt service coverage allowance.

Table 8-8 – Summary of Financial Calculations for the C-51 Reservoir Project

Project Phases per Environmental Resources Permit	Storage Volume (MG)	OPCC ($M)[1]	Total Principal ($M)[2]	Annual Costs ($M)[3]	Annual Costs[4] ($/1000 gal)[4]	
					Dry Season Benefit Only[4]	Year Round Benefit[5]
ERP Phase 1	5,500	106.8	161	14.1	2.55	1.05
ERP Phase 2	14,000	182	315.5	N/A[6]	N/A[6]	N/A[6]
ERP Consolidated (Total)	19,950	286.4	476.5	41.9	2.11	0.87

1. Assumes the rock pit cells are mined and the capital cost represents the conversion to a reservoir. From Tables 7-1 and 7-2, excluding contingencies.
2. From Tables 8-1 and 8-2.
3. From Tables 8-5 and 8-7, Total Annual Cost: Year 1 represents Phase 1 and Year 16 represents Total.
4. From Table 8-5, Avg. Cost per KGal: Year 1 represents Phase 1 and Year 16 represents Total.
5. From Table 8-7, Avg. Cost per KGal: Year 1 represents Phase 1 and Year 16 represents Total
6. Not applicable - the Phase 2 annual operating costs cannot be separated from the total annual costs as they are integrated.

O+M Cost Considerations



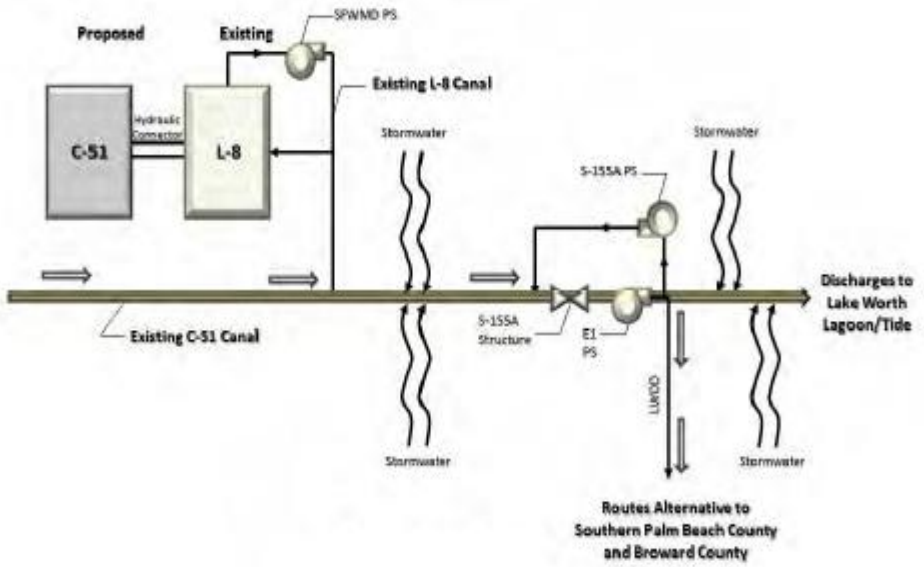


Figure 3-2 – Major Facilities Pursuant to Palm Beach Aggregates' Environmental Resource Permit Application. Modifications include a hydraulic interconnect between the L-8 and C-51 Reservoirs and using the L-8 pump stations to eliminate the C-51 Reservoir inflow and outflow pump stations.

C-51 & L8 Pumping Cost	$ 799
LWDD Pumping Cost	3,196
Total Phase 1 Annual Pumping Cost	3,995
C-51 Maintenance Expense	605,469
LWDD Maintenance Expense	76,032
Total Phase 1 Annual Maintenance Expense	$681,501
Total Phase 1 Operations and Maintenance Expense	$685,496

For purposes of this evaluation, it is assumed that the Phase 1 pumping and maintenance expenses would increase 3% annually to account for the effects of inflation.

Next Steps

- Negotiation Group to Meet With Representatives from Palm Beach Aggregates to Discuss Project Costs and Determine Final Cost Figures
- Palm Beach Aggregates to apply for Diversion and Impoundment CUP (previously negotiated)
- Finalization of Entities Interested in Initial Allocations from Phase I of the Project
- Establishment of Governance Mechanism for Oversight and Management of Project
- Entities Reserving Allocations to Modify Associated CUPs

QUESTIONS?