Palm Beach Aggregates, LLC

C-51 Reservoir Project

Overview and Summary

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In 2007, the Governing Board of the South Florida Water Management District (SFWMD) adopted the Regional Water Availability Rule (RWA Rule) to protect the Everglades and other environmentally sensitive water bodies by limiting Lower East Coast public water supply utilities (LEC Utilities) water supply withdrawals from the Lower East Coast Regional Water Supply System (Regional System) to levels that existed prior to April 2006. As a result of the RWA Rule, LEC Utilities have been required to implement alternative water supply sources to meet their post-2006 customer water supply demands. Since 2007, LEC Utilities have modified their water use permits to incorporate future alternative water supply projects, some of which have been constructed and placed into service and others, which have not yet been constructed. Other LEC Utilities anticipate the need to implement alternative water supply projects in the intermediate future to meet projected 20- to 50-year water supply demands.

LEC Utilities have a number of alternative water supply options available to meet their customer's future water demand needs. These include (i) tapping the Floridan aquifer, a brackish aquifer which lies below and is hydraulically separated from the surficial aquifer that is not re-charged by rainfall, and constructing reverse osmosis water treatment facilities to remove chlorides from the source water (with discharge of the by-product chlorides concentrate by underground injection well or ocean outfall), (ii) constructing advanced tertiary wastewater treatment facilities to remove nutrients from and highly disinfect sewage effluent for direct injection into the surficial aquifer drinking water supply or land application for indirect recharge of the aquifer, (iii) withdrawing seawater and constructing desalination water treatment facilities to create drinking water (with discharge of the by-product chlorides concentrate by underground injection well or ocean outfall), or (iv) constructing storm water diversion and impoundment reservoirs to collect excess storm water during the wet season for re-introduction into the Regional System during the dry season (which would allow certain LEC utilities to utilize existing surficial aquifer treatment facility excess capacity that was inadvertently stranded when the RWA Rule went into effect, in lieu of constructing new alternative treatment facilities).

Each of these alternative water supply options has been implemented in Florida, and each has its own technical challenges and financial feasibility characteristics which each LEC utility must analyze and weigh to determine which option or combination of options will provide its ratepayers the most reliable, most environmentally sustainable and lowest cost water supply. Neither the RWA Rule nor the SFWMD mandates which alternative water supply option or options the LEC Utilities must use.

Since the adoption of the RWA Rule, numerous studies have investigated the potential for the C-51 Reservoir to provide a reliable, environmentally sustainable and cost effective alternative water supply option for the LEC Utilities, the most recent being a Preliminary Design and Cost Estimate Report completed in February 2013 (2013 PDCER). The 2013 PDCER includes detailed information on background, previous studies including those conducted in 2009 and 2012 by Hazen & Sawyer in conjunction with MacVicar, Federico & Lamb (H&S Reports), then current projected water demands, water availability, conveyance alternatives and potential improvements, water quality considerations, cost estimates, conclusions and recommendations. The 2013 PDCER focused on a proposed C-51 Reservoir with 75,000 acre-feet of storage that would be constructed in 3 phases continuously over a 7 year time period.

Discussions regarding the 2013 PDCER included the timing of individual LEC Utility water supply demands, the opportunity to replace existing permitted but not yet constructed alternative water supply projects with a C-51 Reservoir storage allocation, and the possibility of changing the timing and scope of the phases to coincide with current and projected future demands. Discussions regarding longer-term water use permits for participating utilities and statutory authorization for up to 50-year permits, along with other regulatory and operational issues have taken place. Additional discussions regarding alternatives for connecting the C-51 Reservoir to the C-51 Canal and the Regional System have also taken place, along with potential project implementation options.

In May of 2013 the SFWMD Governing Board approved a Memorandum of Understanding with Palm Beach Aggregates, LLC (PBA), the owner of the proposed C-51 Reservoir (2013 SFWMD MOU) that established the framework for the project and the roles of the parties. The goal of Phase 1 of the C-51 Reservoir would be for the SFWMD to capture and divert excess storm water that would otherwise flow into the Lake Worth Lagoon estuarine habitat or other water bodies to the C-51 Reservoir, where it would be stored for later re-introduction by the SFWMD for the benefit of the region during periods of low rainfall or drought for the purpose of maintaining water levels within the region and re-charging natural systems, surface water bodies and the surficial aquifer systems to enhance protection against salt water intrusion and to benefit water supply utilities and other water users that wish to participate in Phase 1 of the project. In order to assure the seamless integration of the C-51 Reservoir with the SFWMD's operation of the Regional System and to implement the availability of the C-51 Reservoir as an alternative water supply for the participants, the SFWMD would operate the C-51 Reservoir as part of the SFWMD's Regional System to maintain stages sufficient to meet the needs of each Phase. During the permitting process, SFWMD and PBA will develop a written operations agreement to provide for (i) the SFWMD to operate and maintain the C-51 Reservoir with O&M funding on an annual basis from the Participants, (ii) coordination between SFWMD and the 298 Districts, and (iii) would provide for standard SFWMD liability protection, indemnifications and insurance coverage.

In September 2013, the SFWMD Governing Board approved the Lower East Coast Water Supply Plan Update (LEC Plan) in conjunction with the LEC Utilities identifying the C-51 Reservoir as a potential alternative water supply project. As an alternative water supply project, the C-51 Reservoir would be available to LEC Utilities to address unmet need in the 20-year planning horizon, unmet need in the longer-term planning horizon, or as a lower-cost substitute for an existing alternative water supply project (such as a permitted, but not yet constructed Floridan Aquifer-Reverse Osmosis system). If a LEC utility wishes to use an allocation from the C-51 Reservoir as a substitute for an existing project, it would submit a permit modification to SFWMD to change the source for that portion of its water supply, subject to the provisions of the Basis of Review. A number of LEC Utilities have expressed interest in allocations from Phase 1 of the C-51 Reservoir and are analyzing modifications to their existing consumptive use permits.

Further discussions with SFWMD and other participants have led to the current configuration of the C-51 Reservoir, to be constructed in two phases. Phase 1 will provide approximately 16,000 acre feet of storage. Phase 2 would provide an additional 46,000 acre-feet of storage (for a total of 62,000 acre feet). The maximum control elevation would be 16.5 NAVD, the same as the adjacent SFWMD L-8 Reservoir. As proposed, the C-51 Reservoir would be connected to the L-8 Reservoir by two 100 inch steel pipes at -20 NAVD, with a control structure and gates on the eastern side.

Pursuant to the 2013 SFWMD MOU and in accordance with continuing discussions with SFWMD, Palm Beach Aggregates LLC has submitted an application for an Environmental Resource Permit for the C-51 Reservoir.