

MEMORANDUM

TO: Governing Board Members

FROM: Chip Merriam, Deputy Executive Director, Water Resources Management

DATE: September 13, 2007

SUBJECT: Approval of the Florida Keys Aqueduct Authority Second Amendment to Consent Agreement Order No. 03-166-CO-WU

Background: The Florida Keys Aqueduct Authority (FKAA), under terms of their current Consumptive Use Permit, is required to construct and use an Aquifer Storage and Recovery (ASR) well and limit withdrawals from the Biscayne Aquifer. Due to unforeseen delays in obtaining Department of Environmental Protection permits for construction of the ASR well, FKAA and the District entered into a Consent Agreement that revised the schedule for implementing the ASR project and allowing FKAA to continue to meet demands using the Biscayne wellfield with specific limits on pumpage, liquidated damages for non – compliance, requirements for use of emergency and other available sources to temporarily augment Biscayne Aquifer water, if needed, and imposition of in-kind service fines if pumpages were exceeded. The Consent Agreement was amended in January 2006 to again extend development of the ASR system due to unanticipated delays beyond the control of the FKAA. The long-term plan in the Consent Agreement is to eventually replace or augment the ASR source with development of Floridan Aquifer wells projected to become operational when a reverse osmosis plant is constructed to treat the Floridan water.

FKAA is in compliance with the terms of the Consumptive Use Permit and the Amended Consent Agreement. However, test data obtained from the ASR test well into the upper portion of the Upper Floridan Aquifer indicate that the aquifer characteristics in the proposed withdrawal area would not function efficiently as an ASR project. Therefore, FKAA requests to convert the ASR test well into a reverse osmosis supply well. FKAA has applied to modify its Consumptive Use Permit to include a Floridan Aquifer allocation for treatment by a proposed reverse osmosis facility, which is currently under development. This is consistent with long-term water supply development plans discussed by FKAA and the District.

How this helps meet the District's Mission: Approving this Consent Agreement helps FKAA construct Alternative Water Supply facilities to meet their future demands.

Funding Source: There is no funding need associated with this approval. The District has partially funded the construction of this Floridan Aquifer well through the Alternative Water Supply Grant Program.

This item impacts what area of the District, both resource area and geography: FKAA serves the Keys (Monroe County) and has withdrawal facilities near Florida City (Miami-Dade County).

What concerns could this Board item raise? Changing from an ASR facility to a Floridan Aquifer well will delay full implementation of an alternative source to the Biscayne Aquifer withdrawals until 2010. The limitations placed on the Biscayne Aquifer withdrawals under the Consent Agreements (17 MGD average daily pumpage for the dry season) were imposed consistent with the Governing Board direction on regional water system availability. However, FCAA has provided assurances that notwithstanding this delay in implementation of a supplemental alternative water supply source, it will continue to comply with the 17 MGD average daily limitation for the dry season until the projected operation date of the Floridan aquifer facilities due to lower than anticipated increases in demand projections for the FCAA service area over the last few years. To provide additional reasonable assurances of compliance with the Biscayne Aquifer pumpage limitation, the proposed second amendment to the Consent Agreement includes new specific timelines for development of the Floridan Aquifer well and treatment facility, along with liquidated damages for non-compliance, and requirements to use any available emergency sources, as necessary. In addition, FCAA also fully recognizes that it will be liable for appropriate civil fines and penalties if it does not comply with the Biscayne Aquifer withdrawal limitations, pursuant to Chapter 373, Florida Statutes.

Why should the Governing Board approve this item? Approval of this item will expedite the implementation of a large scale long-term Alternative Water Supply plan for FCAA.

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