

Memorandum



Date: February 15, 2011

To: Honorable Chairman Joe A. Martinez
and Members, Board of County Commissioners

From: George M. Burgess
County Manager 

Subject: Supplement #2 to Contract Award Recommendation for the Construction of the South Miami Heights Water Treatment Plant as required by the County's 20-Year Water Use Permit issued by the South Florida Water Management District

Supplement No. 2
Agenda Item No. 8(R)1a

At its January 20, 2011, Board of County Commissioners (Board) meeting, the Board deferred the above referenced contract award recommendation to the February 15, 2011 Board meeting, and directed staff to prepare a report detailing the contract award recommendation and follow up conversation with the South Florida Water Management District (District).

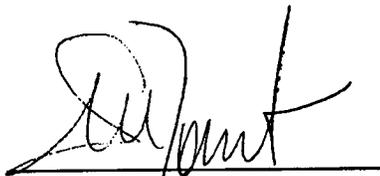
It is recommended that this construction contract be withdrawn at this time, and that within 90 days staff return to the Board with a final recommendation. While the construction of the South Miami Heights Water Treatment Plant (SMHWTP) is consistent with approved WASD's Master Plan, current permitting requirements, approved capital plan, and significant investments to date, changes in the regulatory environment and the continuation of water supply demands below projections indicate the *possibility* that the District may entertain additional modifications to the County's Water Use Permit (WUP). While this plant is necessary, there may be an opportunity to reduce the scope of the treatment plant and still fulfill water supply needs at a substantially lower cost. The 90 days will provide staff with the opportunity to formalize these preliminary discussions with the District.

In considering this situation, several factors are relevant:

- The SMHWTP is designed to replace five small water treatment plants that are more than 40 years old and to provide minimal water treatment. These plants are at the outer limits of their treatment and supply capacities and may require interim investment to operate within public health and fireflow standards until such time that a more reliable system can be provided.
- The south service area of the regional water supply system is somewhat isolated from the central and north service areas, and the department has limited capability to move additional supply to the south service area. The water supply plan calls for improved interconnection as well as additional supply, and these continue to be important needs.
- The south service area has been particularly hard hit by the recession, with a vacancy rate of more than 11%. An economic rebound could generate additional water demands that could stress current supplies beyond permitted water supply and treatment capacities before a new supply system can be constructed.
- The south service area has significant potential for future growth as the recession subsides.
- Under the current WUP conditions, the SMHWTP requires the construction of the South District Water Reclamation Plant to provide extremely thorough treatment of wastewater which would then be piped to the vicinity of Zoo Miami where it would augment ground water supplies that are needed to support the water treatment plant.
- Additional water supplies commensurate with the SMHWTP are absolutely needed to provide a reliable water supply in the south service area to meet current and future water supply needs.

- The current WUP and Water Supply Masterplan addresses this need with all of the projects associated with the SMHWTP and the South District Water Reclamation Plant. The current estimated cost of all of these facilities is on the order of \$500 million, most of which would have to be derived from the sale of bonds. While this is an extremely costly solution to the water supply needs of the area, at the time that the Water Use Permit was negotiated it was the most feasible and preferred solution by State regulations.
- Components of the water treatment plant project that have already been built, such as the reservoir and high service pumps, are useable on an interim basis to boost supplies to the south service area from the Alexander Orr Water Treatment Plant, providing some buffer should demands rise. These components can also be integrated into a redesign of the project to utilize Floridan aquifer water rather than Biscayne aquifer water.
- The South District Water Reclamation Facility, which is part of the overall strategy for long term water supplies for the south Miami-Dade service area, is currently about 75% designed. As part of this recommendation the design of this project will be suspended pending consideration of an alternative approach to meeting future water supply needs in the area.

Discussions with the District and the Florida Department of Environmental Protection continue. Preliminary discussions already indicate their willingness to consider a suitable amendment to the WUP to improve the cost-effectiveness of the long range water supply plan. These issues can be clarified over the next 90 days with a comprehensive update provided to the Commission on the most cost-effective and environmentally sound approach to meet our water supply needs in south Miami-Dade County.



Assistant County Manager