



PAMELA D. BRANGACCIO, County Administrator
 115 S. Andrews Avenue, Room 409 • Fort Lauderdale, Florida 33301 • 954-357-7350 • FAX 954-357-7360

To: Broward County Board of County Commissioners

Through: Pamela Brangaccio, County Administrator *PdB*

From: *AB* for Anthony Hui, Interim Director of Public Works and Transportation

Date: May 10, 2007

Re: Response to Report No. 07-13: Review of the Water and Wastewater Services Capital Construction Planning Process, dated April 13, 2007

This Management Response is submitted in response to Report No. 07-13, entitled Review of the Water and Wastewater Services Capital Construction Planning Process, dated April 13, 2007.

We want to express our appreciation to the Auditor and his staff for the fruitful discussions during their review and at the April 23, 2007 exit conference and the resultant revisions that were incorporated in the final Report.

Our response to the Report recommendations and findings:

Recommendation No. 1 - Creation of a comprehensive and cohesive master planning document, inclusive of a strategic vision, project prioritization guidelines and future regulatory change considerations.

Management Response – WWS concurs with the recommendation to create a comprehensive and cohesive master planning document. We have already initiated the planning for the following:

1. Water Resources Master Plan/Facility Plan – WWS is currently participating in a sub-regional water resource feasibility study with the cities of Ft. Lauderdale, Hollywood, Pompano Beach, and Plantation; Palm Beach County Water Utilities; Broward County Environmental Protection Department; and the South Florida Water Management District (SFWMD). At the conclusion of this feasibility study (expected within 120 days pending SFWMD modeling results), WWS will initiate the preparation a Water Resource Master Plan/Facility Plan to evaluate and develop the most feasible water supply, wastewater treatment/disposal, and reuse options identified for our service area. WWS, in conjunction with the Environmental Protection Department, is schedule to discuss these issues with the Board at the Water Resources Workshop on June 5, 2007.
2. Regional Biosolids Management and Planning Study – WWS will be participating in a regional biosolids management planning study with the cities of Plantation, Ft. Lauderdale, Margate,

and Davie. An interlocal agreement with the City of Plantation, the lead agency, is being developed and the study is expected to begin in the next 60 days.

3. Retail Service Area Master Plan – WWS will prepare the Retail Service Area Master Plan to include the 2010 census data in accordance with the requirements of the Broward County Comprehensive Plan. WWS has already brought our planning models up-to-date in 2003 with the inclusion of the 2000 census data.

The triggers for initiating formal master planning efforts have only appeared recently. WWS operates in full compliance with existing regulatory and permit requirements. Over the last several years, regulatory changes in various WWS operational areas have been anticipated. However, these potential changes have continued to evolve. Their impacts and interrelationships with each other remain, as yet, non-specific. WWS has taken the prudent approach to monitor these potential changes, participate in their rulemaking process when appropriate, evaluate their potential impacts on our operations, and postpone the expensive and time-consuming master planning efforts until the regulatory changes become more definitive. Recently, the convergence of the water resources and wastewater treatment/disposal issues (and better definition of their potential impacts) signals it's time to initiate the formal planning process.

The Report had concluded that "...the capital budget has become the Division's principal comprehensive planning document...it appears that other planning activities...have not been afforded a comparable level of cohesiveness and attention." WWS has actually performed multiple planning efforts in context of the approach described above. In addition to the planning efforts recognized in the Report, WWS has also performed the following planning activities:

1. Aquifer Storage Recovery Well (ASR well) – WWS worked together with FDEP and the Department of Health to redefine the operating parameters of the existing ASR well at the 2A Water Treatment Plant. Based on the new parameters, WWS is testing the effectiveness of the ASR well as an alternative water supply for the County's District 2A service area. Results of this testing will be utilized in the Water Resources Master Plan/Facility Plan.
2. Full Scale Pilot Nutrient Reduction Pilot Program - WWS has developed and is starting field implementation of a full scale pilot program designed to identify cost effective improvements to reduce nutrients discharged in the ocean outfall. The work will entail computer modeling of the plant treatment process followed by full scale piloting and data collection of selected treatment modules under modified operation. The work will enable WWS to be responsive to the potential imposition of more stringent effluent limits as a condition of the permit renewal process by the FDEP. WWS currently holds a permit valid through 2008 and operates in compliance with current regulations.
3. Florida Water Environmental Association Utility Council Deep Well Workgroup – WWS staff has served as the chair of this workshop as its inception in 1996. The workgroup included many utilities in south Florida and has been instrumental in working with FDEP and EPA in formulating reasonable solutions to maintain safe operations of this technology.
4. FAC 62-555 – WWS evaluated the potential impacts of the proposed FAC 62-555 (4-log virus removal regulations) on County operated water treatment plants and compared alternative

methodologies for compliance with the rule. In conjunction with other utilities throughout the State, Broward County worked cooperatively with FDEP to define the implementation requirements of the rule due to various technical concerns.

5. Various in-house and consultant hydraulic analysis studies for both water and wastewater conveyance systems which evaluated specific system expansion requirements to meet future demand projections. (e.g., Lighthouse Point Hydraulic Modeling; Districts 1 and 2 in-house water system analyses).
6. Updates to Master Plan with 2000 Census – The Report has incorrectly stated that the 2002 Master Plan as being outdated due to its use of 1990 U.S. Census. While it is true that the original report was based on the 1990 Census (as reflected in the paper copy of the Master Plan), WWS has updated our entire planning efforts with the 2000 U.S. Census data in 2003. All WWS computer models, capacity analyses, facility sizing are based on the latest census data. We also coordinated with our large users on an annual basis to further refine their respective flow requirements.

It is important to note that WWS operations encompass multiple distinct elements such as: 1) water resources/supply; 2) water treatment; 3) retail water distribution and wastewater collection; 4) regional wastewater treatment and disposal; and 5) biosolids disposal. Accordingly, the Master Plan document consists of multiple sections reflective of these operational elements and individual sections of the report are prepared according to their respective regulatory requirements and time schedules.

We believe the merit of this approach to strategic planning for the County's water and wastewater utility was validated in March, 2005 when all three major rating agencies (Moody's, Fitch, and Standard & Poor) issued double-A ratings for utility's bonds based in part on our effective management of the regulatory challenges and our capital program. Standard & Poor specifically stated the WWS implemented a "...capital improvement plan that is pretty manageable, and they have very strong management".

Recommendation 2 - Regular and timely updates to the comprehensive Master Plan described above.

Management Response – WWS concurs that updates to the Master Plan should be performed on a timely basis. Over the last three years, WWS has undertaken, or is preparing, the following presentations to the Board regarding major policies or potential regulatory impacts:

1. In the summer of 2004, WWS and Environmental Protection Department (EPD) staffs reviewed and briefed Board members on the An Examination of the Use of Deep Injection Wells in Broward County and Alternative Technologies report.
2. In 2006, WWS and EPD staffs briefed all Board members on the draft Water Availability Rule proposed by the South Florida Water Management District and their potential impacts on the County utility.

3. On June 5, 2007, WWS and EPD staffs will conduct the Water Resource Workshop with the Board. The workshop will focus on the preliminary results from the sub-regional water resource feasibility study described above. It will also seek Board directions on the subsequent Water Resource Master Plan/Facility Plan for WWS.

WWS will continue to brief the Board and formally update the Master Plan for key policy issues on a timely basis.

WWS does not concur with the recommendation to perform formal Master Plan updates annually. Our experience indicates that most regulatory changes do not occur that frequently or quickly. On the other hand, preparation of a formal Master Plan (or formal updates) requires significant staff time and effort and can be expensive. We believe the annual formal updates of the above documents would not provide the intended benefit. However, to achieve the Report's intent, we will prepare, as part of the annual capital budget process, a section on impending changes in regulatory requirements or operating conditions, continuing master planning efforts over the next year, and the relationship between the proposed capital projects and the Master Plan. This informal update will be included in the capital project documentation submitted to the Board for review and approval.

Recommendation 3 - Presentation of subsequent Master Plans to the Board for approval.

Management Response – WWS concurs with the recommendation.

CC: Bertha Henry, Deputy County Administrator
Evan Lukic, County Auditor
Jeffrey Newton, County Attorney
Richard Brossard, Assistant County Administrator
Bud Bentley, Assistant to the County Administrator

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