

EPC
SPECIAL
8/8/00

AGENDA ITEM COVER SHEET

Date: August 8, 2000

Agenda Item: Amendment to the data collection requirements of the BUDW Settlement Agreement for the Brandon Urban Dispersed Well No. 7

Description/Summary

In September 1999 and in June 2000, the Hillsborough County Water Department notified Tampa Bay Water ("TBW") that the County's projections for the South Central service area show that demand will exceed the current permitted water supply prior to planned additional sources being brought on line in the time frame estimated by TBW's Master Water Plan. In order to address this situation, TBW staff, the Hillsborough County Water Department, the Hillsborough County Water Resource Team and Environmental Protection Commission staff explored various options to increase the water supply in the South Central area in as environmentally sound manner as possible. The parties concur that the most efficient resolution to the situation is to bring the Brandon Urban Dispersed Well No. 7 on line earlier than originally contemplated by TBW's Master Water Plan. Well No. 7 of the Brandon Urban Dispersed Wellfield ("BUDW") is one of the five permitted wells in the Brandon area that currently is scheduled to be brought into operation within the next two years. The BUDW is permitted to supply a total of 6 million gallons per day ("mgd") of water. BUDW No. 7 is permitted to provide an average of 2 mgd. TBW would not begin operation of Well No. 7 unless and until specifically requested to do so by Hillsborough County.

The BUDW was a subject of arbitration. On April 22, 1999, the BOCC and the Environmental Protection Commission approved an Arbitration Settlement Agreement between TBW, Hillsborough County and the Environmental Protection Commission. Section 6 of the Settlement Agreement provides that TBW will obtain twelve months of baseline hydrological and ecological data at and in the vicinity of Lithia and Buckhorn Springs prior to bringing the BUDW into operation. In order to bring BUDW No. 7 on line earlier than originally scheduled, Section 6 of the BUDW Settlement Agreement must be amended to address the expedited time frame. If the original baseline data requirement is not modified, TBW will be unable to bring Well No. 7 on line without violating the previously approved Settlement Agreement. This situation could negatively impact the Water Department's ability to provide water to the South Central service area.

The Hillsborough County Water Resource Team and the Environmental Protection Commission have negotiated with TBW for an environmentally protective amendment to the baseline data collection requirements. The Environmental Protection Commission staff, in conjunction with the Hillsborough County Water Resource Team, recommend that TBW begin the baseline data collection as soon as is practicable and continue the collection of baseline data until BUDW No. 7 is brought on line. TBW remains responsible for collecting twelve months of baseline data for the remaining wells in the BUDW system.

Commission action recommended:

Approve the proposed amendment to the baseline ecological and hydrologic data collection requirements for BUDW Well No. 7 in order to expedite operation of the well as requested by Hillsborough County Water Department.

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AGENDA ITEM COVER SHEET

Date: August 8, 2000

Agenda item: Hydrobiological Monitoring Program

Description/Summary

In accordance with conditions set forth in Tampa Bay Water ("TBW") water use permits that allow TBW to withdraw water from the Hillsborough River, Tampa By-Pass Canal/Palm River, and Alafia Rivers, the Southwest Florida Water Management District ("SWFWMD") required TBW to develop and implement a comprehensive Hydrobiological Monitoring Program ("HBMP"). The BOCC and the Environmental Protection Commission ("EPC") approved the HBMP in the fall of 1999 for submittal to SWFWMD. SWFWMD subsequently approved the HBMP.

Objective

The goal of the HBMP is to ensure that, following the implementation of the permitted withdrawals, flows in the Tampa By-Pass Canal, Hillsborough River, and Alafia River do not deviate from the normal rate and range of fluctuation to the extent that:

- a. water quality, vegetation, and animal populations are adversely affected in streams and estuaries; or
- b. salinity distributions in tidal streams and estuaries are significantly altered as a result of withdrawals; or
- c. recreational use or aesthetic qualities of the resource are adversely affected.

Chronology

TBW awarded a contract to PBS&J in May 1999 to design an HBMP. Shortly thereafter, PBS&J and TBW began convening a series of workshops drawing upon stakeholders and regulators to assist in the scope and design of this HBMP. Representatives of EPC, Hillsborough County, Pinellas County, SWFWMD, Florida Department of Environmental Regulation, U.S. Geological Survey, TBW, Florida Marine Research Institute ("FMRI") and various subcontractors to TBW comprised this "Focus Group." During winter 1999/2000 through to the spring of 2000, EPC, Hillsborough County Water Resource Team and the SWFWMD negotiated technical modifications to the HBMP.

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Program Elements

The HBMP includes physical, chemical, and biological monitoring elements as set forth below.

1. Physical: stream flow, water elevation, water temperatures, light penetration, sediment characteristics
2. Chemical: salinity, dissolved oxygen, pH,
3. Biological: juvenile/adult fishes, bottom dwelling invertebrates (benthos), birds, vegetation

Modifications to draft HBMP

During the spring of 2000, SWFWMD recommended modifications to the HBMP. The suggested modifications include: (1) adjusting seasonal sampling schedules; (2) subdividing the river reporting units into smaller areas for better detailed surveying and collection; (3) elimination of sampling for freshwater benthos in that portion of the Alafia River above the withdrawal structure and (4) the addition of water quality sample sites.

The suggested changes increase the level of effort with respect to water quality monitoring and eliminate sampling which not only was above the area of impact in the Alafia River, but in all likelihood could not have been collected because of logistical constraints, such as site access. EPC and County staff reviewed these recommendations and met with SWFWMD, TBW and PBS&J to confirm support for these modifications.

EPC participation in the HBMP process

EPC staff participated in the Focus Group that assisted in the scope and design of the in the HBMP. Through its participation, the EPC achieved the following:

- Participation in the selection process of the primary contractor to TBW for development and implementation of the HBMP;
- Participation in all Focus Group meetings enabling the EPC to lend its expertise to the Water Quality and Benthos sub-committees, thus ensuring the quality of the program;
- Assurance that the HBMP study design is generally similar to and consistent with EPC's and Tampa Bay Estuary Program's approach to bay-wide monitoring;
- Assurance that the HBMP will employ the same field/laboratory methods that EPC uses for water quality and benthos;
- Assurance that the HBMP will use the same specialists for benthic Quality Assurance/Quality Control ("QA/QC") as EPC uses. This provides EPC assurance that the HBMP and HIMP benthic data would be comparable;

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- The ability to influence PBS&J to participate in the "Regional Ambient Monitoring Program" QA/QC process for water quality analyses. This provides EPC assurance that the HBMP and HIMP water quality data would be comparable;
- Participation in the selection of the subcontractor who will perform the benthic analysis thus ensuring the quality of the analysis;
- Assurance that more rigorous biological sampling in the portion of the Alafia River most likely to experience changes in the salinity regime due to freshwater diversions will be undertaken;
- Participation in the selection of fixed station locations for hydrological monitoring.

Recommended Commission Action:

Approve modifications to the HBMP.

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