

APPENDIX J

Memo in Response to Texas Water Development Board Comments on Draft Report

December 2013





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December 4, 2013

David Meesey
Project Manager
Texas Water Development Board
1700 North Congress Avenue
P.O. Box 13231
Austin, Texas 78711-3231

Subject: Brazoria County Regional Water Facility Study for Brazosport Water Authority –
Response to TWDB Comments on Final Draft Report submitted July 5, 2013

Dear Mr. Meesey:

Attached you will find responses to the Texas Water Development Board Comments on the Final Draft Report submitted on July 5, 2013. These comments and/or changes have been incorporated into the final report, where applicable.

Should you have any questions, please feel free to contact Allen Woelke at 512.346.1100 or woelkead@cdmsmith.

Sincerely,

A handwritten signature in blue ink, appearing to read "Allen D. Woelke".

Allen D. Woelke, P.E.
Vice President
CDM Smith Inc.
TBPE Firm Registration No. F-3043



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RESPONSE TO COMMENTS ON BRAZORIA COUNTY REGIONAL WATER FACILITY PLANNING
STUDY, TWDB CONTRACT NO. 1248321449 (dated August 9, 2013)

1. *Brackish groundwater desalination is the primary recommended alternative for Brazoria County water user groups, including the Brazosport Water Authority (BWA) and its customers. The report acknowledges that the current groundwater usage in the county is approaching the annual modeled available groundwater (MAG) limits, implying that additional fresh groundwater production is not an option. However, brackish groundwater development would count toward the annual MAG limits in the same way fresh groundwater production does. Please discuss this in the report and include further justification for recommending brackish groundwater desalination. Include possible remedies for this problem, including legislation that would exclude brackish water from a MAG (similar legislation failed in the 2013 legislative session) or changes to the desired future conditions by the groundwater district that would raise the annual MAG limit substantially.*

Response to Comment #1

During the course of this study, concerns were expressed over the use of groundwater – including brackish groundwater – exceeding the modeled available groundwater, or MAG. As such, BWA funded a separate study to look more closely at the effects of brackish groundwater use within the region. The report from this study has been attached as Appendix H. Additionally, text has been added to Section 9.9 discussing the legislation concerning the concept and application of the MAG and potential impacts from the development of brackish groundwater.

2. *In section 3 or 4, please include further discussion of the relationship between industrial-manufacturing water usage and the entities involved in this study (specifically BWA). If any of BWA's infrastructure currently or is projected to provide water to industry and manufacturers, please clarify whether industry/manufacturing needs will be met with groundwater or surface water, and further discuss industrial-manufacturing water needs in the report.*

Response to Comment #2

Dow Chemical owns the Brazoria and Harris Reservoirs, from which BWA sources its water. BWA currently provides 1 MGD of treated water to Dow for drinking, sanitary and eyewash use at the facility. The source of the water is currently surface water, but future demands might be met by both surface and groundwater sources. Discussions are ongoing between BWA and Dow regarding the possibility of increasing the water provided to Dow to 2 MGD.



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Water supplies and demands for the three participating industries, as well as other industries, in Brazoria County can be found in the 2011 Regional Water Plan prepared by the Region H Planning Group. Information that was collected from the industries as part of this facility master plan in regards to the entities' water supplies and usage is considered Business Confidential.

- 3. Please consider further investigation of opportunities to jointly develop or cost-share in water supply projects with area industries as a way to maximize cost-effectiveness to Brazoria County water users.*

Response to Comment #3

Local industries/manufacturers have approached local water providers about participating in cost-sharing for construction/expansion of surface water facilities. However, due to budget limitations of this study, the defined scope of work, and the complexities of public/private financing, BWA and the other project participants agree that it would be beneficial to further investigate cost sharing opportunities following the completion of this study.

- 4. Please include discussion and documentation for the four public meetings held during the course of this study. Any meeting handouts and sign-in sheets could be included in an appendix.*

Response to Comment #4

The meeting agendas and sign in sheets from the four public meetings held during the course of this study have been included in Appendix I.

- 5. On page 8-2, Section 8.1.1, Drinking Water State Revolving Fund, 2nd paragraph it states the origination charge is imposed and is almost always rolled into the total loan amount, but with an additional rate subsidy. Please revise this to state that there is no additional interest rate subsidy for those financing the origination charge.*

Response to Comment #5

Text has been revised to say that there is no additional interest rate subsidy for those financing the origination charge.



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6. *Page 8-2, Section 8.1.1, Drinking Water State Revolving Fund, the 3rd paragraph correctly states that applications for financial assistance may be submitted at the end of summer and early fall. However, the next sentence about funds being available the following year depends on how quickly an application is submitted. Please consider revising it to state that the TWDB will typically take 60-90 days to review a complete application and to present the funding request formally to the Board for approval. Once approved, the applicant could then proceed with closing on the funding. This comment applies to page 8-3, 1st paragraph as well.*

Response to Comment #6

Text has been revised to say that TWDB will typically take 60 to 90 days to review a complete application and to present the funding request formally to the Board for approval. Once approved, the applicant could then proceed with closing on the funding.

7. *On page 8-3, please include a section on State Water Plan funding (WIF, etc.) for projects that are recommended strategies in the State Water Plan and the importance of working with the regional planning group to ensure needed projects are identified.*

Response to Comment #7

A section on the State Water Plan Funding: Water Infrastructure Fund (WIF) has been added to Section 8.1.1.

8. *In Section 4 — Growth Projections, Subsection 4.2.6, page 4-8 states that average daily water demand is 0.3 GPM per connection. Please note that the TCEQ minimum requirement is 0.6 GPM per connection.*

Response to Comment #8

The comment in regards to the average daily water demand being 0.3 GPM per connection has been removed from the text.

9. *In Section 5 — Description of Existing Water Systems, please consider including a summary of existing conditions for the water systems including treatment facilities, transmission mains, and distribution within the county. This description would summarize the need for the improvements or rehabilitation of the existing facilities and distribution systems.*



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Response to Comment #9

A table showing each entities water source; population; treated water capacity in gallons per minute per connection; storage type and volume; and pumping capacity was added to Section 5.1.3. Data on transmission mains and distribution within the county and the need for improvements or rehabilitation of the existing facilities were not provided. Assessment of individual City assets was beyond the scope of this study which focused on regional options.

- 10. In Section 5 — Description of Existing Systems, consider including a table summarizing the existing capacities per connection for treatment plants, storage tanks, and pump stations. This would help demonstrate whether the existing water systems meet the TCEQ minimum capacity requirements specified in TCEQ Rule 290.45.*

Response to Comment #10

A table showing each entities water source; population; treated water capacity in gallons per minute per connection; storage type and volume; and pumping capacity was added to Section 5.1.3.

**CDM
Smith**

cdmsmith.com