

Study 2
Brackish Groundwater Supply Evaluation

2011 Regional Water Plan Study 2: Brackish Groundwater Supply Evaluation

List of Comments and Proposed Responses¹ November 6, 2008

Garrett Engelking, General Manager, Refugio Groundwater Conservation District

Woodsboro-Refugio Groundwater Desalination Project

Comment: There is expected to be considerable growth in population near Mission Bay and Copano Bay in Refugio County. Because there are very limited fresh water supplies in this area, the groundwater desalination project should be expanded to serve this area.

Response: The project will be modified to consider developments in this area that are equivalent to the half scale (2.36 MGD or 2,644 acft/yr) development in Southern Calhoun County. The Woodsboro component will be retained, but the Refugio component will be dropped.

Comment: The cost for the Woodsboro-Refugio project is considerably more expensive than the Southern Calhoun County project. What can be done to get the project more comparable to the Southern Calhoun County project?

Response: This will be addressed by increasing the size of the project (see response above) and locating the well field near the expected coastal development and site of concentrate disposal.

Tyson Broad & Norman Johns, PhD., Sierra Club & National Wildlife Federation

Southern Calhoun County Groundwater Desalination Project

Comment: There appears to be a misprint of 0.46 MGD instead of 3.46 MGD in the size of the project.

Response: This will be corrected.

Comment: A suggestion is made on preparing a schematic to show water flow and split for a desalination water treatment plant.

Response: A schematic will be prepared.

Comment: Oyster reefs may occur in the outfall area and a diffuser may be needed at the end of the outfall.

Response: Oyster reefs will be added to the list of brine outfall siting concerns. A line item for a diffuser system will be added to the cost estimate.

Woodsboro-Refugio Groundwater Desalination Project

¹ Comments not specifically referenced herein either do not require a response or suggest a response beyond the scope of this regional water planning study.

Comment: There should be a consistency in the listing of potential contaminants in the discharge concentrate and a diffuser system included.

Response: The listing will be reviewed and revised as needed and a diffuser system included in the cost estimate.

SAWS Local Wilcox Desalination Project

Comment: Clarification is needed on the map showing the project location and components.

Response: The diagram will be reviewed and revised as needed.

Comment: Additional detail is needed on the backwash disposal facilities.

Response: Discussion will be expanded.

Comment: Clarification of groundwater rights is needed.

Response: This will be addressed.

Edwards Brackish Desalination Project

Comment: Add clarification on: disposal of concentrate, literature reference, Luling Fault, and backwash.

Response: These items will be addressed.

Texas Parks and Wildlife Department

Southern Calhoun County Groundwater Desalination Project

Comment: There appears to be a misprint of 0.46 MGD instead of 3.46 MGD in the size of the project.

Response: This will be corrected

Comment: Review the blending splits for the Calhoun project and consider including a schematic to show water flow for a desalination water treatment plant.

Response: The blending splits will be reviewed and revised as needed. A schematic will be prepared.

Comment: Review the concentration of the brine concentrate water. There is a concern if the concentration is considerably higher than 8,000 mg/L of total dissolved solids.

Response: This will be reviewed and revisions will be made as needed.

Edwards Brackish Desalination Project

Comment: A strong data collection and analysis program is needed to determine the hydraulic connection between the freshwater and saline portions of the Edwards Aquifer.

Response: This will be noted in the limitations.