

Study 1
Lower Guadalupe Water Supply Project
for GBRA Needs

2011 Regional Water Plan

Study 1: Lower Guadalupe Water Supply Project for GBRA Needs

List of Comments and Proposed Responses¹ November 06, 2008

TPWD Comment:

Pages ES-3 and 6: Please expand the description of the pro-rata share calculation.

Proposed Response:

It is proposed that the sentence describing the 187 cfs will be reworded to read: “A maximum diversion rate of 187 cfs (the pro-rata share of the maximum diversion rate in CA# 18-5178 or $[264.35 \text{ cfs} * 75,000 \text{ acft} / 106,000 \text{ acft}] = 187.0 \text{ cfs}$) was used in all scenarios.”

TPWD Comment:

All Scenarios: Please describe the quantity of water that is expected to evaporate from the off-channel reservoir. It appears that the off-channel reservoir will be full most of the time and rarely used in Scenario 1. It would be helpful to know the ratio of water evaporated to water used to understand the efficiency of this portion of the project. In addition, please add a discussion in Section 3 “Environmental Issues” of impacts associated with the off-channel reservoir mentioned under Scenarios 1, 2, and 3. While off-channel reservoirs generally are less environmentally impacting than on-channel reservoirs there are still impacts associated with the off-channel reservoir.

Proposed Response to the first part:

It is proposed that in each of the scenarios, the following language will be added to the discussion about the reservoir sizing: “The long-term average net evaporative loss associated with a reservoir of this size in the lower Guadalupe River Basin is expected to be ____ acft/yr.”

Proposed Response to the second part:

It is proposed that the following sentence be added to the environment issues section in regards to off-channel reservoirs: “A specific site for the off-channel reservoir has not been chosen. In choosing a site, key considerations will include minimizing construction and long-term operations costs and minimizing conflicts with streams, highways/roadways, railroads, transmission facilities (water, product, and power), petroleum production, and environmental/cultural resources (e.g., endangered & threatened species habitat, wetlands, and historical/archaeological sites).”

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.

Sierra Club, NWF, & SMRF Comment:

Page 5. 1st Paragraph

Several water suppliers outside of the Guadalupe Basin (SAWS, City of Boerne, Fair Oaks Ranch, and Bulverde) are identified on page 26 as Water User Groups (WUGS) that plan to utilize water from this project. It is not immediately clear, therefore, why this version of the LGWSP is not subject to Section 11.085 inter-basin transfer provisions.

Proposed Response:

The inclusion of WUGs outside of the GBRA statutory district was an oversight. Reference to these WUGs will be eliminated.

Sierra Club & NWF Comment:

Page 5. 2nd Paragraph

The discussion of GBRA water rights in the lower basin would benefit from a discussion of all water rights in the basin and the inclusion of a more recent historical period.

Proposed Response:

More recent data will be referenced in discussing historical use of the water rights.

Sierra Club & NWF Comment:

Page 6. Figure 2-1

This figure is confusing in reference to the text. It is unclear why the y-axis shows 135,000 ac-ft/yr run of river availability, as there is no discussion of this amount in the text. From this graph, it also appears that 75,000 ac-ft/yr is available all of the time. Finally, it is not clear why the period of record ends in 1989, especially given the discussion of the historical period on the previous page.

Proposed Response:

It is proposed that more language be added to clarify that the 135,000 acft/yr is maximum availability, subject to the 187 cfs and senior water rights only. Actual diversions are limited to amounts necessary to meet the delivery requirement and refill storage. Also, language will be added that the GSA WAM simulation ends in December 1989 because requisite natural streamflows and other hydrologic data for the 1990 – 2007 historical period have not been developed by TCEQ.

Sierra Club & NWF Comment:

Page 7, 3rd paragraph

This paragraph is over 3 years old. It would be beneficial to provide an update on the studies mentioned.

Proposed Response:

It is proposed that Study 4B be mentioned as summarizing the work being done by Texas A&M.

Sierra Club & NWF Comment:

Page 20, last paragraph

We find the last sentence misleading to the reader. Given the findings presented in the additional analysis performed by National Wildlife Federation for the SCTWPG's last Regional Plan (Section 7.1.3 Supplemental Evaluations of Potential Long-Term Changes in Freshwater Inflows to the Guadalupe Estuary), it important to note what impact full water rights use has on the Estuary.

Proposed Response:

It is proposed that the following sentence be added: "In the scenarios in which Consensus Criteria for Environmental Flow Needs are applied (Scenarios 2 and 3), freshwater inflows to the Guadalupe Estuary would be greater than those of the baseline (full water rights use)."

Sierra Club & NWF Comment:

Page 26, 2nd Paragraph

Boerne is misspelled.

Proposed Response:

The spelling of Boerne will be corrected.

Texans for a Sound Energy Policy Alliance (TSEPA) comments provided by Blackburn Carter, P.C. are addressed by a 9/30/2008 message from Chairman Mims.

Trungale Engineering & Science Comment:

Region L RWPG continues to use a highly modified version of the WAM based on a 1999 version of the WRAP source code. (WRAP is the FORTRAN computer code used to run the WAM. The current official version of this code is from May 2007).

Proposed Response:

Use of the Region L GSA WAM was explicitly approved by the SCTRWPG and TWDB because it more accurately models Consensus Criteria for Environmental Flow Needs (CCEFN) and major water rights (e.g., Canyon Reservoir, Medina Lake System) than

does the TCEQ version of the GSA WAM available at the time the studies were performed. A new version of the TCEQ GSA WAM has just been released and will be considered for use in completion of the 2011 South Central Texas Regional Water Plan. Hydrologic assumptions used in Study 1 were approved by the SCTRWPG and are consistent with those used in the surface water supply analyses, evaluation of water management strategies, and cumulative effects analyses in the 2006 South Central Texas Regional Water Plan.

Trungale Engineering & Science Comment:

The Region L WAM models do not include at least two major existing water supply commitments. These are water for current users including their future growth and water committed by GBRA for the Exelon nuclear project.

Proposed Response:

Current commitments to GBRA's existing customers are accounted for in the Region L WAM. Exelon currently has a Reservation Agreement with GBRA. As on-going work by Exelon and GBRA continues, this Reservation Agreement may become a Definitive Agreement or may be dissolved at any time. Furthermore, GBRA has not committed to developing the LGWSP for GBRA Needs and has said that, if the Exelon project becomes a reality and needs the full 75,000 acft/yr referenced in the Reservation Agreement, the LGSWSP for GBRA Needs cannot be a 60,000 acft/yr project. In the scope of work for development of the upcoming 2011 SCTRWP, there are two water management strategies that will provide relevant information – one is the evaluation of the Exelon water supply from GBRA as a water management strategy and the other is a reduced LGWSP for GBRA Needs water management strategy with a firm supply of about 35,000 acft/yr that could be developed in addition to the Exelon project.