



LBG-GUYTON ASSOCIATES

PROGRESS REPORT

DATE: October 11, 2016
TO: Jean Perez, Hydrologist II, Conservation & Innovative Water Technologies
FROM: Michael Keester, P.G. and James Beach, P.G.
SUBJECT: TWDB Contract No. 1600011952
Nacotoch Aquifer – Potential Brackish Groundwater Production Areas

Work Completed

The time period covered by this progress report is from September 1, 2016 through the end of the month (September 31, 2016).

TASK 1 PROJECT MANAGEMENT

LBG-Guyton coordinated work with BEG and Collier Consulting.

TASK 2 DATA ACQUISITION

- Working on draft methodology report
- Data screening of water quality analysis was completed. After screening, 360 analyses from 186 wells remain.

TASK 3 HYDROGEOLOGIC EVALUATION

- Regression relationships were developed for specific conductance and TDS in the the analyzed wells. One sample per well, usually the most recent analysis, was used. Three relationships were developed, one for the North, Central, and South part of the study area.
- Updated spreadsheet calculator for TDS estimates from geophysical logs
- Very few logs available that have a matched water quality sample

Problems

We found what appear to be inconsistencies with some of the methods and examples in Estep (1998; 2010). We believe that we have identified the possible issues in his presentations and examples to account for calculations of salinity in our work.

We have updated the schedule to reflect a delay in delivery of the Draft Evaluation Technique and Approach Report.