

Appendix A

Technical Sufficiency Memo



United States Department of the Interior

BUREAU OF RECLAMATION
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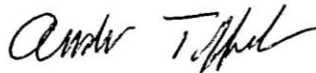
IN REPLY REFER TO:

PR-J-8.10
86-68190

SEP 12 2013

MEMORANDUM

To: Environmental Protection Specialist, Oklahoma-Texas Area Office
Attn: TX-Gerber (JGerber)

From: Andrew Tiffenbach, Mechanical Engineer 
Water Treatment Group

Subject: Technical Service Center review of the *Lower Rio Grande Valley Basin Study Alternatives Evaluation and Affordability Report* prepared by Daniel B. Stephens and Associates, Inc.

The Technical Service Center (TSC) has reviewed the *Lower Rio Grande Valley Basin Study Alternatives Evaluation and Affordability Report* dated September 11, 2013 (including appendixes and supporting documentation) and has determined the work to be technically sufficient.

A summary of our findings are as follows:

The proposed project infrastructure and preliminary cost estimates described in the report were developed using the Unified Costing Model (UCM), which is an Excel-based tool developed by the Texas Water Development Board to aid in preparing regional water planning-level cost estimates in Texas. Due to the complexities of the proposed project, the report authors expanded UCM Excel workbooks in order to properly account for all proposed infrastructure items over the phased build-out period. These UCM expansions were reviewed and found to be consistent with the calculations and assumptions used elsewhere in the model. The inputs used in the UCM were found to be consistent with the methodology and assumptions described in the report.

Given the preliminary nature of this study, the assumptions made in the report seem reasonable, although as noted throughout the report, there are many aspects of the proposed project that will require additional investigation including, but not limited to:

- Aquifer capacity and water quality
- Facility locations and number of facilities
- Concentrate disposal
- Pipeline alignment, and
- Project phasing

These aspects could have significant impacts on the proposed project infrastructure and cost. Further evaluation is recommended as a part of the next phase of the project.

cc: TX-Trevino (MTrevino), TX-Balcombe (CBalcombe), 86-68190 (KDahm),
86-68270 (SPiper)