

**Exhibit C**  
**Scope of Work**  
**FAR WEST TEXAS REGION E SCOPE OF WORK**

**PROJECT 0 - Planning Group Administration/Public Participation**

***Task 0. Scope of Work Preparation***

1. Post public notice and hold public meeting to gather input on scope of work and regional priorities
2. Prepare scopes of work, budgets and grant application
3. Submit application for funding to TWDB

***Task 1. Public Information Activities***

1. Prepare and distribute public information material for the purpose of encouraging public participation, including response to individual inquiries, meeting summaries, press releases, and information of water planning related activities within the region, and posting and distributing public notices.

A. Develop and maintain a planning group website to provide timely information on the planning process to the public and to interested parties, including meeting agendas, minutes, backup materials, reports, and planning group information.

B. Develop and maintain public contact mail and e-mail databases to transmit planning related materials directly to interested parties and to individuals and entities designated in statute.

2. Serve as the point of contact for all public information activities associated with the regional water planning process, including coordination with other planning regions, and distribute information on water planning to the public as requested.

3. Serve as water planning group liaison to other local and regional water planning entities and organizations, such as the Lower Rio Grande Water Users Organization and the Paso del Norte Water Taskforce, in order to share information and coordinate common goals and planning activities.

4. Conduct public meetings and/or hearings to convey information on planning group activities and project progress, solicit public involvement and comment to set regional priorities and to gather input on the development of project reports, solicit comment on draft reports and on the development of any updates to the regional plan.

5. Provide copies of any draft and final reports resulting from planning group activities to libraries, public officials, planning group members, and interest groups.

***Task 2. Planning Group Administration***

1. Coordinate and facilitate public meetings of the planning group, including securing meeting space with adequate public access, and ensuring adequate copies of meeting materials are available for public inspection prior to and following public meetings.

2. Administration, financial oversight and reporting associated with reimbursement of members' travel expenses, sub-consultant contracts and other eligible political subdivision administrative expenses.

## **Study 1 - Groundwater Data Acquisition and Compilation, and Aquifer Well Testing**

### **Task 1. Data acquisition and compilation**

- a. Review existing distribution of well data in the Texas Water Development Board (TWDB) Groundwater Database and determine areas that are deficient in well data coverage, with emphasis in areas of current or future groundwater availability modeling efforts, including the Rustler, Capitan Reef, and West Texas Bolsons aquifers.
- b. Coordinate with Sul Ross State University and the Texas State University System to identify wells that have been tested or will be tested (for water quality and other aquifer attributes) under their “Sustainable Agricultural Water Conservation in the Rio Grande Basin” research project.
- c. Coordinate with the following groundwater conservation districts to identify wells currently on file in the district records that are not in the TWDB database.
  - Brewster County Groundwater Conservation District (GCD)
  - Culberson County GCD
  - Hudspeth County Underground Water Conservation District (UWCD) #1
  - Jeff Davis County UWCD
  - Presidio County UWCD
- d. Identify additional sources of well data in areas not covered by groundwater conservation districts.
- e. Select appropriate well data in areas of identified insufficient data coverage and prepare data for inclusion in the TWDB Groundwater Database, including accurate well locations and assignment of correct aquifer designations.
- f. Work with TWDB staff to identify up to twenty wells for water quality sampling and analysis.
- g. Note: The amount of groundwater available to the region will be determined based on the TWDB’s determination of managed available groundwater for a groundwater supply based on desired future conditions submitted by groundwater districts within a groundwater management area, if the desired future conditions are submitted to the TWDB by December 1, 2007.

### **Task 2. Aquifer well testing**

- a. Review existing distribution of aquifer/pumping test data in the TWDB Groundwater Database and determine areas that are deficient in test data coverage. Coordinate with TWDB to select appropriate wells in the region with emphasis in areas of current or future groundwater availability modeling efforts, including the Rustler, Capitan Reef, and West Texas Bolsons aquifers.
- b. Coordinate with Sul Ross State University and the Texas State University System to identify wells that have had aquifer tests conducted under their “Sustainable Agricultural Water

Conservation in the Rio Grande Basin” research project, and coordinate future well tests to avoid duplication.

- c. Coordinate with the above groundwater conservation districts to identify wells within their respective boundaries that can be tested.
- d. Identify additional wells in areas not covered by groundwater conservation districts that can be tested.
- e. Obtain well-owner permission. Where possible, select wells where other wells in the general vicinity can be used as observation wells. Conduct aquifer/pumping test according to accepted standard procedures. Pumping time for each test will be determined based on size and production rate of each well. Upon completion of the pumping period, continue to record measurements during the recovery period.
- f. Calculate transmissivity or storage coefficient of each test and prepare data to be entered into the TWDB database.

### **Deliverables**

**Task 1:** Well data will be prepared in an appropriate database format for transfer to the TWDB Groundwater Database.

**Task 2:** Pumping test results will be prepared in an appropriate database format for transfer to the TWDB Groundwater Database.

Draft and final reports will be prepared and will include the following sections: executive summary, purpose of the study including how the study supports regional water planning, methodology, results, and recommendations, if applicable. Draft report will be submitted to the planning group and the TWDB for review and comment. All comments will be addressed in the final report. The report will discuss results of the data collection and aquifer well testing tasks.

The report will be submitted per TWDB requirements and results from this study will be included in the 2011 Far West Texas Regional Water Plan. The development, analysis, and reporting of results will follow methodologies and guidance according to Attachment B and agency rules.

### **Scheduled Milestones**

Quarterly reports will be submitted to the FWT Regional Planning Group and TWDB giving a status of each task.

## **Study 2 - Conceptual Evaluation of Surface Water Storage in El Paso County**

- Task 1.** Meet with El Paso Water Utilities and El Paso County Water Improvement District No. 1 representatives to gain an understanding of previous studies and discussions regarding the Upper Valley site and the Socorro Ponds as possible surface water storage sites.
- Task 2.** Develop and analyze up to four alternatives for a conceptual level evaluation of surface water storage. Include the location, size, land ownership, conceptual operation, and flow routing for each alternative.
- Task 3.** Evaluate how the implementation of each alternative would be integrated into the current conjunctive use management approach.
- Task 4.** Develop estimates of increased water availability for irrigation and municipal use and decreased groundwater pumping for each alternative.
- Task 5.** Develop an estimate of costs to implement each alternative in accordance with Exhibit B requirements.

### **Deliverables**

- Task 1** No deliverable.
- Tasks 2-5** Draft and final reports will be prepared and will include the following sections: executive summary, purpose of the study including how the study supports regional water planning, methodology, results, and recommendations, if applicable. Draft report will be submitted to the planning group and the TWDB for review and comment. All comments will be addressed in the final report. The report will include a conceptual evaluation of surface water storage at up to four alternative sites, including implementation, water availability and cost estimates.

The report will be submitted per TWDB requirements and results from this study will be included in the 2011 Far West Texas Regional Water Plan. The development, analysis, and reporting of results will follow methodologies and guidance according to Attachment B and agency rules.

### **Scheduled Milestones**

Quarterly reports will be submitted to the FWT Regional Planning Group and TWDB giving a status of each task.

## **Study 3 - Evaluation of Irrigation Efficiency Strategies for Far West Texas: Feasibility, Water Savings and Cost Effectiveness**

### **Scope of Work**

**Task 1.** Survey, identify and review current agricultural production, water use practices and technologies in Far West Texas.

**Task 2.** Evaluate TWDB proposed Best Management Practice (BMP) strategies in terms of:

- a. Applicability for Far West Texas agriculture
- b. Potential for locating specific additional water savings
- c. Institutional and infrastructural considerations and implications
- d. Economic costs and returns of BMP implementation

**Task 3.** Analyze and provide BMP recommendations and estimates of regional water savings. Analyses will be conducted in collaboration with agricultural water users and groups.

### **Deliverables**

**Tasks 1-3** A technical presentation will be provided to the Far West Texas Regional Water Planning Group. Draft and final reports will be prepared and will include the following sections: executive summary, purpose of the study including how the study supports regional water planning, methodology, results, and recommendations, if applicable. Draft report will be submitted to the planning group and the TWDB for review and comment. All comments will be addressed in the final report. The report will include the findings from each of the above tasks, including evaluation of BMP strategies, recommendations, and estimates of water savings.

The report will be submitted per TWDB requirements and results from this study will be included in the 2011 Far West Texas Regional Water Plan. The development, analysis, and reporting of results will follow methodologies and guidance according to Attachment B and agency rules.

### **Scheduled Milestones**

Quarterly reports will be submitted to the FWT Regional Planning Group and TWDB giving a status of each task.

### **Project Budget**

This project will be performed cooperatively with Texas A&M University through the Rio Grande Basin Initiative.

## **Study 4 - Municipal Water Conservation**

### **Scope of Work**

- Task 1.** Staff of the El Paso Water Utilities will develop an educational conservation program primarily intended for small water utilities. The program will highlight specific actions that EPWU has successfully instituted. The program will also consider best management practices (BMPs) for municipal users identified by the TWDB Conservation Task Force that have relevance in the desert communities of West Texas. Brochures and fact sheets will be developed for the education program.
- Task 2.** Invitations will be sent to all municipal water utilities within the region to attend a training session presented by EPWU. A number of sessions will be scheduled to insure that all utilities have the opportunity to take advantage of this program. EPWU will offer to visit those utilities that request on-site training.
- Task 3.** Two months prior to the end of the funded project biennium, EPWU will provide a report to the Far West Texas Water Planning Group describing the educational program, and documenting the number of training sessions offered and identifying the utilities that participated. The report will also provide recommendations pertaining to the practicality of the educational program and suggestions for its continuation.

### **Deliverables**

- Task 1 A conservation training program and materials will be developed.
- Tasks 2-3 Draft and final reports will be prepared and will include the following sections: executive summary, purpose of the study including how the study supports regional water planning, methodology, results, and recommendations, if applicable. Draft report will be submitted to the planning group and the TWDB for review and comment. All comments will be addressed in the final report. The report will describe the educational program and document the number of training sessions offered and identifying the utilities that participated.

The report will be submitted per TWDB requirements and results from this study will be included in the 2011 Far West Texas Regional Water Plan. The development, analysis, and reporting of results will follow methodologies and guidance according to Attachment B and agency rules.

### **Scheduled Milestones**

Quarterly reports will be submitted to the FWT Regional Planning Group and TWDB giving a status of each task.

### **Project Budget**

This funding is primarily intended for travel expenses for water utility personnel in Far West Texas counties to travel to El Paso for training sessions, and, if necessary, for EPWU personnel to travel to the rural areas. EPWU will provide additional funding necessary to insure the success of this program.