
Exhibit A
Scope of Work

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Task 1: Planning Area Description

This task will be a limited effort to update the area descriptions contained in the 2006 Approved Regional Water Plans.

Subtasks

1. Review and revise as necessary the planning region description as presented in the 2006 Regional Water Plan.
2. Provide additional area descriptions or information of regional importance as directed by the Regional Water Planning Group (RWPG).
3. Provide draft(s) of Task 1 Chapter to RWPG for review and comment. Make necessary changes as directed by the RWPG.

Deliverables:

Bibliography and summary of major plans and studies
Water rights databases
Base maps
Memorandum describing related programs

Task 2: Select revisions of population and water demand projections

This task will focus on updating population and water demand projections from the 2006 regional water plans based on changed conditions as described in the Guidelines for Regional Water Plan Development.

This work will include, but is not necessarily limited to:

- 1) revisions of population projections for municipal water user groups by RWPG's contractor.
- 2) revisions of water demand projections for water user groups and wholesale water providers, excluding steam-electric power demands.
- 3) inclusion of cities, non-city water utilities and wholesale water providers not included in previous regional water plans and that meet the water user group or wholesale water provider definition in Guidelines for Regional Water Planning Data Deliverables.
- 4) review and incorporation of new water demand projections for steam-electric power production.

Water User Groups for whom we anticipate revisions in population and/or water demands are as follows:

- All WUGs in Jefferson, Orange, and Hardin Counties due to industrial expansion projects not anticipated in the 2006 RWP.
- 9 WUGs with population increases more than 5% greater than projected and 18 others with populations more than 5% less than projected. See attached listing.
- LNVA Irrigation demands due to the availability of metered water usage not previously available.
- Inclusion of 11 WUGs not included in previous water plans.

Subtask	Changed Conditions	Water User Groups/Wholesale Water Providers
Revisions of population projections for municipal water user groups.	We anticipate 9 Municipal WUGs with population projection increases greater than the 2006 RWP of more than 5% and 18 others with decreases of more than 5% of projections. Also, all municipal WUGs in Jefferson, Orange, & Hardin Counties totaling 24 need to be examined in light of the industrial expansion occurring.	Arp, Brownsboro, Bullard, Chandler, Lumberton, Troup, & Tyler have been identified by the TWDB having increases more than 5% greater than projected. 18 other municipalities show population differences more than 5% less than projected. All municipal WUGs in Jefferson, Orange, & Hardin Counties totaling 24 need to be re-examined in light of the industrial expansion occurring.
Revisions of water demand projections for water user groups and wholesale water providers, excluding steam-electric power demands	We need to revisit irrigation and manufacturing water demands for LNVA due to metered data being available for some irrigation users and the dramatic expansion in manufacturing capacity in Jefferson & Orange Counties	In addition to the irrigation and manufacturing demands, we anticipate revisions to a number of the 39 municipal WUGs enumerated above.
Inclusion of cities, non-city water utilities and wholesale water providers not included in previous regional water plans and that meet the water user group or wholesale water provider definition	TWDB has provided us with the names of 11 municipal WUGs that need to be included in the 2011 RWP not in the 2006 Plan.	Angelina WSC, D&M WSC, Frankston Rural WSC, Melrose WSC, Rayburn Country MUD, Redland WSC, Sacul WSC, Sand Hills WSC, Walnut Grove WS, Woden WSC, Wright City WSC
Review of new water demand projections for steam-electric power production	We anticipate 2010 demands above our 2006 Plan Projections. Also, we anticipate demands will change by county.	Potentially 10 counties

Task 3: Water supply analysis

This task will focus primarily on updating existing water supply numbers included in the 2006 approved regional water plans based upon changed conditions. This work may include, but is not necessarily limited to:

1. updating groundwater supply volumes based on information resulting from updated Groundwater Availability Models (GAM).
2. updating firm yield of surface water supply volumes due to changed water rights or approved surface Water Availability Models.
3. updating the water supply to water user groups or wholesale water providers due to contractual or transmission infrastructure changes or due to changes in surface water rights by the Texas Commission of Environmental Quality.
4. **Additional Work** – Evaluate the effects of Environmental Flow Policies on Water Rights, Water Availability, and Water Planning in East Texas
5. **Additional Work** – Review Water Quality Impacted water bodies in East Texas and their effect on water availability and water treatment requirements.
6. **Additional Work** – Refine Ground Water Availability considering water quality and geographic restrictions. Using groundwater quality contours already available categorize groundwater in the various East Texas Aquifers as needing minimal treatment, needing moderate treatment, and needing substantial treatment. Also note those areas where groundwater production is restricted by characteristics of the aquifer.

The predictive GAM for the Gulf Coast Aquifer is now available for use and was not available for the 2006 RWP. Region I will revise groundwater availability using this model. It is anticipated groundwater availability is likely to change for Jasper, Newton, Jefferson, Hardin, and Orange Counties. These counties have 69 WUGs utilizing groundwater for supply.

Subtask	Changed Conditions	Water User Groups/Wholesale Water Providers
Update groundwater supply volumes based on information resulting from updated Groundwater Availability Models	The Predictive Model for the Gulf Coast Aquifer is now available. Water Availability will potentially change for 69 WUGs.	69 WUGs in the counties of Jasper, Newton, Jefferson, Hardin, & Orange are dependent on groundwater from the Gulf Coast Aquifer
Update the water supply to water user groups or wholesale water providers due to contractual or transmission infrastructure changes or due to changes in surface water rights by the Texas Commission of Environmental Quality.	Confirm no changes with TCEQ	
Additional Work – Evaluate the effects of Environmental Flow Policies on Water Rights, Water Availability, and Water Planning in East Texas		
Additional Work – Review Water Quality Impacted water bodies in East Texas and their effect on water availability and water treatment requirements.		
Additional Work – Refine Ground Water Availability considering water quality and geographic restrictions. Using groundwater quality contours already available categorize groundwater in the various East Texas Aquifers as needing minimal treatment, needing moderate treatment, and needing substantial treatment. Also note those areas where groundwater production is restricted by aquifer characteristics		

Task 4: Identification, evaluation and selection of water management strategies based on needs

This task will focus on the identification of water needs based upon changed conditions in demand or supply and updating the recommended water management strategies in the approved regional water plans as necessary.

This work will include:

- Update of water management strategies' capital cost estimates per Exhibit C. This can be accomplished by either updating total costs by applying the appropriate CCI conversion to each total cost in the current approved regional plan or by reevaluating/re-estimating costs at a more detailed level.
- Updating water management strategies annual costs (and any presented unit cost estimates) to reflect updated power and capital/debt service costs in accordance with revised capital costs or changes to power costs.

This work will include, but is not limited to:

- Identify, evaluate, and select new water management strategies for new water user groups or wholesale water providers with needs corresponding to individual retail public utilities and logical reporting units of retail public utilities and water user groups that have experienced changed conditions requiring the evaluation of additional or modified water management strategies. Examples of changed conditions include:
 - Documented changes in water demand such as projected demands exceeding the supplies available from previously adopted water management strategies,
 - Changes in availability such as supplies being less than demands, and
 - Regionalization of two or more water user groups.
- Revision of water management strategy analyses and modifications to existing water management strategies only if the water demands, water supply volumes, or identified water needs have changed.
- Review and revision of a water management strategy to ensure that all necessary project elements are included so as to qualify for funding under the TWDB Water Infrastructure Funding program.
- Development of new water management strategies if a strategy included in the current approved plan is: no longer feasible; if the regional planning group wants to add or remove a strategy; if a new water management strategy is identified; or if the sponsor of a strategy no longer supports the strategy.
- Development of a new or removal of an existing water management strategy based on revised water demand or supply figures.
- Revising analyses and descriptions as necessary for water management strategies (e.g. due to changes in routing, capacity, or timing) and revising the impact descriptions for any revised water management strategies.
- Establishment of alternative water management strategies: TWDB Rule 357.7(a)(7)(H) allows for the substitution of one evaluated alternative water management strategy for another if the strategy originally recommended is no longer feasible. These alternative water management strategies must be fully evaluated in terms of costs and impacts on water quality, the natural environment and agriculture. In addition, the regional water plan will specifically identify the alternative water management strategies that may be substituted to meet needs.

Subtask	Changed Conditions	Water User Groups/Wholesale Water Providers
Revision of construction costs	Required revision and increase in costs	All WUGs/WWPs with WMS in 2006 Plan
Strategies to Meet Growth	We anticipate 17 Municipal WUGs with population projection increases greater than the 2006 RWP of more than 5% as identified by the TWDB. Also, all municipal WUGs in Jefferson, Orange, & Hardin Counties totaling 24 need to be examined in light of the industrial expansion occurring.	Bevil Oaks, Colmesneil, Corrigan, Diboll, Hudson, Jasper, Lufkin, New Summerfield, Pine Forest, Pinehurst, Pineland, Port Neches, Rose City, & Woodville identified by the TWDB. All municipal WUGs in Jefferson, Orange, & Hardin Counties totaling 24 need to be examined in light of the industrial expansion occurring.
Development of new water management strategies if a strategy included in the current approved plan is: no longer feasible; if the regional planning group wants to add or remove a strategy; if a new water management strategy is identified; or if the sponsor of a strategy no longer supports the strategy.	Identified 11 WUGs Not Previously Identified in 2006 RWP	City of Lufkin, City of Zavalla, City of Huntington, Angelina WSC, Manufacturing in Angelina County, Four Way WSC are affected by Lufkin change.
New Groundwater Availability Model (GAM)	GAM availability volumes released in November 2007.	Jasper, Newton, Jefferson, Hardin, & Orange Counties. See Attached Listing of 69 WUGs Potentially Affected
Amend Water Conservation Management Strategies as Appropriate based on Work Accomplished in Round 3 Phase I		

Task 5: Impacts of selected water management strategies on key parameters of water quality and impacts of moving water from rural and agricultural areas

The Planning Group must include a chapter in the regional water plan that provides a description of the major impacts of recommended WMS on key parameters of water quality. The Planning Group will select the key water quality parameters since they are in the best position to determine the factors that are important to the water sources of their region. Conditions resulting from implementation of recommended WMS are to be compared to current conditions to provide a comparison of the actual impacts of recommended WMS on water quality. In its evaluation of WMS, the Planning Group must quantitatively report impacts on agricultural resources including analysis of third-party impacts of moving water from rural and agricultural areas to urban areas.

Subtasks

1. Evaluate water quality impacts based on key parameters important to the water resource. (RWPG will select the key water quality parameters.)
2. Compare existing water quality conditions with anticipated water quality after implementation of adopted WMS's using best available data.
3. Develop a quantitative reporting of impacts on agricultural resources including analysis of third-party impacts of moving water from rural and agricultural areas.
4. Provide draft(s) of Task 5 Chapter to RWPG for review and comment. Make necessary changes as directed by the RWPG.

Subtask	Changed Conditions	Affected Streams
New WMS	Identified 11 WUGs Not Previously Identified in 2006 RWP	Angelina & Neches Rivers
Establish new Irrigation and Manufacturing demands for LNVA	Metered Irrigation Data available for some farms. Increase in Industrial capacity greater than projected by 2006 Plan	Neches River, Taylor Bayou, Hillebrant Bayou

Task 6: Water conservation and drought management recommendations

In Phase I of Round 3 planning the East Texas Regional Water Planning Group disaggregated municipal water uses to better identify effective water conservation strategies for WUGs using conservation as a water management strategy. In Round 3 Phase II planning East Texas will use the information developed by this effort to amend water conservation strategies recommended to those identified as more appropriate for the particular WUG and their water usage.

Task 7: Description of how the regional water plan is consistent with long-term protection of the state's water resources, agricultural resources, and natural resources

Work under this task will be limited to updating the current description in the 2006 regional water plan as necessary, for example, based on changed conditions and new water management strategies identified under previous tasks.

Subtask	Changed Conditions	Revisions to Chapter 7
Revise description in 2006 RWP as necessary due to new Water Management Strategies and/or Changed Water Use Patterns	11 new municipal WUGs, Industrial expansion greater than projected in Jefferson and Orange Counties Gulf Coast Aquifer Predictive GAM Available	Unknown at this time

Task 8: Unique stream segments/reservoir sites/legislative recommendations

Work under this task will be limited to updating the current descriptions of and potential revisions to recommendations for unique reservoir or stream segments in the currently approved regional plan and updating legislative recommendations as necessary. The legislative recommendations are to be developed by planning groups in a similar manner as for the previous approved regional water plans.

The TWDB commissioned a study to update environmental resources after Round II Planning. We propose to use the information in this updated source to consider designation of Unique Stream Segments and Reservoir Sites. We will also use this resource in evaluating Water Management Strategies

A presentation will be made to the RWPG identifying those significant stream segments that have any three of the five characteristics qualifying them as a significant stream. Following identification of these selected segments recommendations will be solicited for unique status. If the RWPG decides to recommend a river or stream segment for unique status, a recommendation package consisting of a physical description giving the location of the stream segment, maps, photographs, and a site characterization documented by supporting literature and data will be developed.

The recommendation package will address the required biological and hydrological function criteria. The recommendation package will be forwarded to the Texas Parks and Wildlife Department for comment. Any corrections or amendments required by the TPWD will be made before inclusion into the region water supply plan.

Task 9: Report to Legislature on Water Infrastructure Funding Recommendations

A provision was integrated into the scope of work for the second round of regional water planning to survey municipal water user groups with needs in order to develop infrastructure funding recommendations.

To meet this requirement during the current round of regional planning, regional water planning groups must update their assessment of funding needs through a water user group survey similar to the last round. Additional task guidance and a Board-developed survey instrument will be provided prior to execution of the contract.

Subtasks

1. Identify new WUGs with water supply needs to be surveyed.
2. Prepare, distribute, and retrieve surveys from local governments, regional authorities, and other political subdivisions that depict how they intend to finance their infrastructure projects.
3. Assist RWPG in developing probable funding mechanisms for county aggregate groups such as livestock, mining, and irrigation where no political subdivision is responsible for the provision of water supplies.
4. Assist RWPG in developing a policy statement that describes the role proposed for the State in financing projects identified in the regional water plan.
5. Prepare a report for adoption by the RWPG that summarizes the survey results and answers the question related to the role of the State in financing water infrastructure.

Task 10a: Adoption of plan

This task includes public participation, eligible administrative costs, and eligible planning group member travel. This task has a similar scope and effort as funded during the second round of regional planning.

Public participation was important in the development and adoption of the 2006 regional water plans and will continue to be so in this next round of regional water planning. Activities conducted by professional public relations staff are intended to inform and involve the members of the public.

This task will gain public input for various aspects of the water plan development. It is anticipated that the Regional Water Planning Group will provide significant input on the approach to be taken to gain

representative public input. The strategy may include establishing focus groups aimed at specific areas of interest, use of technical subcommittees to provide information and technical support, or a website to dispense information regarding the progress of the study and an electronic mailbox to receive public comment. It is anticipated that there will be three public meetings at various locations within the region to present findings of Tasks 1-3 and receive input from the public. Additionally, the required public hearing for receiving public comment on the plan will be held in at least three cities in the region to maximize public participation.

This task will at a minimum insure compliance with TAC Chapter 357.12 (a)(2)-(4) Notice and Public Participation.

A report presenting the East Texas Regional Water Plan will be prepared, and input from the public through a public meeting will be solicited. The initial tasks will include preparation of a draft report which summarizes the results of this planning project.

A public hearing will be conducted to solicit comments on the recommendations in the plan. A summary of public comments and the steps to address those comments will be prepared and incorporated into a revised plan for submittal to the TWDB.

The regional water planning group shall submit in a timely manner to the executive administrator information on any known interregional conflict between regional water plans.

The regional water planning group shall seek to resolve conflicts with other regional water planning groups and shall participate in any board sponsored efforts to resolve interregional conflicts.

The regional water planning group shall modify the regional water plan to incorporate board resolutions of interregional conflicts.

Upon receipt of input from the RWPG and the public, the final plan will be completed and submitted to the RWPG for adoption. The adopted plan will be submitted to the TWDB by January 1, 2011. Copies of the plan will be distributed to the various stakeholders.

The regional water planning group will transfer copies of all data and reports generated by the planning process and used in developing the regional water plan to the TWDB executive administrator. To the maximum extent possible, data shall be transferred in digital form according to specifications provided by the executive administrator. One copy of all reports prepared by the regional water planning group shall be provided in digital format according to specifications provided by the executive administrator. All digital mapping shall use a geographic information system according to specifications provided by the executive administrator. The executive administrator shall seek the input from the Texas Geographic Information Council regarding specifications mentioned in this subsection.

Deliverables:

- Periodic Newsletter for East Texas Water Planning
- Periodic news releases to regional and state media outlets
- Maintenance of the ETRWPG Website
- Draft Report
- Final Report
- Notification of interregional conflicts, if any

Task 10b: Scope of Work Development

This task includes development of the scope of work for preparation of the 2011 Regional Water Plan.