Agenda Item 6d. Consider approval of a partial scope of work for Task 5B and authorize the political subdivision to submit a request to the TWDB for a notice proceed with the partial scope of work for Task 5B

This agenda item is to review and consider approval of a partial scope of work for Task 5B and authorize the political subdivision to submit a request to the TWDB for a notice to proceed with the partial scope of work for Task 5B. The TWDB developed a scope of work for Water Management Strategies (Task 5B), which includes the development and evaluation of water management strategies and development of Chapter 5 of the 2026 Region F Water Plan (see Attachment 1). This scope of work considers all regulatory requirements and TWDB guidance. The scope items that are necessary for regulatory compliance are outlined in the executed contracts. However, specific scopes of work for the evaluations of potentially feasible water management strategies are to be developed by the regions. All funds for this task are contingent upon written notice to proceed from TWDB based on the specific scope of work. Two cornerstone strategies in the Region F Water Plan are Subordination of Surface Water and Conservation. Both strategies are needed to fully assess the needs of water users in the region, and then identify potentially feasible infrastructure projects to meet those needs. Therefore, Region F is requesting the authorization of funds to evaluate these strategies prior to the completion of the needs analysis. In addition, there are several reuse strategies identified from surveys of water users that are new or will be retained and are also included in the request. The remaining funds and associated scope of work are planned to be requested with the technical memorandum with a full list of potentially feasible water management strategies for evaluation.

Attachments:

- 1. Scope of Work for Water Management Strategies, Phase I
- 2. Completed Template for Scoping Currently Contracted Task 5B Funding for Region-Specific Subtasks



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ТО:	Region F Regional Water Planning Group
CC:	File, CMD21867
FROM:	Lissa Gregg, Jordan Skipwith
SUBJECT:	Scope of Work for Water Management Strategies, Phase 1
DATE:	10/4/2023
PROJECT:	Region F 2026 Water Plan

The TWDB developed a scope of work for Water Management Strategies (Task 5B), which includes the development and evaluation of water management strategies and development of Chapter 5 of the 2026 Region F Water Plan (see Attachment 1). This scope of work considers all regulatory requirements and TWDB guidance. The scope items that are necessary for regulatory compliance are outlined in the executed contracts. However, specific scopes of work for the evaluations of potentially feasible water management strategies are to be developed by the regions. All funds for this task are contingent upon written notice to proceed. The scope items shown in Attachment 1 apply to the evaluations of all potentially feasible water management strategies and are not repeated in the scope descriptions below. The total budget in the executed contract for this effort is currently \$324,497 (TWDB is in the process of authorizing additional funds and the task breakdown is not yet known). This memorandum presents the scope and fee for a portion of the effort to complete this task. The scope for the remainder of the effort to complete the strategies evaluations will be developed after the needs analysis is completed.

The preliminary needs analysis for Region F is ongoing. Based on the preliminary comparisons between projected demands, surface water availability, and groundwater availability data, Region F will continue to show water needs for recipients of surface water and known areas of limited groundwater. Two cornerstone strategies in the Region F Water Plan are *Subordination of Surface Water* and *Conservation*. Both strategies are needed to fully assess the needs of water users in the region, and then identify potentially feasible infrastructure projects to meet those needs. Therefore, Region F is requesting the authorization of funds to evaluate these strategies prior to the completion of the needs analysis. In addition, there are several reuse strategies identified from surveys of water users that are new or will be retained. The development and/or update of these strategies is also included in this scope and fee.

SCOPE OF WORK FOR WATER MANAGEMENT STRATEGIES (TASK 5B) FUNDS

Subordination Strategy

The Subordination Strategy assumes that water in the upper Colorado River Basin is retained for users in Region F by modifying the priority dates for water rights in the upper basin. This applies only to major reservoirs and municipal water rights. This approach is consistent with current operations and the approach used by Region K to evaluate existing supplies for Region K. For the 2026 Region F Water Plan, we propose to use the official TCEQ Colorado River WAM model that includes hydrology through 2016





and is available on the TCEQ website as of October 1, 2023. Specific tasks associated with this effort include:

Scope of Work:

- Obtain the official TCEQ WAM. Modify the model to include sedimentation and other operational considerations in place today consistent with the hydrologic variance request.
- Update the reservoir safe yields for each major reservoir in Region F.
- Re-affirm the assumptions used for the Pecan Bayou watershed with appropriate water rights holders.
- Working together with the water rights holders, assign the amount of supply to water user groups from the Subordination strategy. Conduct a secondary needs analysis after implementation of the Subordination strategy.
- Update the evaluation of the strategy in accordance with the Regional Water Planning Guidelines. This will include the evaluation of reliability, cost, environmental issues, impacts to agricultural and rural areas, natural resources and other issues deemed relevant by the region.
- Develop GIS map showing the reservoirs and water rights considered in the Subordination strategy.
- Develop a draft memorandum summarizing the findings of this strategy update and present it at a RWPG meeting for approval.
- Provide a copy of the updated model to the TWDB.

Entities Potentially Receiving Water from this WMS:

Colorado Municipal Water District (CRMWD) and its customers (22) San Angelo and its customers (3) Upper Colorado River Authority and its customers (4) Brown County WID and its customers (10) City of Bronte City of Coleman City of Coleman City of Sweetwater (Brazos G) City of Brady Steam Electric Power WUGs

Conservation

Region F proposes to develop and/or update conservation strategies for irrigation, develop conservation strategies for all municipal water users in the planning area, and work together with other water use sectors to identify potential conservation measures that may be appropriate for each sector. Specific tasks associated with this effort include:

Scope of Work

- Update irrigation conservation strategies based on updated historical irrigation use, projected demands, adoption rates of irrigation technologies and changing irrigation practices, as necessary. Develop new strategies if appropriate. Evaluate the updated water savings and estimated costs of conversion to the respective identified strategies.
- Identify a package of municipal water conservation strategies that are appropriate for suppliers in Region F. Assess the potential water savings for each municipal entity in Region F and develop estimated costs. Coordinate with municipal water user groups (WUGs) that have implemented conservation programs.
- Evaluate each major conservation in accordance with the Regional Water Planning Guidelines. This



Scope of Work for Task 5B Funds 10/11/2023 Page 3 of 8

will include the evaluation of reliability, cost, environmental issues, impacts to agricultural and rural areas, natural resources and other issues deemed relevant by the region.

• Develop cost estimates for all conservation strategies.

Entities Potentially Receiving Water from Conservation WMSs: All municipal WUGs Irrigation WUGs

Reuse

Reuse is a recommended strategy in the 2021 Region F Plan for three municipal water user groups or wholesale water providers. It is also recommended for multiple mining WUGs. Reuse continues to be a viable option to meet the increased mining demands in the region.

Scope of Work

- Review existing reuse supplies. Identify potential increases in reuse water supplies and new applications of reuse to meet future water needs. This will include both direct and indirect reuse strategies. Coordinate with representatives of the non-municipal water users and municipalities to identify any new reuse strategies and/or updates to existing reuse strategies.
- Evaluate each major reuse strategy in accordance with the Regional Water Planning Guidelines. This will include the evaluation of reliability, cost, environmental issues, impacts to agricultural and rural areas, natural resources and other issues deemed relevant by the region.
- Update cost estimates for all reuse strategies.

Entities Potentially Receiving Water from Reuse WMSs:

City of San Angelo Pecos City Steam Electric Power WUGs Mining WUGs

Database Entry

As required by the TWDB rules, all water management strategies that are recommended or adopted as alternate strategies must be entered into the TWDB database for the 2027 State Water Plan. Also, specific reports must be included in the 2026 Region F Water Plan. For Phase 1, this task will apply only to the strategies developed under this scope of work. Final database entry and data reports will be developed under Phase 2 Scope of Work. Specific tasks associated with the database entry include:

Scope of Work

- Define each water management strategy (WMS) in accordance with the specific requirements of the database.
- Assign WUGs and WWPs to a specific WMSs. Enter the amount of supply received for each decade. Enter other data required for the WMS source, user and seller, as appropriate.
- Enter capital costs and annual costs for each WUG/WWP as appropriate.
- Coordinate with shared regions as appropriate.
- Perform appropriate QC checks on data entry.
- Coordinate with TWDB database staff.

Scope of Work for Task 5B Funds 10/11/2023 Page 4 of 8

Entities

All WUGs and WWPs receiving water from a WMS.

Documentation and Coordination

Each strategy will be documented in a technical memorandum that can be provided to the strategy sponsor and the Region F RWPG. The technical memorandum will address the development of the strategy, costs and technical evaluation. These memoranda will be included as an appendix to the Region F Water Plan.

Fee Summary

The total budget for developing the water management strategies for the 2026 Region F Water Plan (Task 5B) is \$324,497. The Phase 1 Scope of Work effort is estimated at \$160,000. Below is a breakdown of the fee by major strategy category.

TASK 5B	BUDGET
Subordination	\$60,000
Conservation strategies	\$30,000
Reuse	\$35,000
Database Entry	\$15,000
RWPG Coordination/Documentation	\$20,000
TOTAL	\$160,000

ATTACHMENT NO. 1

TASK 5B SCOPE OF WORK REGION F CURRENT CONTRACTS

TASK 5B - EVALUATION AND RECOMMENDATION OF WATER MANAGEMENT STRATEGIES (WMSS) AND PROJECTS (WMSPS)

The objective of this task is to evaluate and recommend WMSs and their associated WMSPs, and to prepare a separate chapter (in accordance with 31 TAC §357.22(b)) to be combined with Task 5A and 5C and included in the 2026 RWP that identifies, evaluates, and recommends WMSs and WMSPs. Work includes presenting alternative WMSs and WMSPs and includes all technical evaluations.

In addition to generally meeting all applicable rules and statute requirements governing regional and state water planning under 31 TAC Chapters 357 and 358, this portion of work must include all work necessary to meet all the requirements of 31 TAC §357.22(a), §357.34, and §357.35 that is not already included under Tasks 5A or 5C.

Performance of work associated with any 5B subtasks will be <u>contingent upon a written notice-to-proceed in the</u> <u>form of a contract amendment</u>. This task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

- Perform technical evaluations of all potentially feasible WMSs including previously identified or recommended WMSs and newly identified WMSs, including drought management and conservation WMSs; WMS and WMSP documentation must include a strategy description, discussion of associated facilities, project map, and technical evaluation addressing all considerations and factors required under 31 TAC §357.34(e)-(i) and §357.35. If an identified potentially feasible WMS is, at any point, determined to be not potentially feasible by the planning group and therefore not evaluated, the plan must provide documentation of why the WMS was not evaluated. ¹
- 2) Include documentation of the RWPG's process for selecting recommended WMSs and associated WMSPs including development of WMS evaluations matrices and other tools required to assist the RWPG in comparing and selecting recommended WMSs and WMSPs. Include this documentation in the IPP and final RWP.
- 3) Consider water conservation plans and drought contingency plans from each WUG, as necessary, to inform WMS evaluations and recommendations.
- 4) Ensure necessary communication, coordination, and facilitation occurs within the RWPA and with other RWPGs to develop recommendations.
- 5) Update descriptions and associated technical analyses and documentation of any WMSs and WMSPs that are carried forward from the previous RWP to address:
 - a. Changed conditions or project configuration.
 - b. Changes to sponsor of WMS and WMSP(s).
 - c. Updated costs (based on use of required costing tool²).
 - d. Other changes that must be addressed to meet requirements of 31 TAC §357.34 and §357.35.
- 6) Assign all recommended WMS water supplies to meet projected needs of specific WUGs.
- 7) Document the evaluation and selection of all recommended WMS and WMSPs, including an explanation for why certain types of strategies (e.g., aquifer storage and recovery, seawater desalination, brackish groundwater desalination) may not have been recommended.
- 8) Determine whether the region has 'significant' identified water needs and if so, assess the potential for aquifer storage and recovery to meet those needs. The plan must include at a minimum, the methodology used by the planning group to determine what volume constitutes a 'significant' water need in their

¹ Requirements are further explained in the guidance document *First Amended General Guidelines for Development of the* 2026 Regional Water Plans.

² See Section 2.5.2.12 under 'Financial Costs' in First Amended General Guidelines for Development of the 2026 Regional Water Plans.



region.

- 9) Provide documentation of the implementation status, in a separate chapter subsection and in table format, of the status of certain recommended WMSs. First Amended General Guidelines for Development of the 2026 Regional Water Plans Section 2.5.2.7 outlines the required WMS types³ that implementation status must be provided for and outlines the required minimum table contents depicting key milestones.
- Coordinate with sponsoring WUGs, WWPs, and/or other resource agencies regarding any changed conditions in terms of projected needs, strategy modifications, planned facilities, market costs of water supply, endangered or threatened species, etc.
- 11) If TWC §11.085 applies to the proposed inter-basin transfer (IBT), determine the "highest practicable level" of water conservation and efficiency achievable (as existing conservation or proposed within a WMS) for each WUG or WWP WUG customer recommended to rely on a WMS involving the IBT. Recommended conservation WMSs associated with this analysis shall be presented by WUG.
- 12) Present the water supply plans in the RWP for each WUG and WWP relying on the recommended WMSs and WMSPs.
- 13) Consider alternative WMSs and WMSPs for inclusion in the plan. Alternative water management strategies must be fully evaluated in accordance with 31 TAC §357.34(e)-(i). Technical evaluations of alternative WMSs must be included in the plans and the data associated with alternative WMS must be entered into DB27.
- 14) Review the TWDB reports (report numbers 10-19) from DB27 and incorporate these agency planning database reports (including as populated final RWP must incorporate these standard TWDB DB27 reports, in the IPP and final RWP, by reference, as part of the regional water plan by including links to TWDB Database Reports application and inform the reader that the report may be accessed via that application.
- 15) Submit data through DB27 to include the following work:
 - a. Review of the data.
 - b. Confirm that data is accurate.
- 16) Disseminate the chapter document and related information to RWPG members for review.
- 17) Modify the chapter document based on RWPG, public, and/or agency comments.
- 18) Submit the chapter document to the TWDB for review and approval.
- 19) Make all efforts required to obtain final approval of the RWP chapter and associated DB27data by the TWDB.
- 20) [REGION-SPECIFIC SCOPE OF WORK TO BE APPROVED AT FUTURE DATE BY TWDB EXECUTIVE ADMINISTRATOR PRIOR TO NOTICE-TO-PROCEED]

Scope of Work to be amended based on specific Task 5B scope of work to be developed and negotiated with TWDB. Work under Task 5B to be performed only after approval and incorporation of Task 5B scope of work and written notice-to-proceed. NOTE: Work effort associated with preparing and submitting a proposed Task 5B scope of work for the purpose of obtaining a written 'notice-to-proceed' from TWDB is not included in Task 5B and shall <u>not</u> be reimbursed under the Contract.

³ The list of WMS types is subject to change based upon legislative direction.



Scope of Work for Task 5B Funds 10/11/2023 Page 8 of 8

Deliverables: A completed Chapter 5 (including work from Tasks 5A-5C) including technical analyses of all evaluated WMSs and WMSPs must be included in the IPP and final 2026 RWP. Data must be submitted and finalized through DB27 in accordance with the Guidelines for 2026 Regional Water Planning Data Deliverables.

Strategy Type ASR Groundwater Dase Conservation/Drought Groundwater Dase Conductor to the search of the sea	SubTask Scope of Work Write-up	Deliverable	SubTask Budget (\$)	WUG(s) &/OR WWP Entities Potentially Served by WMS(s)	Addressing a changed condition from previous cycle? If yes, describe the changed condition.	When was this WMS identified by RWPG as potentially feasible?	Was the WMS evaluated in any previous Regional Water Planning Cycles?	Is evaluation a limited update to previous technical evaluation information? If no, indicate specific update in subtask sow column E
F 5A 1 Subordination	See attached Scope of Work	Technical memorandum and updated surface water model	\$ 60,000	See attached Scope of Work	Yes	2006	Yes	No
× I I F 5A 2 Conservation	See attached Scope of Work	Technical memoranda - municipal users, agricultural users and other non-municipal users	\$ 30,000	See attached Scope of Work	Yes	2006	Yes	No
F 5A 3 Reuse	See attached Scope of Work	Technical memoranda - municipal users, non-municipal users; Updated portion of Appendix C	\$ 35,000	See attached Scope of Work	Yes	Different dates	Yes for some entities but not for all entities	No
F 5A 5 Database Entry	See attached Scope of Work	Data necessary for required DB27 reports	\$ 15,000	See attached Scope of Work	Yes	NA	NA	NA
F 5A 6 RWPG Coordination/ Docur	entation See attached Scope of Work	Updated portion of Chapter 5	\$ 20,000	See attached Scope of Work	Yes	NA	NA	NA
	REGION-SPECIFIC SUBTASKS TOTAL BUDGET		\$ 160,000		1	1		