

Agenda Item 4.3
Development of Scope of Work for
Phase 2 Funding
for the 2011 Regional Water Plan

April 16, 2008



Scope of Work Committee



Status

- ✓ February 15, 2008 – TWDB posts request for applications in Texas Register
- ✓ February 23, 2008 – TWDB posts Exhibit B Guidelines for Regional Water Plan Development
- ✓ April 16, 2008 – First SOW Committee meeting
- ✓ June 13, 2008 – Applications due to the TWDB



TWDB Documents Citing Requirements

- ✓ **Guidelines for Regional Water Plan Development 2007 – 2012**
- ✓ **Guidance for Preparation of Scope of Work for Regional Water Planning**
- ✓ **Guidelines for Regional Water Planning Data Deliverables 2007 – 2012**

What we will discuss today:

- ✓ **(4.3.1) Required Elements in the Scope of Work**
- ✓ **(4.3.2 & 4.3.3) Additional Elements to be Added**
 - **Study Topics Identified During Phase 1**
 - **Topics suggested by Brazos G RWPG**
 - **Topics Suggested by Public Input**
- ✓ **(4.4) Prioritization of Topics and Recommendations to the RWPG for Scope of Work**

Plan for Today:

1. Discuss required items task by task (4.3.1)
2. Review/include additional study topics (4.3.2 & 4.3.3)
3. Formulate outline of scope of work (4.4)

Focus for 2011 Plan:

- ✓ **Changed Conditions:**
 - Water demand and supply availability
 - ✓ Population – only if changed conditions documented
 - ✓ Demands – only if changed conditions documented
 - ✓ Supply – GMA process, new water rights, new water supply contracts, new droughts of record
 - New water management strategies identified or needed
 - Environmental studies or other work to further implementation of recommended strategies
 - Updating costs of strategies
 - Other necessary activities:
 - ✓ Interregional coordination
 - ✓ Infrastructure financing survey
 - ✓ Public participation activities

Required Tasks

- ✓ **Task 0 – Scope of Work Development**
- ✓ **Task 1 – Planning Area Description**
- ✓ **Task 2 – Select Revisions of Population and Water Demand Projections**
- ✓ **Task 3 – Water Supply Analysis**
- ✓ **Task 4 – Identification, Evaluation and Selection of Water Management Strategies Based on Needs**
- ✓ **Task 5 – Impacts of Selected Water Management Strategies on Key Parameters of Water Quality and Impacts of Moving Water from Rural and Agricultural Areas**

Required Tasks

- ✓ **Task 6 – Water Conservation and Drought Management Recommendations**
- ✓ **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**
- ✓ **Task 8 – Unique Stream Segments/Reservoir Sites/Legislative Recommendations**
- ✓ **Task 9 – Report to Legislature on Water Infrastructure Funding Recommendations**
- ✓ **Task 10 – Adoption of Plan**

Base Funding Allocation

Task	Funds	Task Description
1.	\$10,000	Planning Area Description
2.	\$171,610	Population and Water Demands
3.		Existing Water Supplies
4.		Water Needs and Selection of WMS
5.		Impacts of WMSs on Water Quality
6.	\$10,000	Conservation and Drought Management
7.	\$10,000	Consistency with Long-Term Protection of Resources
8.	\$15,000	Unique Sites/Segments and Leg. Recommendations
9.	\$25,800	Water Infrastructure Funding
10.	<u>\$163,800</u>	Adoption of Plan (administration and public part.)
	\$406,210	Total Base Funding

Task 0 – Scope of Work Development

- ✓ Allocated from administrative funds (Task 10)
- ✓ Up to \$10,000
- ✓ Application Information Required: none

Task 1 – Planning Area Description

- ✓ Limited effort to update area description in 2006 Plan
- ✓ Application Information Required: describe work to be done
 - Background info – RWPG membership, dates, etc.
 - Regional economic data
 - New water rights and wholesale contracts
 - Updates on groundwater districts and activities
 - Updates on other planning activities

Task 2 – Select Revisions of Population and Water Demand Projections

- ✓ Revisions of population projections for municipal WUGs
- ✓ Revisions of water demand projections for all WUGs but Steam-Electric
- ✓ Inclusion of additional WUGs and WWP
- ✓ Review of TWDB-revised Steam-Electric demands

Task 2 – Select Revisions of Population and Water Demand Projections (2)

- ✓ WUGs possibly needing revisions (pop and/or demands):
 - Abilene and Sweetwater area
 - Johnson County area – based on Region G/C study
 - McLennan County entities – current study
 - Williamson County entities
 - Bell County entities
 - Fort Hood
 - Coryell County entities
 - Hill County entities
 - Bryan/College Station area
 - Others?

Task 2 – Select Revisions of Population and Water Demand Projections (3)

- ✓ Inclusion of additional WUGs and WWPs
 - Include Texas A&M University as a WUG
 - Other cities for which population exceeds 500 persons or 280 acft/yr use
 - Other WWPs holding contracts > 5,000 acft/yr
 - HDR needs to obtain information on additional WUGs from TWDB

Task 2 – Select Revisions of Population and Water Demand Projections (4)

- ✓ Review of TWDB-revised Steam-Electric Demands
 - Send out revised data for regional review
 - Confirm other new demands are included:
 - ✓ Somervell County demands at Comanche Peak
 - ✓ Nolan County demands near Sweetwater
 - ✓ New demands near:
 - ✓ Mineral Wells?
 - ✓ Grimes County?
 - ✓ Waco area?
 - ✓ Others?

Task 3 – Water Supply Analyses

- ✓ Update GW availability estimates
 - Revised/Updated GAMs
 - GMA process results
 - Areas with new GCDs – effects of regulation
 - New wells constructed
- ✓ Update SW availability estimates
 - Brazos G WAM updates
 - ✓ New water rights (including BRA Sys Ops)
 - ✓ New BRA contracts
 - ✓ New upper basin drought of record – current study
 - ✓ Revise wastewater return flows
 - ✓ Abilene/WCTMWD/BRA priority calls agreement

Task 3 – Water Supply Analyses (2)

- ✓ Update contractual information (new/revised supply contracts)
 - Survey WUGs
 - Survey WWP
- ✓ Re-apportion BRA supplies between Brazos G and Region H
- ✓ Refine estimates of infrastructure constraints
 - Treatment capacity
 - Intake or transmission capacity
 - Review TCEQ data and survey utilities
- ✓ Supplies from wastewater reuse

Task 4 – Identification, Evaluation and Selection of Water Management Strategies

- ✓ Update plans for all WUGs and WWPs
 - Include intake, transmission and treatment capital costs where only unit treated water costs were assumed (approx. 40 cases)
 - Survey WUGs and WWPs to obtain current plans to meet future demands

Task 4 – Identification, Evaluation and Selection of Water Management Strategies

- ✓ Update water management strategy evaluations
 - Update costs for all recommended and alternative strategies
 - Brushy Creek Reservoir information update
 - Identify and update reuse projects
 - ✓ Various Waco projects
 - ✓ Identify others in the region
 - Update Lake Granger augmentation project to match BRA's favored configuration
 - Update LCRA/Williamson County project to match current configuration
 - BRA System Operations

Task 4 – Identification, Evaluation and Selection of Water Management Strategies (2)

- ✓ Evaluate other strategies for which full evaluations were not done for 2006 Plan
 - Stonewall, Kent, Garza County Chloride Control Project (BRA)
 - Storage reallocation in Federal reservoirs (BRA)
 - BRA sediment reduction program (BRA)
 - Abilene water supply from Possum Kingdom Reservoir (Abilene, WCTMWD and BRA)
 - Other strategies requested by WUGs and WWP's or identified during survey

Remaining Tasks

- ✓ Task 5 – Impacts of Selected Water Management Strategies on Key Parameters of Water Quality and Impacts of Moving Water from Rural and Agricultural Areas
- ✓ Task 6 – Water Conservation and Drought Management Recommendations
 - Revisit drought management and other recommendations
- ✓ 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
- ✓ Task 8 – Unique Stream Segments/Reservoir Sites/Legislative Recommendations
 - Revisit and confirm 2006 decisions or consider alternatives
- ✓ Task 9 – Report to Legislature on Water Infrastructure Funding Recommendations
 - IFR survey using TWDB-provided form
- ✓ Task 10 – Adoption of Plan

Additional Items

- ✓ Items included in Phase 1 grant application
- ✓ Items included in consolidated list from July 2006
- ✓ Items identified by Brazos G RWPG
- ✓ Items identified during public input today

Tasks Included in Phase 1 Grant Application

Study (in priority order)	Budget Requested
Study 1. Impact of drought on reservoir water supplies in the upper Brazos G area	\$79,900
Study 2. Re-evaluate water management strategies for the Nolan County area	\$105,500
Study 3. Regionalization strategies to assist small water systems in meeting new SDWA requirements	\$49,400
Study 4. Evaluate changes to municipal water demands, supplies and strategies due to accelerated or desired growth	\$74,900
Study 5. Refine water management strategies for Johnson and McLennan County areas	\$105,100
Study 6. Updated evaluation of sources and control of chloride pollution	\$148,700



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Tasks Included in Phase 1 Grant Application (2)

Study (in priority order)	Budget Requested
Study 7. Participate in HB1763 process to assist GMA's in establishing desired future conditions	\$27,700
Study 8. Update effects of reservoir sedimentation on supply and identify strategies for control	\$118,400
Study 9. Augment water supplies in tributary areas	\$47,200
Study 10. Impacts of stock tanks and small ponds on reservoir yields	\$48,100
Study 11. Water quality aspects of indirect reuse as a water management strategy	\$107,400
Administrative Activities	\$81,900
Total	\$994,200



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Other Scoping Items Identified in 2006 Consolidated List

- ✓ The following items were identified, but not included in the Phase 1 grant application:
 - Largely BRA-funded Initiatives (1)
 - Refine and expand conjunctive use projects (3)
 - Effectiveness of conservation measures recommended in 2006 Plan (6)
 - Instream flows evaluation (9)
 - Revise water demands and supplies for institutional water user groups (12)
 - Changed water needs for mining and steam-electric uses (13)

Note: (#) – number of item from July 23, 2006 consolidated list



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Other Input

- ✓ Brazos G RWPG member suggestions
- ✓ Public suggestions



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Discussion and Action

- ✓ Add to/remove items for consideration

- ✓ HDR develop detailed scope of work
 - Task budgets
 - Differentiate base funding from additional funding
 - ✓ Base Funding = \$406,210
 - ✓ Other Funding Available = \$4.8 million (16 regions)
 - ✓ Additional funds beyond base activities
 - ✓ Set-aside funds (unforeseen funding needs)

- ✓ Next meeting date