



2017 Llano Estacado Regional Water Plan

Planning Group Meeting

January 16, 2014
Lubbock, Texas



DBS&A
Daniel B. Stephens & Associates, Inc.



High Plains
Underground Water
Conservation District



Espey



PARKHILL SMITH & COOPER





Agenda Item 10

- The Region O projections for population and water demand were approved by the TWDB Board
- Status report on the letters sent to the TWDB
 - Surface water availability (approved)
 - Groundwater availability (approved)
 - Extending the groundwater availability estimates through 2070 (approved)





Agenda Item 10

- We have received notice to proceed on the first three Task 4D water management strategies
 - Irrigation conservation
 - Local groundwater development
 - Municipal water conservation
- Preliminary surface water modeling discussion (David Harkins, RPS)





Agenda Item 11

- Update on the WUG surveys
 - Six additional surveys have been completed since the October 17, 2013 meeting
 - Silverton (Briscoe County)
 - Dimmit (Castro County)
 - Hart (Castro County)
 - Seminole (Gaines County)
 - Farwell (Parmer County)
 - Brownfield (Terry County)





Agenda Item 11

- Update on the WUG surveys
 - Total 49 surveys complete (of 53 WUGs)
 - Waiting for survey responses from
 - Petersburg (Hale County)
 - Plainview (Hale County)
 - Sundown (Hockley County)
 - Tulia (Swisher County)





Agenda Item 12

- The Task 4D scope of work and budgets have been drafted for ten additional water management strategies
 - Water reuse
 - Water importation
 - Infrastructure development
 - Watershed management
 - Drought management
 - Water transfers





Agenda Item 12

- Additional Task 4D water management strategies (continued)
 - Acquisition of available supplies
 - Brackish water desalination
 - Electric-dry power generation
 - Confined animal feeding operations groundwater development
- Request approval of the scope of work and budgets for submittal to the TWDB





Agenda Item 13

- Updated needs assessment
 - Supply values have been updated based on the surveys and additional calls
 - The large table handout shows the resulting needs by sector and municipal needs by WUG
 - Discuss the outstanding supply questions





Agenda Item 13

- Model predicts zero supply by 2020, but no production limitations were reported on the WUG surveys
 - Anton (Hockley County)
 - 2020-2070 demand ranges from 161 to 176 acre-feet/year (afy)
 - Set supply to 100 afy (still showing need)?
 - Plains (Yoakum County)
 - 2020-2070 demand ranges from 432 to 675 afy
 - Set supply to 200 afy (still showing need)?





Agenda Item 13

- Model predicts zero supply by 2020 (cont.)
 - Shallowater (Lubbock County)
 - 2020-2070 demand ranges from 422 to 662 afy
 - Also receive 187 afy from Roberts County (CRMWA)
 - Set supply to 100 afy for local groundwater supply (still showing need)?
 - Wilson (Lynn County)
 - Population is less than 500 people, so remove from table (included with County other)?
 - Or estimate demand and supply separately?





Agenda Item 13

- Model predicts sufficient supplies but WUG surveys report aquifers as a limiting factor and declining water levels
 - Olton (Lamb County)
 - 2013 demand was 100 million gallons per year (310 afy)
 - 2020-2070 demand projections range from 469 to 438 afy (decreasing over time)
 - Set supply to 300 afy (maximum supply per the WUG survey)?





Agenda Item 13

– Seminole (Gaines County)

- Expects local groundwater to last to 2030
- Anticipate purchasing water from Blaus Wasser beginning in May 2014 (they will sell them raw water for treatment and then buy it back)
- Long term plan will be to import water from Winkler and/or Andrews County (will address with WMS)
- 2020-2070 demand projections range from 2,348 to 3,675 afy
- Set supply equal to 1,500 afy (maximum supply per the WUG survey)?





Agenda Item 13

- Supply drops due to the fraction of surface water available from White River Reservoir
 - Crosbyton (Crosby County)
 - Post (Garza County)
 - Ralls (Crosby County)
 - Spur (Dickens County)





Agenda Item 13

- Should we add in new groundwater supply for newly completed well fields and then address future groundwater development with WMSs?
- How will the new groundwater be distributed (using new or existing lake infrastructure)?





Agenda Item 13

- Supply drops due to the fraction of surface water available from Mackenzie Reservoir
 - Silverton (Briscoe County)
 - Tulia (Swisher County)
 - Floydada (Floyd County)
 - Lockney (Floyd County)
- Should we leave the supplies as they are and address future groundwater development with WMSs?





Agenda Item 13

- Happy (Swisher County)
 - The supply estimates include 2 wells in the Ogallala aquifer in Swisher County, but both wells are in the Dockum aquifer (1 in Swisher County and 1 in Randall County in Region A)
 - Should we fix the aquifer and county locations to match the survey information?





Agenda Item 13

- Levelland (Hockley County) have wells that are used during the summer peak, but these aren't included as a supply source
 - Wells are completed in the Ogallala aquifer
 - Current well field capacity is 6,896 afy
 - Should we add 1,000 afy to their supply (these wells are only used during the summer months)?





Agenda Item 13

- Tahoka (Lynn County) have wells that are used during the summer peak, but these aren't included as a supply source
 - Wells are completed in the Ogallala aquifer
 - Current well field capacity is 166 afy
 - Should we add 100 afy to their supply (these wells are only used during the summer months)?





Agenda Item 13

- Non-member CRMWA leases
 - Leasing CRMWA water from Lubbock
 - Meadow, 31 afy lease (using 18 afy)
 - Ransom Canyon, 1,500 afy lease (using 569 afy)
 - Shallowater, using 187 afy (lease amount?)
 - Leasing CRMWA water from Slaton
 - New Deal, using 153 afy (lease amount?)
 - Post, using 306 afy (lease amount?)
- Should we add supplies for each of these or leave them under the CRMWA member?





Agenda Item 13

- Demand estimates have been added by the TWDB effective with this planning cycle
 - Gaines County manufacturing
 - Demands are for four gas processing plants
 - Floyd County mining
 - Based on a Bureau of Economic Geology fracking study
 - Hale County steam-electric generation
 - TWDB to research this demand
- TWDB will provide available supply data





Agenda Item 14

- Drought management (Chapter 7)
 - The chapter outline includes:
 - Droughts of record
 - Preparations and response
 - Existing and potential emergency interconnects
 - Emergency responses to local drought conditions or loss of municipal supply
 - Drought response recommendations and model drought contingency plans
 - Drought management water management strategy
 - Other recommendations





Agenda Item 14

- Drought contingency plans
 - Systems that serve $\geq 3,300$ connections are required to submit their drought contingency plans to TCEQ
 - For the 2009 drought plan, nine entities were required to send a drought contingency plan to TCEQ for review
 - Brownfield, Hereford, La Mesa, Levelland, Lubbock, Mackenzie Municipal Water Authority, Matador Water District, Plainview Municipal Water System, and White River Municipal Water District





Agenda Item 14

- Drought contingency plans
 - We've received DCPs for 28 WUGs
 - We have contacted 17 additional WUGs and are waiting to receive their DCPs
 - DCPs were under development in Hart and Abernathy when we last contacted them
 - We still need to contact 6 WUGs to request their DCPs (Ralls, O'Donnell, Seagraves, Ropesville, New Deal, and Kress)





Agenda Item 15

- Prioritization
 - House Bill 4 established a process of prioritization for funding projects
 - The stakeholders committee composed of representatives from each region put together uniform standards for prioritization
 - The TWDB put together a template based on the uniform standards developed by the stakeholder committee (including the region's projects & data from DB12)





Agenda Item 15

- Prioritization
 - The TWDB will be adding funds to the regional water planning contracts for prioritization (\$16,558 total for Region O)
 - Regional water planning groups have until June 1, 2014 to submit their draft prioritizations of the projects included in the 2011 regional water plans (final prioritizations will be due by September 1)
 - Will the consultants or a Region O subcommittee do the prioritizations?





Action Items Summary

- Approval of the remaining Task 4D scopes and budgets
- Approval of supply changes to address the outstanding water supply questions





Next Steps

- Spring meeting
 - Present draft project prioritization results for the projects included in the 2011 regional water plan (due June 1)
 - Discuss progress on Chapter 7
- Summer meeting
 - Full needs analysis
 - Update on strategy evaluation
- Fall meeting - presentation on Chapters 4 & 7
- Early 2015 - draft plan complete

