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Tony Wood

Small Business

Vic Hilderbran

GMA 7

Don Dietzmann

GMA 9

Dan Meyer

GMA 10 Diane Savage

GMA 13

Art Dohmann

GMA 15

DATE: July 24, 2013

TO: Members of the South Central Texas Regional Water

Planning Group

FROM: Steven J. Raabe, P.E.

The schedule and location of the meeting of the South Central Texas Regional Water Planning Group is as follows:

TIME AND LOCATION

Thursday, August 1, 2013

10:00 a.m.

San Antonio Water System Customer Service Building

Room CR 145

2800 US Highway 281 North

San Antonio, Bexar County, Texas 78212

Enclosed is a copy of the posted public meeting notice.

GMM/en

Enclosure

NOTICE OF OPEN MEETING OF THE SOUTH CENTRAL TEXAS REGIONAL WATER PLANNING GROUP

TAKE NOTICE that a meeting of the South Central Texas Regional Water Planning Group as established by the Texas Water Development Board will be held on Thursday, August 1st, 2013 at 10:00 a.m. at San Antonio Water System (SAWS), Customer Service Building, Room CR 145, 2800 US Highway 281 North, San Antonio, Bexar County, Texas. The following subjects will be considered for discussion and/or action at said meeting.

- 1. Public Comment
- 2. Approval of Minutes
- 3. Chair's Report
- 4. Status of Edwards Aquifer Habitat Conservation Plan (HCP)
- 5. Status of Guadalupe, San Antonio, Mission, and Aransas Rivers and Mission, Copano, Aransas, and San Antonio Bays Basin and Bay Stakeholder Committee (BBASC) and Expert Science Team (BBEST) and Nueces River and Corpus Christi and Baffin Bays Stakeholder Committee (BBASC) and Expert Science Team (BBEST)
- Discussion and Appropriate Action Regarding Nominations to Fill Voting Member Vacancies
- 7. Texas Water Development Board (TWDB) Communications
- 8. Discussion and Appropriate Action Regarding Consultants Work, Schedule and Budget
- Report, Discussion and Appropriate Action from Work Groups
 - Eagle Ford Shale Work Group, Suzanne Scott
 - Carrizo Aquifer Work Group, Greg Sengelmann
- Discussion and Appropriate Action Authorizing Consultant to Work with TWDB to Negotiate/Resolve Any Issues Regarding Final Projections (Municipal and Non-Municipal)
- 11. Discussion and Appropriate Action Regarding Draft Water Needs, Initial List of Water Management Strategies, and Drought Response Survey to Water User Groups (WUG) and Discussions with Wholesale Water Providers (WWP) (Tasks 4A & 4B)

- 12. Discussion and Appropriate Action Regarding Evaluation of Potentially Feasible Water Management Strategies (Task 4B), Draft Scopes of Work and Budgets for Submittal to TWDB and Inclusion into Planning Contract, TWDB Contract No. 1148301323 (Task 4D)
- 13. Discussion and Appropriate Action Regarding Authorizing Political Subdivision to Submit Request for Notice-to-Proceed for Evaluation of Twelve Water Management Strategies and Authorize Administrator to Execute Contract Amendment with TWDB
- 14. Discussion and Appropriate Action Regarding Identification of Potentially Feasible Water Management Strategies (Task 4B), Draft Scopes of Work and Budgets for Consideration at the Next South Central Texas Regional Water Planning Group Meeting
- 15. Possible Agenda Items for the Next South Central Texas Regional Water Planning Group Meeting
- 16. Public Comment

The South Central Texas Regional Water Planning Area consists of Atascosa, Bexar, Caldwell, Calhoun, Comal, Dewitt, Dimmit, Frio, Goliad, Gonzales, Guadalupe, Karnes, Kendall, La Salle, Medina, Refugio, Uvalde, Victoria, Wilson, Zavala and part of Hays Counties.

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Public Comment

Approval of Minutes

Minutes of the South Central Texas Regional Water Planning Group May 2, 2013

The meeting was called to order at 10:05 a.m. in the San Antonio Water System's (SAWS) Customer Service Building, Room CR 145, 2800 US Highway 281 North, San Antonio, Bexar County, Texas.

Twenty-eight of the 29 voting members, or their alternates, were present.

Voting Members Present:

Gená Leathers for Jason Ammerman
Tim Andruss
Donna Balin
Evelyn Bonavita
Rey Chavez
Dan Meyer
Gary Middleton
Con Mims
Ron Naumann
Iliana Peña

Alan Cockerell Charles Ahrens for Robert Puente

Will Conley
Don Dietzmann
Art Dohmann
Vic Hilderbran
Rick Illgner for Karl Dreher
Steve Ramsey
Diane Savage
Suzanne Scott
Greg Sengelmann
Milton Stolte

Rick Illgner for Karl Dreher Milton Stolte
Kevin Janak Tom Taggart
Bill Jones Bill West
Micah Voulgaris for John Kight Tony Wood

Voting Members Absent:

Mike Mahoney

Non-Voting Members Present:

Wally Bubly, Texas Department of Parks and Wildlife (TPWD)

Ron Fieseler, Region K Liaison Don McGhee, Region M Liaison

Matt Nelson, Texas Water Development Board (TWDB)

Ken Weidenfeller, Texas Department of Agriculture

AGENDA ITEM NO. 1: Public Comment

Melissa Grote, Program Specialist, Texas State Soil and Water Conservation Board (TSSWCB), helps manage the Water Supply Enhancement Project (formerly known as State Brush Program) for TSSWCB and is currently working on a project on the Guadalupe River and provided handouts for the program across the state.

AGENDA ITEM NO. 2: Approval of Minutes

Chairman Con Mims asked if there were any additions or corrections to the minutes from March 14, 2013. Ron Naumann made a motion to approve the minutes as presented. Gary Middleton seconded the motion. The motion carried by consensus.

AGENDA ITEM NO. 3: Status of Edwards Aquifer Habitat Conservation Plan (HCP)

Dr. Robert Gulley, EAHCP Executive Director, provided an update on the implementation of the Habitat Conservation Plan. Dr. Gulley reported all work committed to be accomplished on the HCP is in the process of being implemented, such as work on the spring system, attention to flow control measures, the Aquifer Storage Recovery (ASR) leasing program and the Voluntary Irrigation Suspension Program (VISPO) leasing program. Dr. Gulley also reported on the ongoing adaptive management process and the next phase of the program, such as a phase two decision which will ultimately decide if the measures implemented in the HCP are enough, too much or not enough. Dr. Gulley is working with a Science Committee of local experts, as well as the National Academy of Sciences through the National Search Council (NRC). The NRC has agreed to provide independent science review of the implementation process and help sort through the issues of the best available science.

AGENDA ITEM NO. 4: Status of Guadalupe, San Antonio, Mission, and Aransas Rivers and Mission, Copano, Aransas, and San Antonio Bays Basin and Bay Stakeholder Committee (BBASC) and Expert Science Team (BBEST) and Nueces River and Corpus Christi and Baffin Bays Stakeholder Committee (BBASC) and Expert Science Team (BBEST)

Suzanne Scott, Chair of the Guadalupe, San Antonio, Mission, and Aransas Rivers and Mission, Copano, Aransas, and San Antonio Bays Basin and Bay Stakeholder Committee (BBASC), reported the next GSA BBASC meeting is tentatively scheduled for May 23, 2013. The stakeholders' are continuing to try to find funding for implementation of studies listed in the Work Plan for Adaptive Management. The stakeholders have requested funding through the potential water supply project funding. The rider is \$2M to fund work plan studies. The Science Advisory Council (SAC) and the Environmental Flows Advisory Group (EFAG) would prioritize the work plan studies and a BBASC may request funding for studies.

Mr. Mims, Chair of the Nueces River and Corpus Christi and Baffin Bays Stakeholder Committee (BBASC), had nothing new to report on the process. At the March meeting, Mr. Mims stated the Environmental Flows Standards and Strategies had been submitted, as well as the Work Plan for Adaptive Management with a response from TCEQ still pending.

AGENDA ITEM NO. 5: Texas Water Development Board (TWDB) Communications

Matt Nelson, TWDB, reported the request for funds for regional water planning is still moving forwarded in the legislation.

AGENDA ITEM NO. 6: Texas Water Development Board Presentation on Revised Regional Water Planning Rules, Part 2

Mr. Nelson, TWDB, provided the second part of the presentation on the new rule revisions for Regional Water Planning, focusing on Chapter 7, Drought Management and changes in the regional water planning process for Drought Response.

AGENDA ITEM NO. 7: Discussion and Appropriate Action Regarding Legislative Activities

Mr. Mims asked the Planning Group if anyone would like to discuss specific legislation of interest for regional water planning. Diane Savage informed the Planning Group of a bill changing the deadlines on Desired Future Conditions (DFC), which may change the Groundwater Management Area's reporting. Mr. Mims informed the group the legislation for Unique Stream Segments is waiting to be heard in the House Natural Resources. Dianne Wassenich, San Marcos River Foundation, discussed a bill regarding Firm Bank Springs in Hays County, as well bills regarding impervious cover regulations (Senate Bill 1918 and 1919), weakening impervious cover regulations.

AGENDA ITEM NO. 8: Discussion and Appropriate Action Regarding Authorizing Administrator to Begin Soliciting Nominations for SCTRWPG Voting Members Whose Terms Expire in August 2013 (12 members)

Erin Newberry, SARA, provided an overview of the proposed schedule for accepting nominations for upcoming vacancies on the Planning Group. There will be 12 vacancies to be filled. A draft copy of the Public Notice was in the agenda packet for review as well as a copy of the current members' terms of office.

Mr. Mims informed the Planning Group he received a letter from South Texas Regional Alliance (STRWA), regarding representation on Region L. Mr. Mims provided the names of entities that make up STRWA. Several STRWA members (cities and water utilities) could potentially be nominated under several Interest categories by STRWA at this time so representation could be covered. Mr. Mims asked if there was a representative of STRWA to speak. There was no response.

Mr. Mims asked the Planning Group if there was any interest in increasing, decreasing or recategorizing any of the Interest categories with vacancies that currently has more than one representative and no motion was made.

Art Dohmann made a motion to authorize the Administrator to begin the solicitation process to fill existing vacancies at the August 2013 meeting. Will Conley seconded the motion. The motion carried by consensus.

AGENDA ITEM NO. 9: Report, Discussion and Appropriate Action from Work Groups

- Eagle Ford Shale Work Group Suzanne Scott, Chair
 - Presentation by UTSA Institute for Economic Development -Region L Eagle Ford Shale Population Projection Study, Dr. Thomas Tunstall, Ph.D., Research Director
- Carrizo Aquifer WMS Work Group, Greg Sengelmann, Chair

Dr. Sheryllynn Roberts, Center for Community and Business Research at The University of Texas San Antonio (UTSA), presented the three phased population projection study findings for

counties within Region L affected by Eagle Ford Shale. The study was based on: Phase I: region population projections based on UTSA's Eagle Ford Shale workforce forecasts; Phase II: population projection based on housing units in conjunction with persons-per-household multipliers in order to project population; and Phase III: population projection based on school enrollment. Dr. Roberts also explained the methodology UTSA used to gather and apply all data used for the study, as well as some of the challenges of finding data sets in rural areas. Dr. Roberts also informed the Planning Group UTSA collaborated with HDR Engineering throughout the study.

Following the presentation of study findings for Region L counties, Ms. Scott explained the challenge in formulating a recommendation to the Planning Group. The Work Group, working with HDR Engineering, would like time to analyze and compare the new information with TWDB draft population and water demand projections to see if some of the issues relative to water consumption may be calculated into the gallons per capita daily (GPCD) in the Eagle Ford Shale affected cities and counties. In further analyzing, it may be found that TWDB's draft water demand projections may already account for increased population and water use via the draft water demand projections.

The Eagle Ford Shale Work Group recommendation is as follows:

The Region L Eagle Ford Shale Work Group met Wednesday, May 1, 2013 with the Institute for Economic Development at UTSA and received a briefing from UTSA regarding the results of their study. As a result, the Work Group highlighted several counties within Region L where the analysis by UTSA indicates population projections, based on labor workforce, school enrollment and housing data, could be different from TWDB's population projections and potentially require a request for a modification to the population projection. For the identified counties the Work Group believes the UTSA study results require further review by Region L's Technical Consultants and the Work Group members.

The Region L Eagle Ford Shale Work Group requests authorization from the Planning Group to allow it to continue to work with HDR Engineering and the Institute for Economic Development at UTSA to further review the population projections for DeWitt, Dimmitt, Goliad, Gonzales, Karnes, LaSalle, Refugio and Victoria counties. The Work Group will further study and compare the UTSA study findings with the TWDB population projections to formulate a recommendation on whether to submit a request to the TWDB to consider modifications to population for one or more of the counties. The Work Group further recommends that the Planning Group's Executive Committee be authorized to review and consider the Work Group's recommendation for submission to the TWDB in June. The Work Group will report its final recommendations to the Planning Group at the August 1, 2013 meeting.

Additionally, the Work Group recommends the final UTSA study report be forwarded to the offices of each County Judge within Region L for information. In addition, any recommendations made regarding requests for changes to population projections that are submitted to the TWDB on behalf of the Planning Group will also be shared with the appropriate County Judges.

Ms. Scott made a motion to accept the Work Group's recommendation as presented. Gary Middleton seconded the motion. The motion carried by consensus.

Greg Sengelmann, Chair of the Carrizo Aquifer Water Management Strategies (WMS) Work Group, provided a brief update on the Work Group's recent meeting on April 15, 2013. Mr. Sengelmann stated the group initially clarified the TWDB rules on not breaking Modeled Available Groundwater (MAG) and ensuring WMS' do not exceed a MAG in any Groundwater

Management Area (GMA). Secondly, the Work Group reviewed a list of Carrizo Aquifer MAG and existing permit information to determine where the Carrizo stood on existing MAG and tried to determine whether to use existing pumping or permitted amounts. The group determined for planning purposes, the permitted amount would be used in calculations to determine availability of water, if any. HDR Engineering will work to obtain permitting data from each Groundwater District to calculate what is left in the Carrizo. Finally, the group discussed how to account for exempt usage. HDR Engineering will also obtain exempt use from each Groundwater District to assist in the final calculations of the Carrizo. The next meeting of the Carrizo Aquifer WMS Work Group will be May 22, 2013.

AGENDA ITEM NO. 10: Discussion and Appropriate Action Regarding Consultants Work and Schedule

Brian Perkins, HDR Engineering, presented an updated 2016 Regional Water Planning (RWP) Consultant Schedule and briefed the Planning Group tasks HDR Engineering is currently working on. In addition to the schedule, Mr. Perkins reviewed the list of potential issues that the Technical Consultant and Administrator are tracking that may affect the planning process.

AGENDA ITEM NO. 11: Discussion and Appropriate Action Regarding Population and Population-Related Water Demand Projections (Task 2B) Recommendations to TWDB

Mr. Perkins provided a presentation on Draft Population and Water Demand Projections Survey Results, which incorporated survey results from responding water user groups and wholesale water providers. There were fourteen water user groups that requested HDR Engineering contact them to discuss the data provided in the survey. Of the fourteen HDR Engineering contacted by request, 9 water user groups have requested revisions that will require discussion and appropriate action by the Planning Group on whether or not to forward to TWDB as revision requests. Those entities requesting revisions to their population and population-related water demand projections are: City of Cibolo, Comal County, City of Converse, City of Cotulla, Fair Oaks Ranch, SS Water Supply Corporation (WSC), City of San Marcos, City of Schertz, and City of LaVernia. All entities with the exception of the City of Cotulla have provided some documentation to HDR Engineering for validation of their requests, in accordance with the guidelines provided by TWDB. Mr. Perkins will contact those entities that may require additional documentation before forwarding to TWDB. Mr. Mims also clarified that by forwarding the revision requests with documentation provided, the Planning Group was simply forwarding the requests to TWDB for TWDB consideration. Mr. Nelson, TWDB, also stated after reviewing the requests and documentation provided, if additional information is needed, HDR Engineering would be contacted.

Mr. Middleton made a motion to forward all revision requests reviewed today to the TWDB for consideration by TWDB. There were no objections to the motion. The motion carried by consensus.

AGENDA ITEM NO. 12: Discussion and Appropriate Action Regarding Draft Water Needs Analysis (Task 4A & Task 4B) to be Refined and Included in the Preparation of the Needs Analysis Survey (Phase 2 of Online Survey)

Mr. Perkins informed the Planning Group since the last meeting, HDR Engineering has completed the draft evaluation of existing supplies in order to calculate the draft water needs for

the 2016 RWP. Mr. Perkins reviewed the pieces: 1) Reliability of surface water from the Nueces River Basin, 2) Reliability of surface water from the Guadalupe-San Antonio River Basin, to include the use of spring flows associated with the Edwards Aquifer HCP and the use of the 2011 historical effluent discharges, 3) Reuse, and 4) Groundwater, to include groundwater availability from the Edwards Aquifer with the implementation of the HCP as a WMS.

Mr. Perkins then provided the draft water needs by Water User Group (WUG). Mr. Perkins referred to the handout provided which was broken out by county and WUG and provided the following information by county and Water User Group: 1) Draft demand numbers, 2) Supply sources, 3) Sources of draft supply numbers and 4) Calculated needs or management supply.

Bill Jones asked Mr. Perkins why Victoria County reflects a need for Steam-Electric in the amount of 53,178 ac-ft beginning in 2020. Tommy Hill clarified the need is for Steam-Electric, not specifically Exelon. Mr. Perkins also confirmed that per the Bureau of Economic Geology at University of Texas (BEG) Report, there is a demand for Steam-Electric, though the amount of water estimated in 2020 is less than the 53,178 ac-ft the Planning Group approved as a draft non-municipal water demand, due in part to the future demand of the Exelon Project. Mr. Jones asked if the minutes from the meeting where the decision was made to retain the need for a Steam-Electric water demand in Victoria County at 53,178 ac-ft be revisited for the rationale as to why the Planning Group decided to approve that water need. Per Mr. Jones' request, Mr. Middleton read the following from the November 1, 2012 minutes:

"Mr. Perkins also addressed one final issue in the Steam-Electric category that has occurred since our previous meeting. Exelon has pulled their Early Site Permit in Victoria County and will not require the additional water demand as reflected in the draft projections. However, Victoria County still reflects a need for Steam-Electric in later years and the draft projections reflect that need. Mr. Perkins asked the Planning Group if they would like to revise their previous approval of the draft projections for Victoria County, in the Steam-Electric category, or leave the draft projections as TWDB has stated. Mr. Mims asked if there were any objections to leaving the existing draft projections, approved by the Planning Group at the August 2, 2012 meeting, as they are currently stated. The Planning Group had no objections to leaving the draft projections as stated."

Mr. Jones stated he still did not understand the Planning Groups' rationale. Mr. Middleton stated that due to the projected need for Steam-Electric in Victoria County, the Planning Group left the existing water demand allocated for Steam-Electric demands in Victoria County for use. Prior to projecting draft water demands for the Exelon Project, the Steam-Electric demands in the BEG Report for Victoria County are: 1,478 ac-ft by 2020, 30,802 ac-ft by 2030, 38,202 ac-ft by 2040, 54,623 ac-ft by 2050, 71,720 ac-ft for 2060 and 2070.

Mr. Jones made a motion to remove the Steam-Electric demand from Victoria County. Ms. Bonavita clarified a Planning Group could not remove a projected demand, but could request to revise the projected water demand for the future Steam-Electric need by subtracting out the amount of water for use by Exelon. Mr. Middleton asked Mr. Jones to clarify his motion. Mr. Jones revised his original motion to state his motion is to revise the non-municipal water demand projection for Steam-Electric in Victoria County by eliminating the amount of water requested by Exelon and to adopt the BEG Report recommended water demand for years 2030 through 2070. But for 2020, revise the Steam-Electric water demand by increasing the BEG recommended amount by the difference between the 53,178 acft/yr in the 2011 plan and the amount for the Exelon Project (49,126 acft/yr), approximately 5,000 acft/yr. This difference is

actually 4,052 acft/yr, making the Year 2020 projection for Steam-Electric in Victoria County 5,530 acft/yr (4,052 + 1,478).

The revised non-municipal water demand for Steam-Electric in Victoria County will be as follows:

5,530 ac-ft by 2020, 30,802 ac-ft by 2030, 38,202 ac-ft by 2040, 54,623 ac-ft by 2050, 71,720 ac-ft for 2060 and 2070

Ms. Bonavita seconded the motion. The motion carried by consensus.

Mr. Perkins presented the Draft Water Needs (demands minus existing supplies) projected in the 2016 RWP versus the 2011 RWP. As there were some changes to several Water Needs (municipal, industrial, steam-electric, mining, and irrigation) Mr. Perkins reviewed changes with the Planning Group.

The second part of the survey, Needs Analysis Survey (Phase 2 of the online survey), will be sent out late August or early September, after TWDB approves projected water demands for use in the 2016 Regional Water Plan, to all Water Use Groups.

AGENDA ITEM NO. 13: Discussion and Appropriate Action Regarding Evaluation of Potentially Feasible Water Management Strategies (Task 4B), Draft Scopes of Work and Budgets for Submittal to TWDB (Task 4D)

At the March 14th, 2013 Planning Group Meeting, HDR Engineering received authorization to begin drafting scopes of work and budgets for eight WMS: EA HCP, Water Conservation, Drought Management, Recycled Water Program, Local Groundwater, Surface Water Rights, Facilities Expansion, and Balancing Storage (ASR and/or Surface).

Mr. Perkins presented the results for the Planning Group. With Planning Group authorization, HDR Engineering will submit, to the Administrator, a scope and budget request. The Administrator will then submit the request to TWDB.

Mr. Perkins then requested Planning Group authorization to begin drafting scopes of work and budgets for twelve additional WMS: 1) Wells Ranch – Phase 2 (Canyon Regional Water Authority (CRWA) and Others), 2) Brackish Wilcox for the RWA (CRWA and Others), 3) Hays/Caldwell PUA: Phases 1 & 2 (San Marcos, Buda, Kyle, CRWA), 4) CRWA siesta Project (CRWA), 5) Brackish Wilcox for SAWS, 6) Expanded Local Carrizo – Bexar County (SAWS), 7) Brackish-Wilcox – Gonzales County (SSLGC), 8) Texas Water Alliance Carrizo Well Field – Gonzales County (TWA), 9) Carrizo Aquifer – Wilson County (Cibolo Valley Local Government Corporation), 10) GBRA Mid-Basin Project and Alternatives (GBRA), 11) GBRA Lower Basin Off-Channel Reservoir (GBRA), and 12) GBRA Lower Basin New Appropriation (GBRA).

HDR Engineering will develop the draft SOW and budget for each approved WMS listed and bring them back to the Planning Group in August for discussion.

AGENDA ITEM NO. 14: Discussion and Appropriate Action Regarding Authorizing Political Subdivision to Submit Request for Notice-to-Proceed for Evaluation of Eight Water Management Strategies and Authorize Administrator to Execute Contract Amendment with TWDB

Ms. Bonavita made a motion to authorize the Administrator to submit a request for the Notice-to-Proceed for Evaluation of WMS to the TWDB and to authorize Administrator to execute the contract amendment with TWDB to revise the scope of work to replace Task 4D and to remove the requirement of a Notice-to-Proceed from TWDB Contract No. 1148301323. Mr. Middleton seconded the motion. The motion carried by consensus.

AGENDA ITEM NO. 15: Possible Agenda Items for the Next South Central Texas Regional Water Planning Group Meeting

Mr. Middleton proposed the following agenda items for the August 1, 2013 Planning Group Meeting:

- EAHCP Update
- Status of SB3, Environmental Flows Process
- Report, Discussion and Appropriate Action from Work Groups

Recommended for approval.	
	OADY MIDDLETON, OFODETADY
	GARY MIDDLETON, SECRETARY
Approved by the South Central August 1, 2013.	Texas Regional Water Planning Group at a meeting held on
	CON MIMS, CHAIR

Chair's Report

Funding for State Water Plan Projects

- 2013 Legislative session authorized \$2 billion to be withdrawn from Economic Stabilization Fund and deposited in State Water Implementation Fund for Texas – if the creation of that fund is approved by voters in November.
- The fund will provide bond and credit enhancements to help make loans for State Water Plan projects more affordable.

Prioritization of Regional Water Plan Projects

- Regional prioritization based on:
 - Decade of need
 - Feasibility, including availability of water rights
 - Viability, including whether the project is a "comprehensive solution"
 - Sustainability
 - Cost effectiveness
- TWDB will convene stakeholders committee in September 2013 to determine standards
- Standards to be submitted to TWDB by December 1, 2013.
- Draft prioritization of 2011 regional water plan projects due June 1, 2014, final by September 1, 2014

SWIFT Advisory Committee

- Role of committee:
 - Provide comments and recommendations to the Board regarding rulemaking related to SWP project prioritization and use of money in the fund,
 - Provide evaluations of various aspects of operation of the fund
- Committee recommendations on rules regarding SWP prioritization and disbursement of loans from the fund must be submitted to Board by September 1, 2014.

Prioritization of State Water Plan Projects

- State Water Plan prioritization based on:
 - Serving a large population
 - Serving a diverse urban and rural population
 - Provide regionalization
 - Meet high percentage of water needs
 - Also consider: local contributions, repayment capacity, emergency needs, ready to proceed, demonstrated or projected impact on conservation

SWIFT Operations

- Rules for disbursement of loans from the fund will be finalized by the later of (a) the 90th day after TWDB receives the SWIFT Advisory Committee recommendations or (b) March 1, 2015
- 20% of loan funds to target conservation and reuse projects
- 10% of loan funds to target rural and irrigation conservation projects

Estimated Timing of SWIFT Fund Disbursements

- Rules finalized March 1, 2015.
- Following that will come an application process and the final prioritization of projects from all regions.
- Draft versions of the next round of regional water plans are due to TWDB by May 1, 2015.
- It is assumed that these plans will be the basis for funding decisions.

AGENDA ITEM 4 Status of Edwards Aquifer Habitat Conservation Plan (HCP)

Status of Guadalupe, San Antonio, Mission, and Aransas Rivers and Mission, Copano, Aransas and San Antonio Bays Basin and Bay Stakeholder Committee and Expert Science Team (BBEST) and Nueces River and Corpus Christi and Bafin Bays Stakeholder Committee (BBASC) and Expert Science Team (BBEST)

Discussion and Appropriate Action Regarding Nominations to Fill Voting Member Vacancies

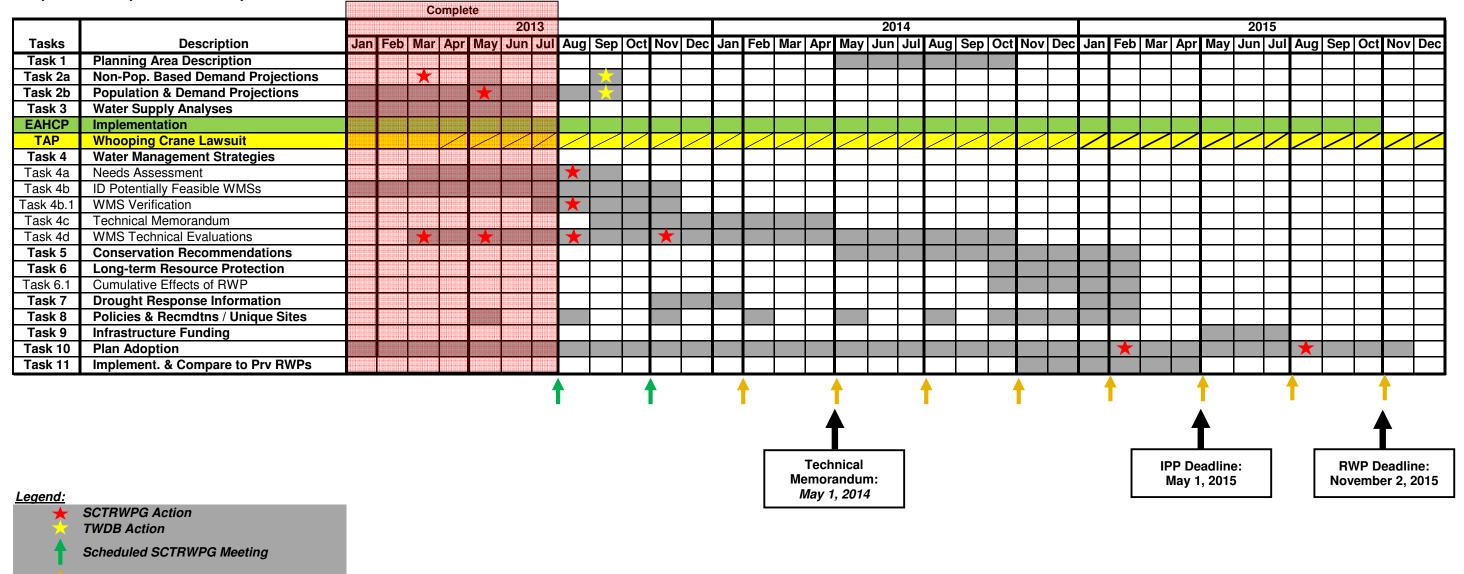
AGENDA ITEM 7 Texas Water Development Board (TWDB) Communications

Discussion and Appropriate Action Regarding Consultants Work, Schedule and Budget

2016 South Central Texas Regional Water Plan

Proposed Workplan for Development

Probable SCTRWPG Meeting



DRAFT 2013-07-18

Report, Discussion and Appropriate Action from Work Groups

- Eagle Ford Shale Work Groups Suzanne Scott, Chair
- Carrizo Aquifer Work Group Greg Sengelmann,
 Chair



Technical Memorandum

To: Eagle Ford Shale Workgroup	
From: Brian Perkins, P.E.	Project: Water Demands
Date: July 24, 2013	Job No: 167424

RE: Revised Water Demand Projections Considering
The UTSA Population Study

This Technical Memorandum is released by R Brian Perkins, P.E. No. 94602, and HDR Engineering, Inc., 8404 Indian Hills Dr., Omaha, NE 68114, Registration No. F-754.

1. Introduction

Following the conclusion of the University of Texas – San Antonio (UTSA) Eagle Ford Shale study, there were still questions about how the results of the study affect regional planning. The purpose of this technical memorandum is to put the population projection results from the UTSA study in context with the Texas Water Development Board (TWDB) draft population projections, and to analyze the effect potential revisions to population projections may have on water demands projections.

2. Population Projections Comparisons

Comprarisons of the five population projections generated by UTSA with the TWDB population projections and the other two State Demographer's population projections (0.0 Migration Scenario and 1.0 Migration Scenario) were made for eight counties which the UTSA study identified as being potentially affected by the Eagle Ford Shale population boom. Graphical representations of these comparisions can be found in Appendix A. In some counties, Housing Unit data were not available to UTSA researchers, therefore population projections based on Housing Unit data could not be made. It is noted that TWDB and State Demographer population projections only account for permenant residents within each county. Population projections made by UTSA attempt to account for permenant residents as well as transient, short-term residents/workers that often live in hotels, campgrounds, and "man camps" for extended periods of time.

3. Water Demand Projections Comparisons

In regional water planning, the municipal water demands set by population projections and base year per capita water use (gpcd) are what the regional water planning group uses to develop the regional water plan. Population projections (especially those that are decades in the future) and per capita water use data are not perfect, but are the best available data. Given that TWDB uses population projections based on permenant residents only and 2011 as the base year for the per capita water use, it's possible that, even though the population projections don't account for short-term residents/workers, the water demands associated with

everyone in the county are accounted for in the per capita water use data. To analyze this, comparisons were made between two sets of water demand projections:

- TWDB Draft Water Demand Projections, comprised of TWDB Draft Population Projections and using 2011 reported water use as the base year per capita water use; and
- Potential Revised Water Demand Projections, comprised of population projections developed by UTSA and using 2006 reported water use as the base year per capita water use.

Please note that 2006 reported water use was selected because 2006 was a dry year and is prior to most of the recent Eagle Ford Shale activity. Graphical summaries of these comparisons are in Appendix B.

The Eagle Ford Shale Workgroup felt it important to account for the highest reasonable projected water demands in each county, therefore potential revised water demand projections were developed using the greater of the water demand projections based on the UTSA – Labor (Historic), UTSA – Student Enrollment (Historic), and the UTSA – Housing Unit population projections. A Year 2020 base per capita water use (gpcd) was determined by multiplying the highest of the UTSA population projections in 2020 with the county's 2006 per capita water use (gpcd), and dividing by TWDB population projection for 2020. Revised water demand projections for future decades then used the resulting Year 2020 per capita water use (gpcd) as the base, accounting for expected reductions in the per capita water use for future decades at the same rates/percentage that the TWDB per capita water use amounts were reduced. The TWDB population projections, TWDB water demand projections, potential revised water demand projections, and associated per capita water uses are shown in Table 1.

4. Recommendation

It is recommended that the South Central Texas Regional Planning Group ask the TWDB to revise the water demand projections in seven of the eight counties (excluding Victoria County) included in Table 1 (highlighted). Revision of these water demand projections will account for the transient, short-term residents/workers that aren't included in the TWDB population projections, without revising the population projections and making it necessary to offset the population projection increases in these counties by lowering the population projections in other counties within Region L.

5. Additional Considerations

If the recommended revisions are approved, TWDB guidance will be sought to appropriate methods for allocations of county-level municipal demand projections to affected water user groups within the county. Furthermore, care will need to be exercised in developing water conservation and drought management recommendations for affected water user groups.

HDR Engineering, Inc.

4401 West Gate Blvd. Suite 400 Austin, TX 78745 Phone: 512•912•5100 Fax: 512•912•5158 www.hdrinc.com

Table 1. Water Demand Projection Comparison

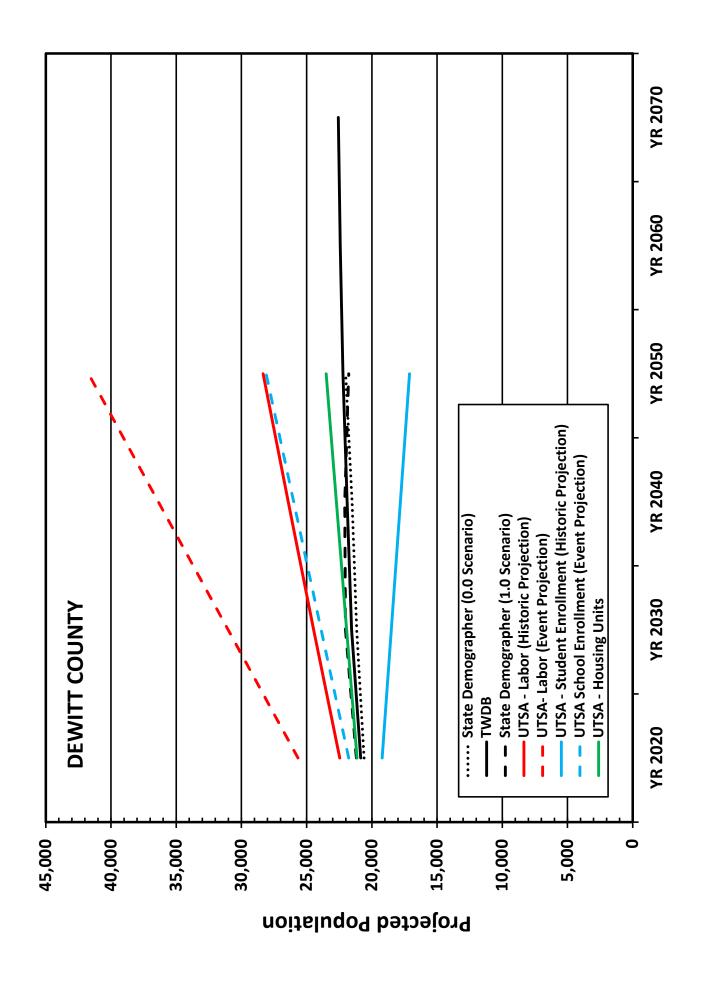
			raft TWDR	Draft TWDB Projections		Pote	Potential Bevised Projections	od Projection	, nc		Difference	aud	
		YR2020	YR2030	YR2040	YR2050	YR2020	YR2030	YR2040	YR2050	YR2020	YR2030	YR2040	YR2050
	TWDB Population (# of people)	20,855	21,555	21,900	22,216	20,855	21,555	21,900	22,216		NA	NA	NA
++!/\\\	TWDB Water Demand (acft/yr)	3,980	4,014	3,999	4,016					699	299	999	899
בפעונ	EFS Study Water Demand* (acft/yr)					4,642	4,681	4,664	4,684	007	700	000	000
	Resulting Per Capita Water Use* (gpcd)	170	166	163	161	199	194	190	188	28	28	27	27
	TWDB Population (# of people)	10,875	11,725	12,275	12,825	10,875	11,725	12,275	12,825	NA	NA	NA	NA
::	TWDB Water Demand (acft/yr)	2,367	2,496	2,574	2,676					000 1	1 00 1	7110	1 163
	EFS Study Water Demand* (acft/yr)					3,396	3,581	3,693	3,839	1,029	T,005	1,119	1,103
	Resulting Per Capita Water Use* (gpcd)	194	190	187	186	279	273	269	267	84	83	81	81
	TWDB Population (# of people)	8,427	9,519	10,239	10,545	8,427	9,519	10,239	10,545	NA	NA	NA	NA
60	TWDB Water Demand (acft/yr)	1,206	1,320	1,391	1,418					OVV	001	500	713
GOII au	EFS Study Water Demand* (acft/yr)					1,646	1,802	1,899	1,935	4 5 5	704	000	710
	Resulting Per Capita Water Use* (gpcd)	128	124	121	120	174	169	166	164	47	45	44	44
	TWDB Population (# of people)	21,751	23,921	25,963	28,330	21,751	23,921	25,963	28,330	AN	AN	NA	NA
20/05	TWDB Water Demand (acft/yr)	4,767	5,133	2,505	2,968					ט	507	641	202
SOUTAIRS	EFS Study Water Demand* (acft/yr)					5,322	5,730	6,146	6,663	CCC	160	041	090
	Resulting Per Capita Water Use* (gpcd)	196	192	189	188	218	214	211	210	23	22	22	22
	TWDB Population (# of people)	15,456	15,938	15,968	15,968	15,456	15,938	15,968	15,968	AN	AN	NA	NA
20022	TWDB Water Demand (acft/yr)	3,497	3,537	3,494	3,473					041	100	170	771
Valley	EFS Study Water Demand** (acft/yr)					3,675	3,717	3,672	3,650	0/1	TOO	1/0	1//
	Resulting Per Capita Water Use* (gpcd)	202	198	195	194	212	208	205	204	10	10	10	10
	TWDB Population (# of people)	7,776	8,517	9,209	6,987	7,776	8,517	9,209	6,987	NA	NA	NA	NA
01000	TWDB Water Demand (acft/yr)	1,770	1,902	2,030	2,188					100	200	057	1 00 1
רמ סמווב	EFS Study Water Demand* (acft/yr)					2,604	2,799	2,987	3,219	400	160	700	т,00т
	Resulting Per Capita Water Use* (gpcd)	203	199	197	196	299	293	290	288	96	94	93	92
	TWDB Population (# of people)	7,687	7,929	7,985	8,119	7,687	7,929	7,985	8,119	AN	AN	NA	NA
ونهربام	TWDB Water Demand (acft/yr)	1,202	1,201	1,178	1,189					UOV	001	171	776
nei ugio	EFS Study Water Demand* (acft/yr)					1,682	1,681	1,649	1,664	001	100	4, I	Ť
	Resulting Per Capita Water Use* (gpcd)	140	135	132	131	195	189	184	183	26	54	53	52
	TWDB Population (# of people)	93,857	100,260	105,298	109,785	93,857	100,260	105,298	109,785	AN	NA	NA	NA
Victoria	TWDB Water Demand (acft/yr)	20,160	21,089	21,805	22,552					C 40 C-	207.6	27 270	1 781
VICTORIA	EFS Study Water Demand* (acft/yr)					17,188	18,381	19,576	20,771	716'7-	-2,700	-4,443	то/'т_
	Resulting Per Capita Water Use* (gpcd)	192	188	185	183	163	160	158	156	-58	-28	-27	-27

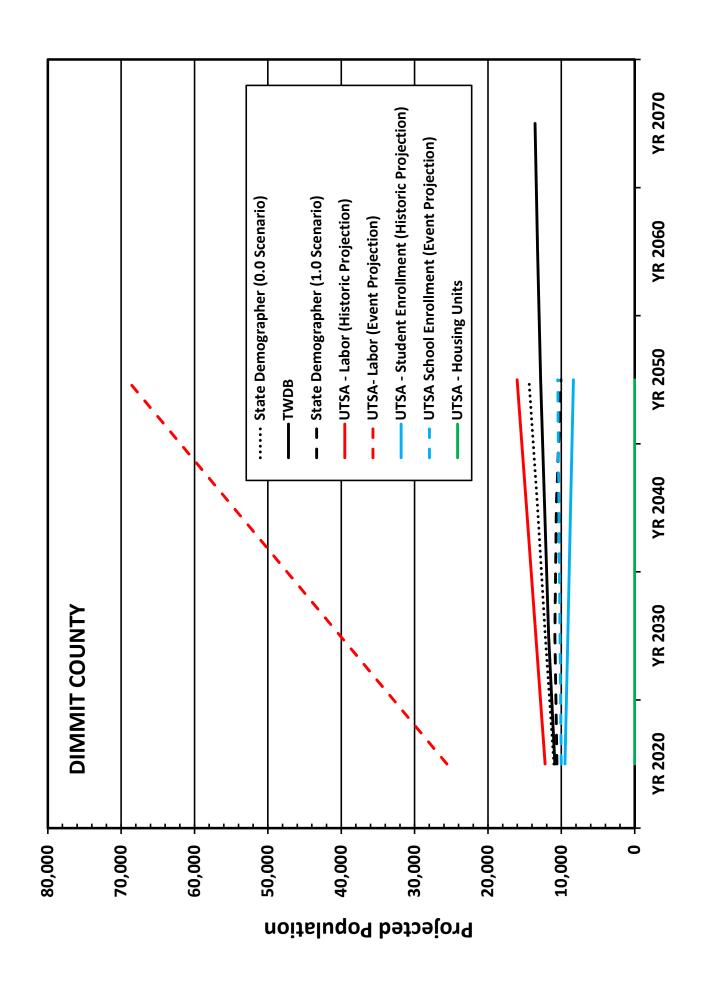
* Based on UTSA - Labor (Historic) Projection for Population and 2006 Per Capita Water Use ** Based on UTSA - Housing Units Projection for Population and 2006 Per Capita Water Use

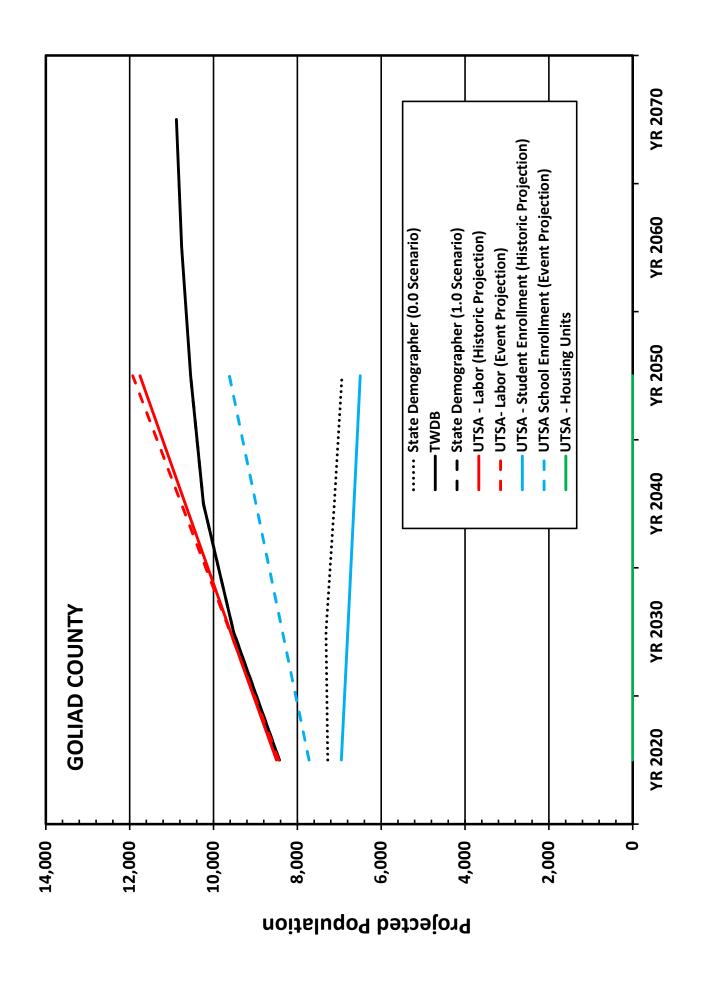
Appendix A

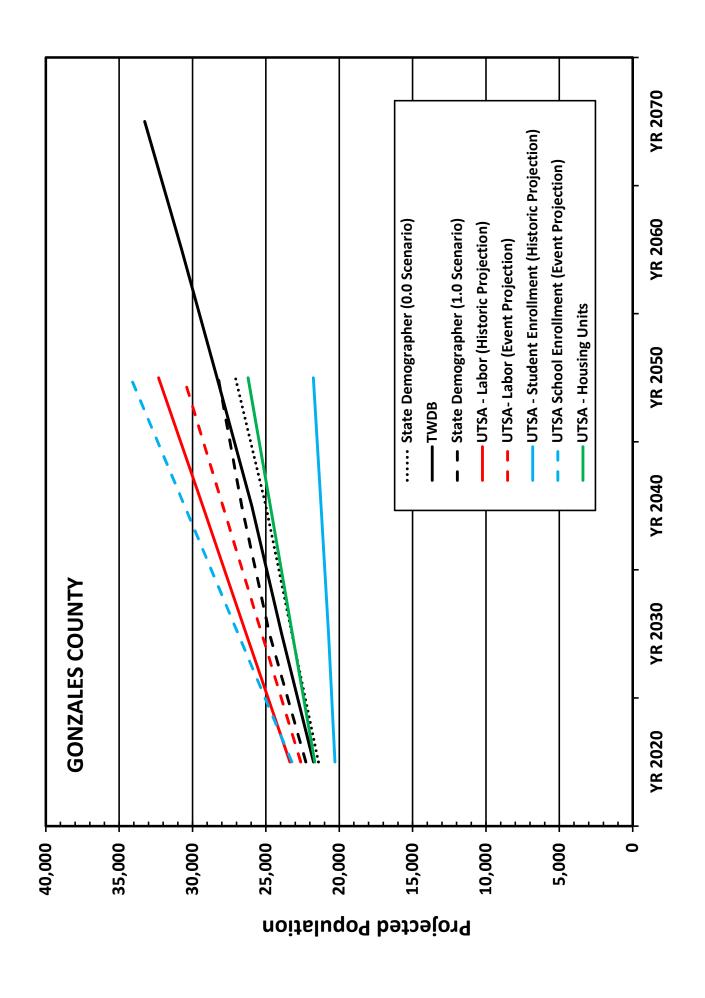
Population Projection Comparisons

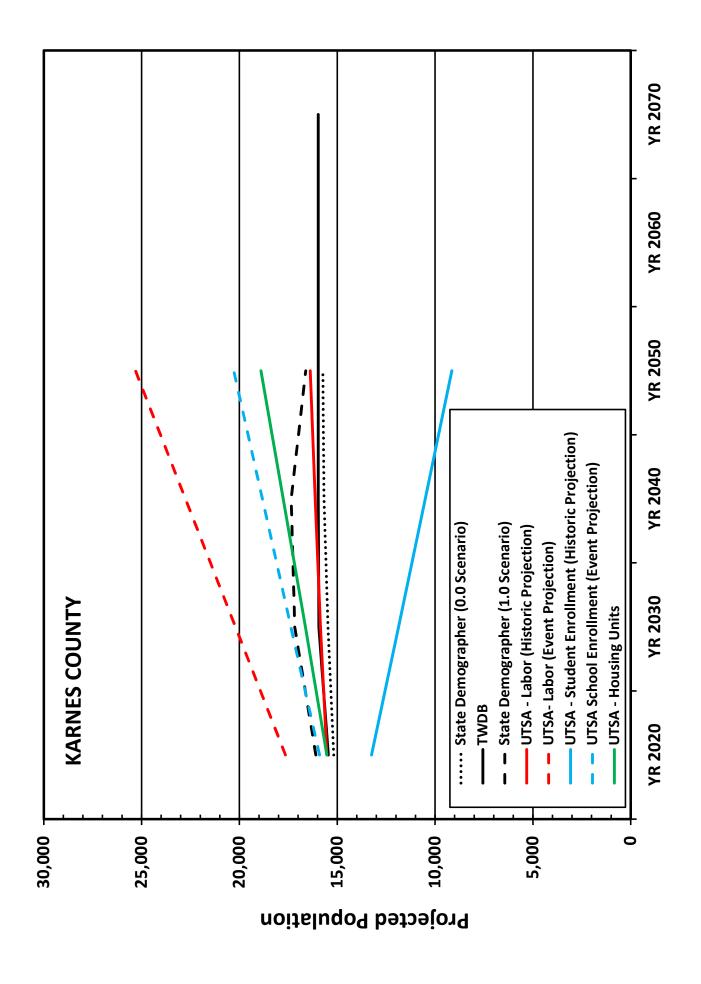
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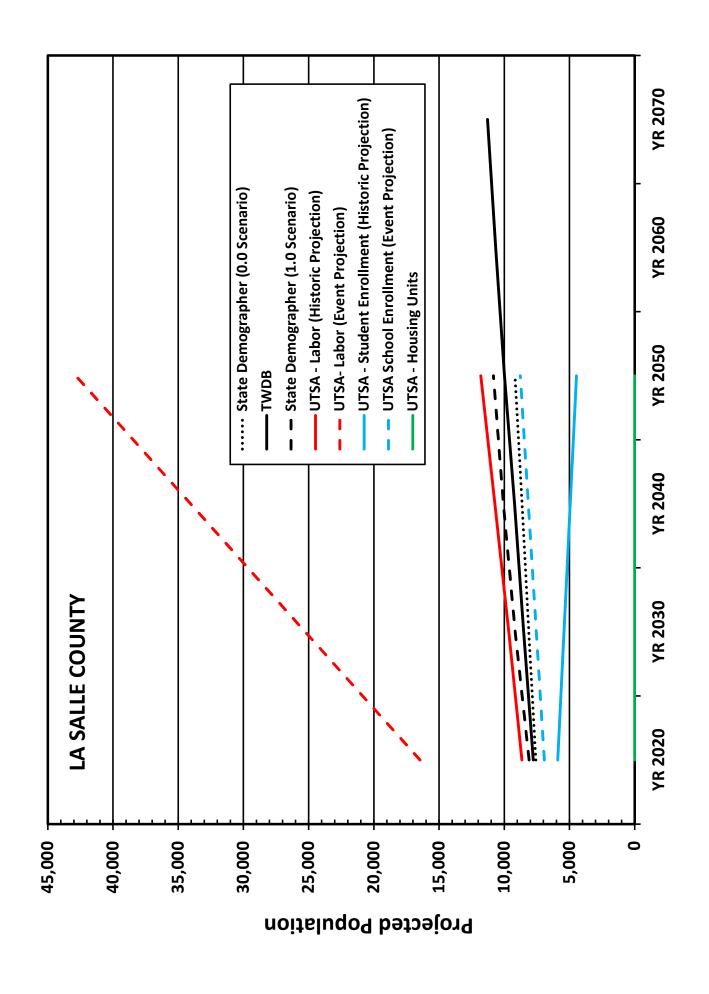


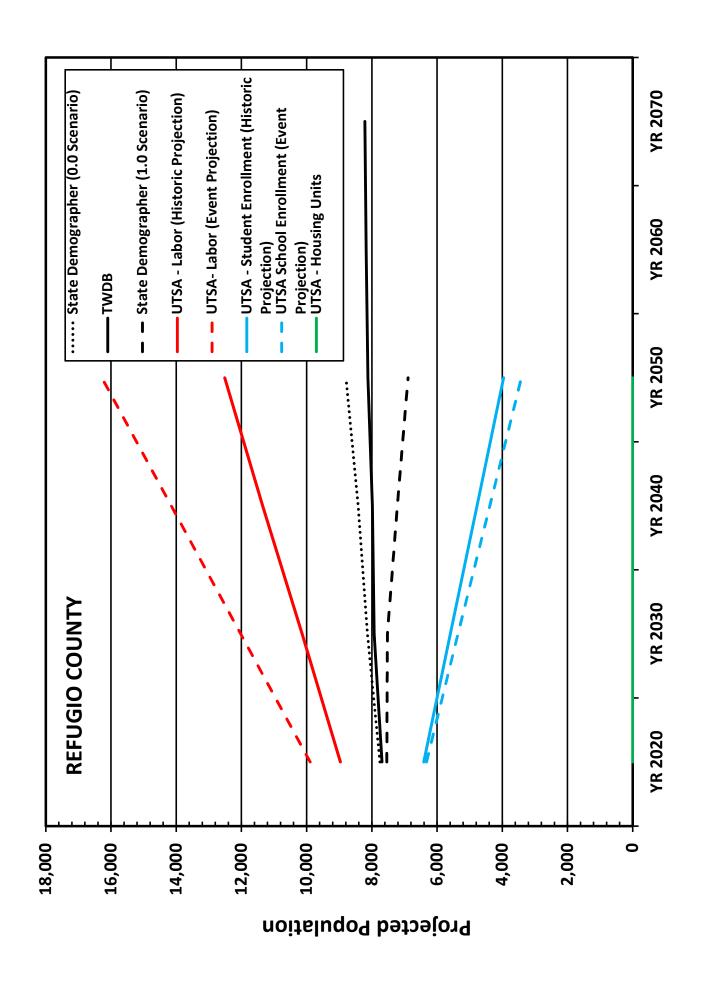


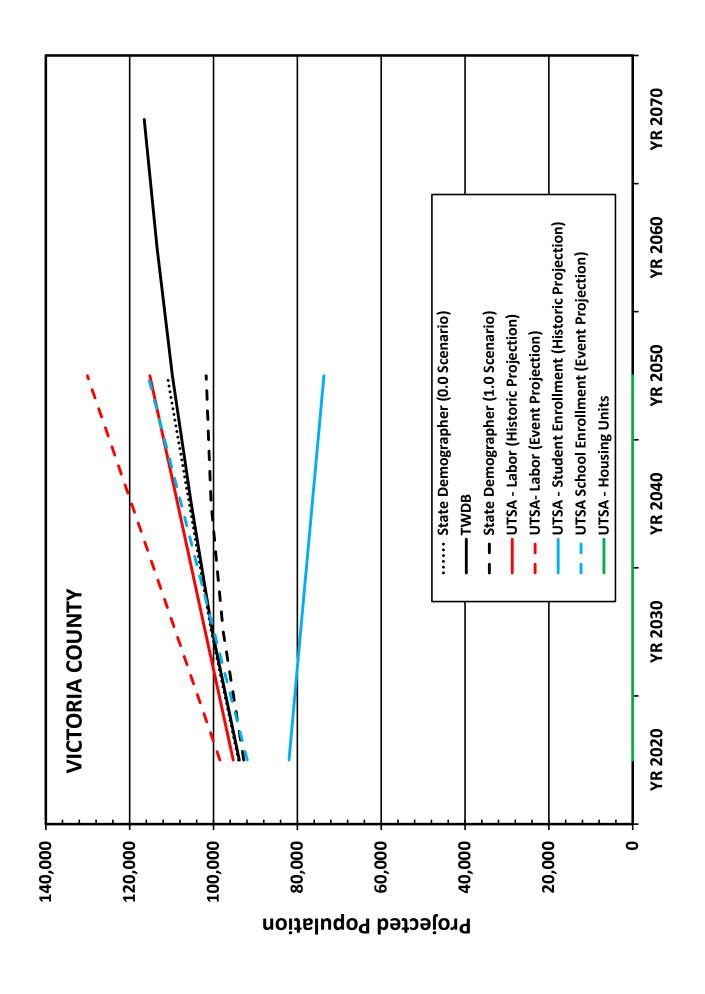








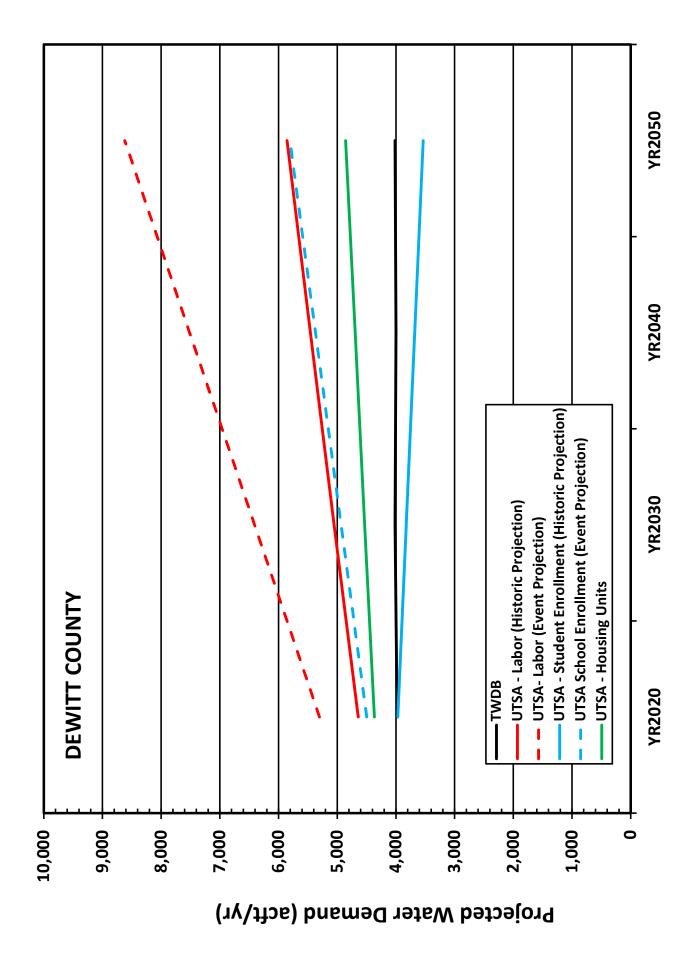


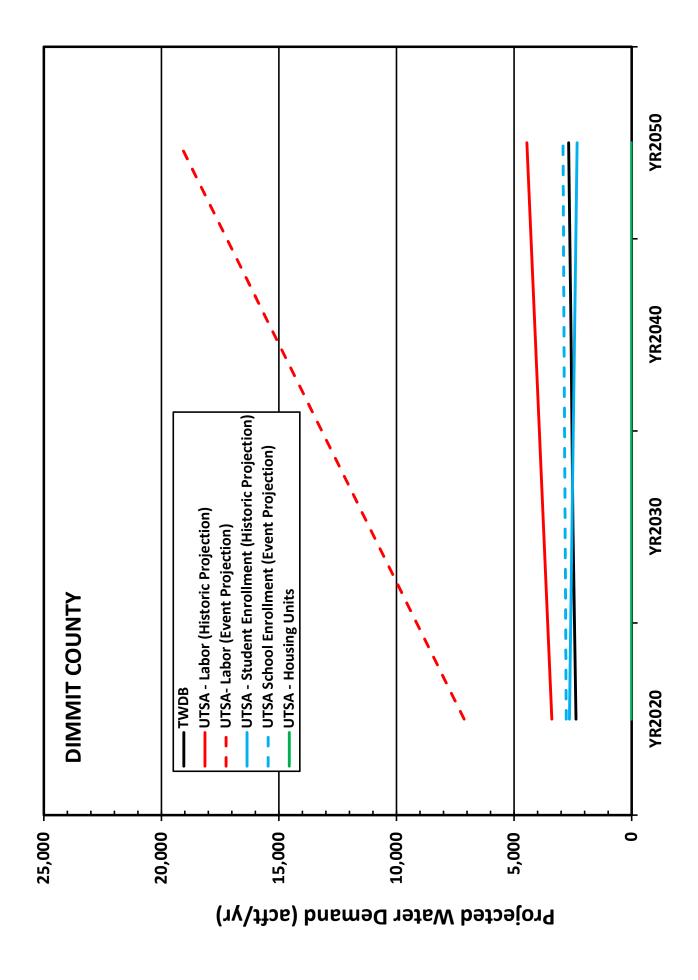


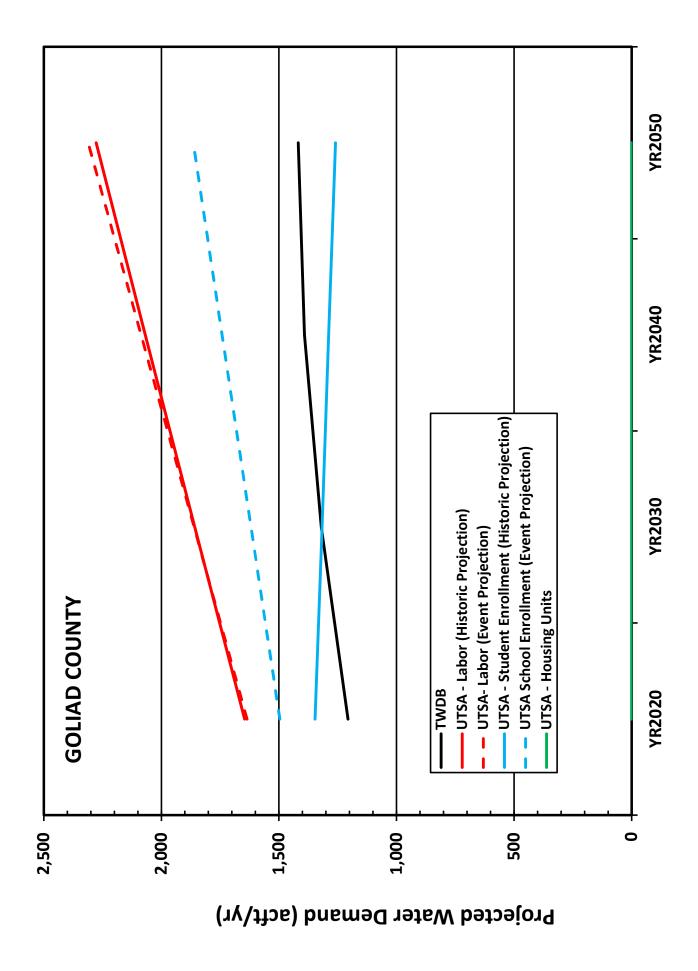
Appendix B

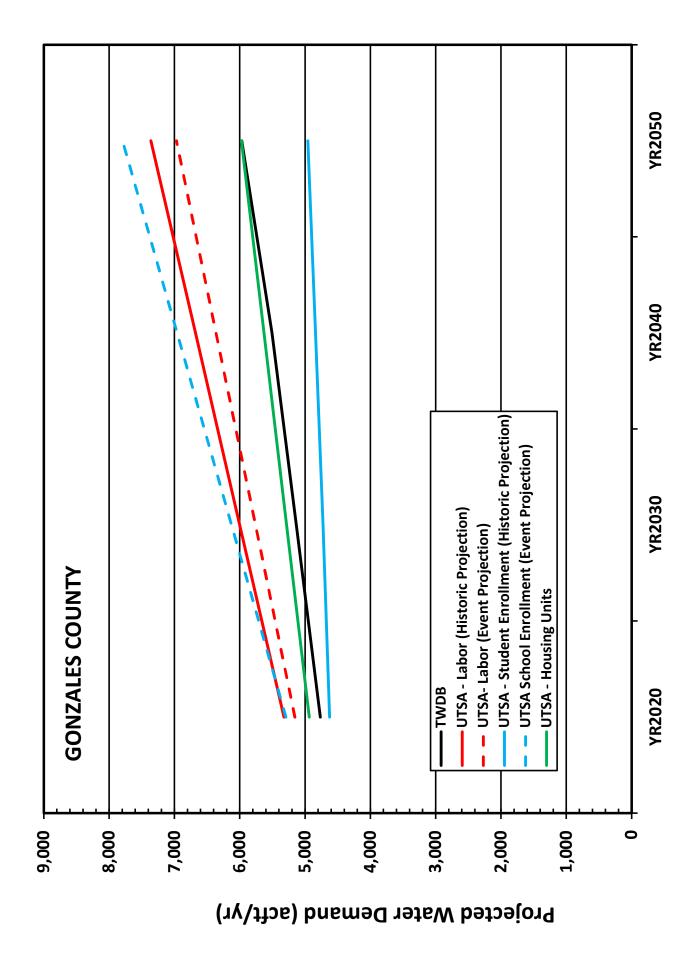
Water Demand Projection Comparisons

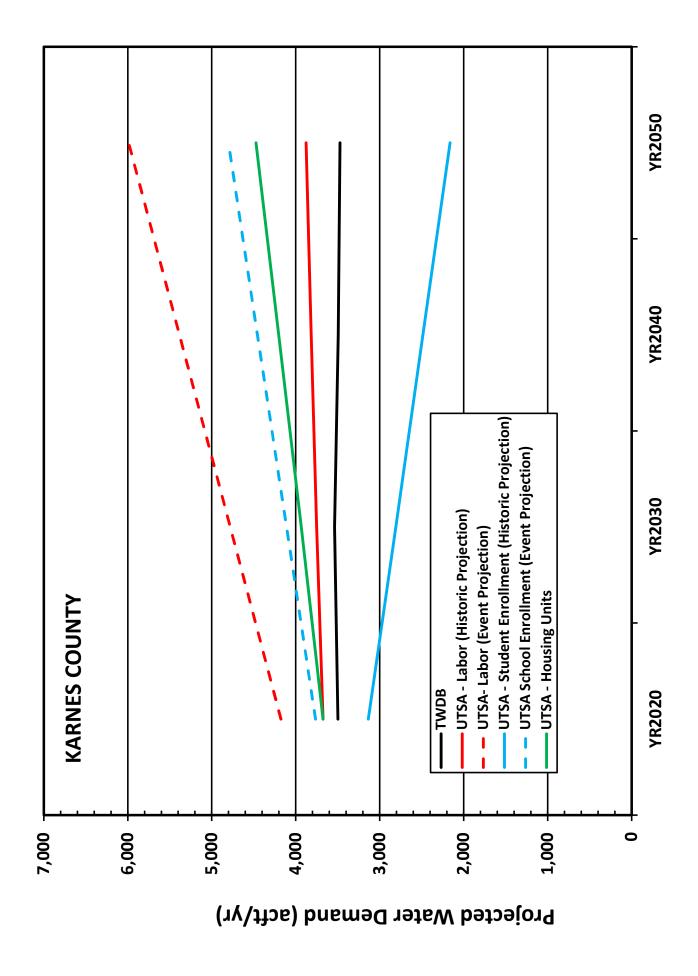
Phone: 512•912•5100 Fax: 512•912•5158 www.hdrinc.com

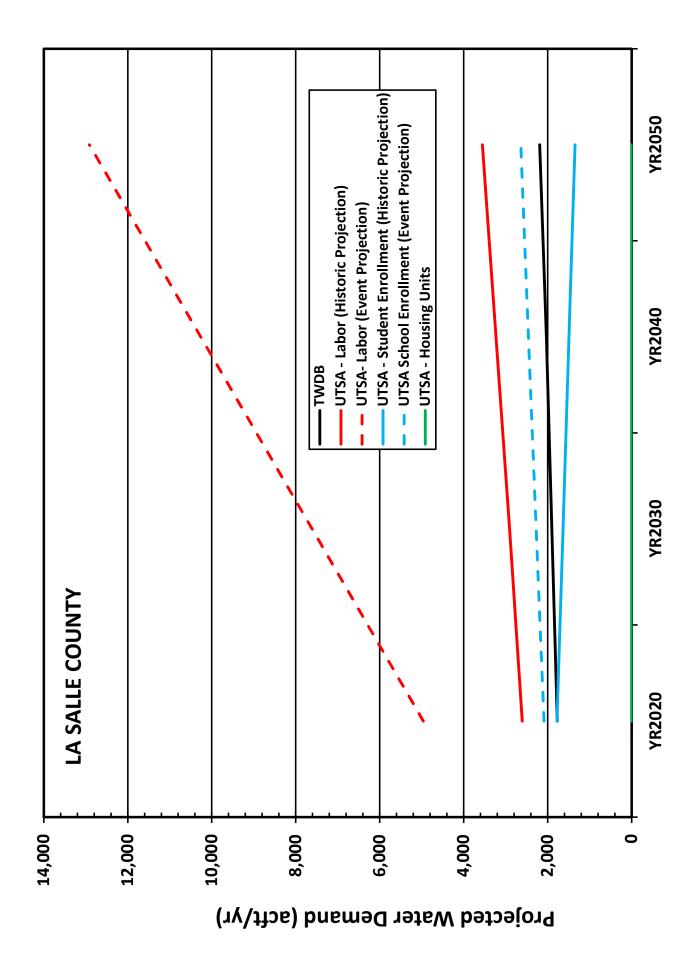


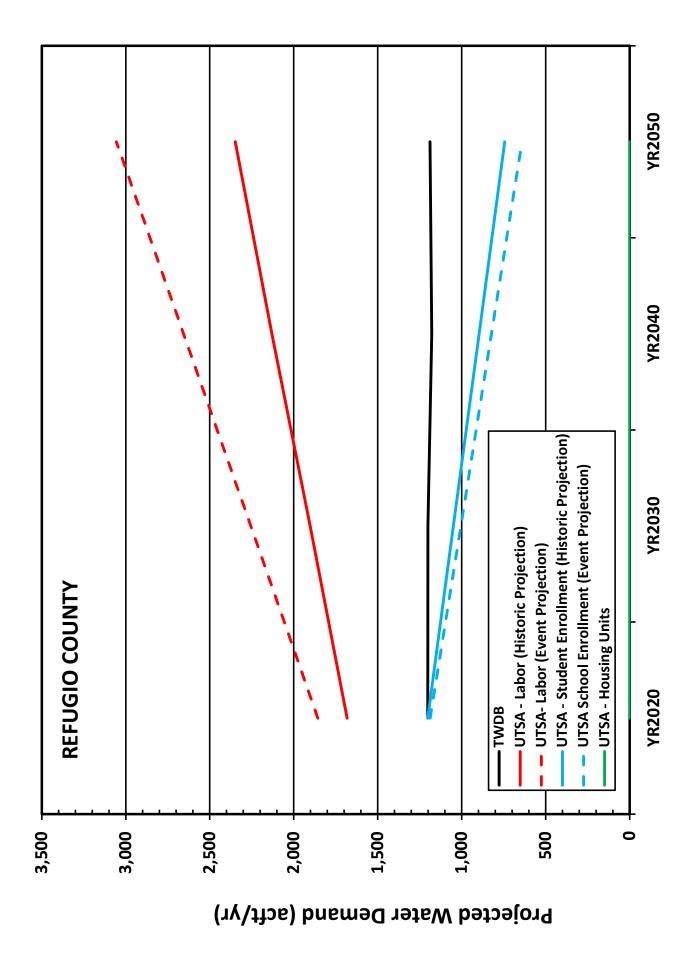


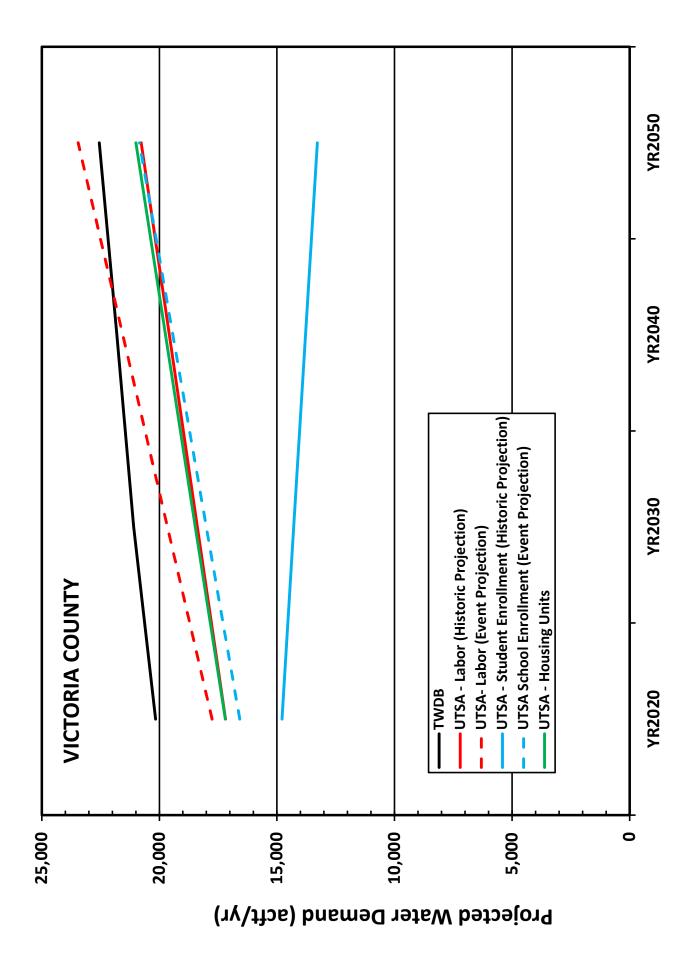












Carrizo Aquifer WMS Work Group Meeting Wednesday, May 22, 2013 at 1:00 pm

Attendees: Greg Sengelm

Gary Guy

Greg Sengelmann, Chair
Brian Perkins, HDR
Erin Newberry
Steve Raabe
Matt Nelson (via conference call)
Alan Cockerell
Con Mims
Jeanne Schnuriger
Steven Siebert

The second meeting of the Region L Work Group for the Carrizo Aquifer WMS' was held at the offices of the San Antonio River Authority on Wednesday May 22, 2013. Agenda items discussed were as follows:

1. Review and Discussion of Groundwater Conservation District Permitted Amounts for the Carrizo and Wilcox Aquifers

HDR provided an Excel spreadsheet breaking out the Carrizo-Wilcox Aquifer MAG and permit information they had to date. The spreadsheet was broken down by county, aquifer, GCD, etc. The spreadsheet reflected the Carrizo Aquifer information separate from the Wilcox Aquifer, with the understanding that the final plan will reflect both aquifers as combined.

Existing permitting information was supplied by the Gonzales County UWCD, the Plum Creek GCD, and the Guadalupe County GCD. Evergreen UWCD, Medina County GCD, and Uvalde County GCD either did not respond to the request for information or stated that they would get back to HDR in the future. The Wintergarden GCD stated that it had no idea how much water had been permitted in the Carrizo or Wilcox Aquifers. Information for Bexar County, which does not have a groundwater conservation district, was supplied by HDR. Copies of the HDR Carrizo and Wilcox Aquifer spreadsheets are attached.

2. Review and Discussion of Comparisons of GCD Permitted Amounts to the MAGs for the Carrizo and Wilcox Aquifers

A discussion ensued on whether permitted/grandfathered amounts equated to the actual pumpage that would occur in a district. The general consensus of the group was that we should assume that water that is permitted will be used by the permittee. If the permitted water is not used by the permittee then it was assumed that someone else would most likely purchase the water rights.

The HDR spreadsheet identified the MAG amounts by County which caused some confusion in the Gonzales and Caldwell County columns since both the Plum Creek GCD and the Gonzales County UWCD boundaries extend into Caldwell County. The Gonzales County Carrizo MAG for 2060 was 50,121ac-ft/yr. The current Gonzales County Carrizo permitted/grandfathered amount was 70,859 ac-ft/yr which leaves a deficit of 20,738 ac-ft/yr. The Caldwell County MAG for 2060 was 22,809 ac-ft/yr. The current permitted/grandfathered amount for Caldwell County was 16,454 ac-ft/yr, which appears to leave a surplus of 6,355 ac-ft/yr. Using these County permitted/grandfathered and MAG amount numbers, however, does not accurately portray how the groundwater aquifers work.

The Carrizo Aquifer extends from Caldwell County into Gonzales County and does not stop at the County line. Pumpage in either County would cause an aquifer response in the other County therefore the Carrizo permitted/grandfathered amounts and MAG amounts for each County should be viewed as a combined total. Taking this into account the Carrizo MAG amount for Caldwell/Gonzales Counties is 72,930 ac-ft/yr and the permitted/grandfathered amount is 87,313 ac-ft/yr which leaves a deficit of 14,383 ac-ft/yr for the Carrizo Aquifer. To fully understand the aquifer relations between the groundwater districts it would be useful to review permitted/grandfathered amounts versus MAG amounts by groundwater conservation districts.

3. Review and Discussion of Data Sources for Obtaining Groundwater District Exempt Use Amounts

The spreadsheet provided by HDR included exempt use amounts used during the GAM simulations, provided by TWDB for the years 2020 to 2060. No exempt use amount was available for Bexar County. The only groundwater district providing an alternative exempt use amount was the Plum Creek GCD. A discussion ensued on whether alternative exempt use amounts provided by GCDs would have to be approved by the TWDB before being available for use in the Regional Water Plan. The general consensus was that HDR should use the exempt use amounts from the TWDB GAM simulations. If a groundwater conservation district wanted to supply an alternative exempt use amount it would have to be approved by the TWDB prior to using it against the MAG.

4. Review and Discussion of How to Quantify Exempt Use Against MAGs

The general consensus was that the exempt use amounts provided by the TWDB during the GAM simulations were estimates of the future pumpage in a district and should be subtracted from the MAGs.

5. Set Date, Time, and Location of Next Meeting.

The Workgroup agreed to hold off on scheduling another meeting until additional permitting information was supplied to HDR by the groundwater districts that did not respond to the initial request for information. HDR Engineering would provide an update to the work group by July 1, 2013.

County	Aquifer	GCD	Category	Presently	Yr 2020	Yr 2030	Yr 2040	Yr 2050	Yr 2060	Notes
			MAG		9,167	9,167	9,167	9,167	9,107	
BEXAR	Carrizo	None	Exempt		N/A	N/A	N/A	N/A	N/A	
			Produced	12,819						
ATASCOSA			MAG		52,899	54,125	55,338	56,753	58,308	
	Carrizo	Evergreen UWCD	Exempt		557	422	321	242	184	
			Permitted	162,271						
			MAG		79,089	76,734	74,439	72,222	70,030	
FRIO	Carrizo	Evergreen UWCD	Exempt		645	719	781	826	849	
			Permitted	252,548						
			MAG		1,641	1,737	1,809	1,850	1,881	
KARNES	Carrizo	Evergreen UWCD	Exempt		4	4	5	5	5	
			Permitted	140,105						
			MAG		22,747	23,812	24,900	26,157	27,549	
WILSON	Carrizo	Evergreen UWCD	Exempt		741	997	1,246	1,503	1,769	
			Permitted	80,003						
			MAG		2,188	2,188	2,188	2,188	2,188	
DIMMIT	Carrizo	Wintergarden GCD	Exempt		457	474	476	466	443	
			Permitted							
	Carrizo	Wintergarden GCD	MAG		4,263	4,263	4,263	4,263	4,263	
LA SALLE			Exempt		278	303	322	334	341	No Information Available
			Permitted							
	Carrizo	Wintergarden GCD	MAG		25,276	25,038	24,944	24,874	24,649	
ZAVALA			Exempt		675	756	838	903	932	
			Permitted							
			MAG		23,324	23,111	23,111	22,809	22,809	
		Plum Crk GCD	Exempt	173	4	3	3	3	3	
CALDWELL	Carrizo		Permitted	0						
CALDWELL	Carrizo	Gonzles Co UWCD	Exempt		24	22	20	18	16	
			Grandfathered	5,000						
			Permitted	11,454						
	Carrizo	Carrizo Gonzles Co UWCD	MAG		41,113	46,391	50,003	50,121	50,121	
GONZALES			Exempt		1137	960	833	796	808	
GUNZALES			Grandfathered	9,250						
			Permitted	61,609						
GUADALUPE			MAG		7,329	7,634	8,810	9,162	9,500	
	Carrizo	Guadalupe Co GCD	Exempt		45	34	22	12	3	
			Permitted	6,389						
MEDINA	Carrizo	Medina Co GCD	MAG		402	400	400	400	400	Amount is combination of
			Exempt		164	193	219	244	266	Carrizo and Wilcox; Does not
			Permitted	994						have info for each aquifer
UVALDE			MAG		1,230	828	828	828	828	
	Carrizo	Uvalde Co UWCD	Exempt		29	33	36	39	40	Will Get Back To Us;
			Permitted							Called and Left Msg (7/19)

2016 South Central Texas Regional Water Plan Wilcox Aquifer MAG and Permit Information

County	Aquifer	GCD	Category	Presently	Yr 2020	Yr 2030	Yr 2040	Yr 2050	Yr 2060	Notes
			MAG		17,111	17,111	17,111	17,111	17,000	
BEXAR	Wilcox	None	Exempt		N/A	N/A	N/A	N/A	N/A	
			Produced	0						
ATASCOSA			MAG		15,877	16,244	16,609	17,033	17,500	
	Wilcox	Evergreen UWCD	Exempt		21	16	12	9	7	
			Permitted	1,425						
			MAG		0	0	0	0	0	
FRIO	Wilcox	Evergreen UWCD	Exempt		0	0	0	0	0	1
			Permitted	3,963						
			MAG		0	0	0	0	0	
KARNES	Wilcox	Evergreen UWCD	Exempt		0	0	0	0	0	
			Permitted	0						
			MAG		14,240	14,906	15,587	16,375	17,246	
WILSON	Wilcox	Evergreen UWCD	Exempt		109	147	183	221	260	1
			Permitted	1,673						
			MAG		1,171	1,171	1,171	1,171	1,171	
DIMMIT	Wilcox	Wintergarden GCD	Exempt		52	53	53	53	50	
			Permitted							1
	Wilcox	Wintergarden GCD	MAG		2,191	2,191	2,191	2,191	2,191	1
LA SALLE			Exempt		0	0	0	0	0	No Information Available
			Permitted							1
	Wilcox	Wintergarden GCD	MAG		10,583	10,483	10,444	10,414	10,320	
ZAVALA			Exempt		21	24	26	28	29	
			Permitted							
	Wilcox	Plum Crk GCD Gonzles Co UWCD	MAG		21,283	21,088	21,088	20,813	20,813	
CALDWELL			Exempt		105	95	87	79	72	
			Permitted	13,965						
CALDWELL			Exempt		31	28	25	23	21	
			Grandfathered	4,078						
			Permitted	0						
			MAG		21,203	23,926	25,788	25,849	25,849	
GONZALES	Wilcox	Gonzles Co UWCD	Exempt		78	65	57	54	55	
			Grandfathered	73						
			Permitted	0						
			MAG		3,505	3,651	4,213	4,381	4,543	
GUADALUPE	Wilcox	Guadalupe Co GCD	Exempt		219	164	105	61	14	
			Permitted	3,497						
		Medina Co GCD	MAG		2,144	2,134	2,134	2,134	2,134	
MEDINA	Wilcox		Exempt		385	455	515	573	626	*See Carrizo
			Permitted							
			MAG		0	0	0	0	0	
UVALDE	Wilcox	Uvalde Co UWCD	Exempt		14	16	18	19	20	
			Permitted	0						1

Discussion and Appropriate Action Authorizing Consultant to Work with TWDB to Negotiate/Resolve Any Issues Regarding Final Projections (Municipal and Non-Municipal)

Draft Population & Water Demand Projections Survey Results 4 Additions

2016 South Central Texas Regional Water Plan

August 1, 2013

4 Additional Revision Requests

Plum Creek Water Co: Revise Population Up;
 Based on Number of Connections and Master Plan

	2020	2030	2040	2050	2060	2070
TWDB Population	6,193	7,452	8,987	10,905	13,073	15,539
Plum Creek WC Population	13,350	19,800	19,800	19,800	19,800	19,800
TWDB Water Demand (acft/yr)	436	502	605	734	879	1,045
Plum Creek WC Water Demand (acft/yr)	940	1,334	1,333	1,333	1,331	1,331
TWDB Water Use (gpcd)	63	60	60	60	60	60
Plum Creek WC Water Use (gpcd)	63	60	60	60	60	60

- East Central SUD: Projections Should Include Portions of St Hedwig (779 connections) and New Berlin (161 connections).
 - Can be handled within Region L Planning Group

4 Additional Revision Requests (cont)

- County Line SUD: Revise Population, Water Demands Up; Overlap Situation Based on CCN and Number of Connections
 - Can be handled within Region L Planning Group
- **Buda**: Revise Water Demand Projections

2016 - Regional Water Demand Projection Comparisons										
BUDA	2016 Region K Projections	1,767	2,503	3,412	4,552	5,845	7,319			
	2016 Region L Projections	299	388	499	639	798	979			
	2016 Projections (Total)	2,066	2,891	3,911	5,191	6,643	8,298			
	2011 Region K Plan	2,128	2,603	3,088	3,666	4,140				
	2012 Projections Provided to HCPUA	2,625	3,720	4,166	4,412	4,524				
	Difference (2016 vs. HCPUA)	(559)	(828)	(255)	779	2,119				

Being Handled by Region K

Discussion and Appropriate Action Regarding Draft Water Needs, Initial List of Water Management Strategies, and Drought Response Survey to Water User Groups (WUG) and Discussions with Wholesale Water Providers (WWP) (Tasks 4A & 4B)

Discussion and Appropriate Action Regarding Evaluation of Potentially Feasible Water Management Strategies (Task 4B), Draft Scopes of Work and Budgets for Submittal to TWDB and Inclusion into Planning Contract, TWDB Contract No. 1148301323 (Task 4D)

TASK 4D WATER MANAGEMENT STRATEGIES Scope and Budget #2

Update Technical Evaluation including Cost Estimates

Update technical evaluation, including cost estimates and documentation, of the following water management strategies to be consistent with current projections of water supply needs and facilities planning pursuant to TWDB rules and guidance. Work effort involves coordination with sponsoring water user group(s), wholesale water provider(s), and/or other resource agencies regarding any changed conditions in terms of projected needs, strategy modifications, planned facilities, costs of water supply, endangered or threatened species, etc. Work effort includes research and revision of cost estimation procedures, cost estimates, and supporting documentation to reflect the September 2013 cost basis for the 2016 regional water plans pursuant to TWDB guidance.

Wells Ranch – Phase 2 (CRWA and Others)

\$12,200

Coordinate with CRWA in order to be consistent with latest plans regarding this water management strategy (WMS). Update technical evaluation to include information regarding current groundwater permit status with due consideration of Modeled Available Groundwater (MAG), delivery locations, and timeframe for implementation. Update estimated cost of project and technical evaluation documentation.

Brackish Wilcox for CRWA (Formerly Brackish Wilcox for the RWA)

\$12,200

Coordinate with CRWA in order to be consistent with latest plans regarding this WMS. Update technical evaluation to include information regarding current groundwater permit status with due consideration of MAG, delivery locations, and timeframe for implementation. Update estimated cost of project and technical evaluation documentation.

Hays/Caldwell PUA – Phases 1 & 2 (San Marcos, Buda, Kyle, CRWA)

\$21,600

Coordinate with H/C PUA to determine current plans regarding this WMS. Update/revise technical evaluation to include information regarding current groundwater permit status with due consideration of MAG, delivery locations, and timeframe for phasing and implementation. Update phase quantities as they coincide with end user demands. Update estimated cost of project and technical evaluation documentation.

CRWA Siesta Project (CRWA)

\$14,500

Coordinate with CRWA in order to be consistent with latest plans regarding this WMS. Update technical evaluation to include information regarding current status of water rights leases and/or purchases, commitments of reuse water as backup supply, delivery locations, and timeframe for implementation. Update estimated cost of project and technical evaluation documentation.

Brackish Wilcox for SAWS

<u>\$17,400</u>

Coordinate with SAWS in order to be consistent with SAWS Water Plan and latest studies. Since the last plan, the locations of Phases 2 & 3 have changed, and the quantities of the phases have increased. Update technical evaluations to include information regarding location, phasing, and planned quantities; current permit status with due consideration of MAG; delivery locations; and timeframe for implementation. Update estimated cost of project and technical evaluation documentation.

Expanded Local Carrizo – Bexar County (SAWS)

\$14,000

Coordinate with SAWS in order to be consistent with SAWS Water Plan. Update technical evaluations to include information regarding delivery locations and timeframe for implementation. Update estimated cost of project and technical evaluation documentation.

Brackish-Wilcox, Gonzales County (SSLGC)

\$13,250

Coordinate with SSLGC in order to be consistent with latest plans regarding this WMS. Update technical evaluation to include information regarding current groundwater permit status with due consideration of MAG, delivery locations, and timeframe for implementation. Update estimated cost of project and technical evaluation documentation.

Texas Water Alliance Carrizo Well Field, Gonzales County (TWA)

\$18,100

Coordinate with TWA in order to be consistent with latest plans regarding this WMS. Since the last regional plan, pipeline alignments and end-users have been changed/added. Update technical evaluations to include information regarding current groundwater permit status with due consideration of MAG, potential customers/delivery locations, and timeframe for implementation. Update estimated cost of project and technical evaluation documentation.

Carrizo-Wilcox Aquifer, Wilson County (Cibolo Valley Local Government Corporation)

\$18,600

Coordinate with CVLGC in order to be consistent with latest plans regarding this WMS. Update technical evaluations to include information regarding current groundwater permit status with due consideration of MAG, potential customers/delivery locations, and timeframe for implementation. Update estimated cost of project and technical evaluation documentation.

GBRA Mid-Basin Project and Alternatives (GBRA)

\$10,900

Coordinate with GBRA in order to be consistent with latest plans regarding this WMS and three alternatives. The four WMSs/alternatives include:

- 1. Conjunctive use of Guadalupe River diversions and Carrizo groundwater with co-located ASR;
- 2. Conjunctive use of Guadalupe River diversions and Carrizo groundwater with remote ASR;
- 3. Guadalupe River diversions with ASR and interim back-up supply; and
- 4. Guadalupe River diversions with off-channel storage.

Update to include only integration of work done in the Mid-Basin Water Supply Project Feasibility Study into the 2016 SCTRWP.

GBRA Lower Basin Off-Channel Reservoir (GBRA)

\$18,900

Coordinate with GBRA in order to be consistent with latest plans regarding this WMS. Update technical evaluation to include information regarding current configuration and timeframe for implementation. Update estimated cost of project and technical evaluation documentation.

GBRA Lower Basin New Appropriation (GBRA)

\$19,100

Coordinate with GBRA in order to be consistent with latest plans regarding this WMS. Update technical evaluation to include information regarding current TCEQ water rights application status, potential customers, delivery locations, and timeframe for implementation. Update estimated cost of project and technical evaluation documentation.

Total = \$190,750

Previously Authorized (May 2013) = \$60,700

Grand Total = \$251,450

Discussion and Appropriate Action Regarding Authorizing Political Subdivision to Submit Request for Notice-to-Proceed for Evaluation of Twelve Water Management Strategies and Authorize Administrator to Execute Contract Amendment with TWDB

Discussion and Appropriate Action Regarding Identification of Potentially Feasible Water Management Strategies (Task 4B), Draft Scopes of Work and Budgets for Consideration at the Next South Central Texas Regional Water Planning Group Meeting

List of Potential Water Management Strategies to Be Scoped for November 2013 SCTRWPG Meeting

Edwards Transfers

Purchase from WWP

Water Resources Integration Pipeline (SAWS)

Advanced Meter Infrastructure (SAWS)

Regional Water Supply Project — RFCSP (SAWS)

Regional Brackish Wilcox Project — Alternative (SAWS)

Integrated Water-Power Project (GBRA)

Luling ASR (GBRA)

New Braunfels ASR Project (NBU)

New Braunfels Trinity Well Field (NBU)

New Braunfels Reuse Project (NBU)

Expansion Carrizo-Wilcox Aquifer, Guadalupe Co (SSLGC)

Lavaca River Off-Channel Reservoir

Brackish Wilcox Groundwater for SS WSC

Carrizo/Buda/Austin Chalk/Leona & Regional ASR (City of Uvalde)

Possible Agenda Items for the Next South Central Texas Regional Water Planning Group Meeting