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EXECUTIVE COMMITTEE

Con Mims
Chair / River Authorities
Mike Mahoney
Vice-Chair / Water Districts
Gary Middleton
Secretary / Municipalities
Evelyn Bonavita
Public
Ron Naumann
Water Utilities

DATE: March 1, 2013

MEMBERS

Jason Ammerman
Industries
Dr. Donna Balin
Environmental
Vacant
Small Business
Karl Dreher
Water Districts
Greg Sengemann
Water Districts
Kevin Janak
Electric Generating/Utilities
Rey Chavez
Industries
Bill Jones
Agriculture
John Kight
Counties
Alan Cockerell
Agriculture
Will Conley
Counties
Tim Andruss
Water Districts
Iliana Peña
Environmental
Steve Ramsey
Water Utilities
Suzanne Scott
River Authorities
Milton Stolte
Agriculture
Thomas Taggart
Municipalities
Bill West
River Authorities
Robert Puente
Municipalities
Tony Wood
Small Business
Vic Hilderbran
GMA 7
Don Dietzmann
GMA 9
Dan Meyer
GMA 10
Diane Savage
GMA 13
Art Dohmann
GMA 15

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, March 14, 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.

A handwritten signature in black ink that reads "Gary Middleton".

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, March 14th, 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. Election of Officers for Calendar Year 2013
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)
5. Status of Edwards Aquifer Habitat Conservation Plan (HCP)
6. Report, Discussion and Appropriate Action from Work Groups
 - EAA HCP Work Group - Tom Taggart, Chair
 - 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
7. Texas Water Development Board (TWDB) Communications
 - Presentation on Revised Regional Water Planning Rules
8. Discussion and Appropriate Action Regarding Legislative Activities
9. Discussion and Appropriate Action Regarding Consultants Work and Schedule
10. Discussion and Appropriate Action Regarding Submittal to the TWDB of Revised Non-Municipal Water Demand Projections for Mining as a Result of the Revised Bureau of Economic Geology (BEG) Report (Task 2A) and Steam-Electric Revision Request
11. Presentation and Discussion Regarding Population and Population-Related Water Demand Projections (Task 2B)

12. Discussion and Appropriate Action Regarding Evaluation of Potentially Feasible Water Management Strategies (Task 4B), Draft Scope of Work and Budget for Submittal to TWDB and Inclusion in Technical Memorandum
13. Possible Agenda Items for the Next South Central Texas Regional Water Planning Group Meeting
14. 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.

www.RegionLTexas.org

AGENDA ITEM 1

Public Comment

AGENDA ITEM 2

Approval of Minutes

**Minutes of the
South Central Texas Regional Water Planning Group
November 1, 2012**

The meeting was called to order at 10:00 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-five of the 29 voting members, or their alternates, were present.

Voting Members Present:

| | |
|----------------------------------|----------------------------------|
| Gená Leathers for Jason Ammerman | Dan Meyer |
| Tim Andruss | Con Mims |
| Donna Balin | Ron Naumann |
| Evelyn Bonavita | Iliana Peña |
| Alan Cockerell | Charles Ahrens for Robert Puente |
| Will Conley | Steve Ramsey |
| Don Dietzmann | Suzanne Scott |
| Art Dohmann | Greg Sengelmann |
| Rick Illgner for Karl Dreher | Milton Stolte |
| Vic Hilderbran | Tom Taggart |
| Kevin Janak | Tommy Hill for Bill West |
| Kenneth Eller for Bill Jones | Tony Wood |
| John Kight | |

Voting Members Absent:

Rey Chavez
Mike Mahoney
Gary Middleton
Diane Savage

Non-Voting Members Present:

Norman Boyd, Texas Department of Parks and Wildlife (TPWD)
Ron Fieseler, Region K Liaison
Matt Nelson, Texas Water Development Board (TWDB)
Steve Ramos, South Texas Water Master, Texas Commission of Environmental Quality (TCEQ)

AGENDA ITEM NO. 1: Public Comment

There was no public comment at the time.

AGENDA ITEM NO. 2: Approval of Minutes

Chairman Con Mims asked if there were any additions or corrections to the minutes from August 2, 2012. Erin Newberry, SARA, stated there is one correction, on page 7, Agenda Item No. 12, in the last paragraph. The request to submit the non-municipal draft projections and related documentation for requested revisions to TWDB should not have Agriculture as a category. Agriculture and Livestock are the same category and only Livestock should be stated. Ron Naumann made a motion to approve the minutes as corrected. Milton Stolte seconded the motion. The motion carried by consensus.

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

Nathan Pence, HCP Officer for the Edwards Aquifer Authority (EAA), provided an update of EAA HCP Implementing Committee activities to date to the Planning Group. Mr. Pence stated the required public meetings to allow public comment on the draft Environmental Impact Statement (EIS) and draft Habitat Conservation Plan have been conducted. The public comment received was positive overall and all comments have been responded to.

The final draft of the HCP has been forwarded US Fish and Wildlife Services and is making its way through the regional offices. It is anticipated that within three to four weeks, a Notice of Intent to issue the Incidental Take Permit will be published in the Federal Register. The goal is an Incidental Take Permit and Management Plan for the Edwards Aquifer in place per requirements by January 1, 2013.

The Edwards Aquifer HCP is moving from the planning process to the implementation phase by January 1, 2013. Agencies are in the process of securing needed permits and we are going through the final stages of securing all the funding applications for 2013. Funding applications are due to go to the EAA Board of Directors at the December board meeting.

The EAA has introduced a new website for the Edwards Aquifer Habitat Conservation Plan at www.eahcp.org and we encourage everyone to check the website for updates.

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), provided a brief update to the Planning Group on current GSA BBASC activities. Ms. Scott informed the Planning Group we recently had a stakeholder committee meeting in Victoria and the stakeholder group is putting together comments to submit to the Science Advisory Committee (SAC) on lesson learned during the Environmental Flows process, opportunities to address or aspects of Senate Bill (SB) 3 that could be modified based on our experience of going through the process once. The SAC may then submit those comments to the Environmental Flows Advisory Group and it is anticipated they would then make legislation recommendations for the Legislature to consider during this next round of legislation. The current legislation does not lay out a process of "what we do next", or if there will be a next round. The GSA BBASC has a Work Plan for Adaptive Management in place, but no funding to

implement aspects of the Work Plan. At this time, it is not certain if the committee that exists today will exist in the future.

Con Mims, Chair of the Nueces River and Corpus Christi and Baffin Bays Stakeholder Committee (BBASC), stated the Nueces BBASC submitted its report August 22, 2012 and has not yet received a response on the report. The Nueces BBASC is currently developing its Work Plan for Adaptive Management and expects to have the final draft approved by the BBASC stakeholders on December 6, 2012 and submitted to Texas Commission of Environmental Quality (TCEQ) by December 31, 2012. Mr. Mims stated to keep in mind the flow regimes being recommended be built into the TCEQ permitting process will be flow regimes that, as a Planning Group, will need to respect as the Region L Planning Group moves forward through the planning process.

AGENDA ITEM NO. 5: Chair's Report

Mr. Mims had no report at the time.

AGENDA ITEM No. 6: Discussion and Appropriate Action Authorizing Administrator to Solicit Nominations for Vacant Planning Group Position

Mr. Mims informed the Planning Group of the resignation of Darrell Brownlow, who represented the Small Business interest category. Mr. Mims asked the Planning Group if it would prefer to authorize the Administrator to begin the solicitation process for Mr. Brownlow's vacancy, or solicit the vacancy in May with all other vacancies that are expiring at that time. Mr. Mims reminded the Planning Group that the Interest will continue to be represented on the Planning Group by Tony Woods.

Ms. Scott made a motion to leave the position vacant until the nomination process begins at the May Planning Group meeting. Evelyn Bonavita seconded the motion. The motion carried by consensus.

AGENDA ITEM NO. 7: Texas Water Development Board (TWDB) Communications

Matt Nelson, TWDB, informed the Planning Group the Regional Water Planning Grant to complete the 2106 Regional Water Plan (RWP) for Region L was approved by the Board at its October meeting. The board authorized the allocation of funding and amendments to all the contracts. Mr. Nelson stated the Administrator, SARA, will receive an amendment to the existing contract in the next couple of weeks for execution.

Mr. Nelson stated as part of the contract amendment, there are updates to the guidance documents and deadlines have been revised due to the delay in the new census data. TWDB is awaiting the final version of the population projections. Once received, TWDB will require about three months to develop projections at the county and water user group level. The current deadline for Planning Groups to submit their proposed revisions and/or recommendations on population and water demand projections to TWDB is July 1, 2013. The revised deadline to submit an adopted regional water plan is November 1, 2015.

Mr. Nelson informed Planning Group members that he will provide an overview and training of the revised water planning requirements, which were discussed during the rules revisions

process in previous meetings and are included in the contract amendment. The revised rules revisions include tasks Planning Groups have been doing, new requirements based on statutory requirements passed by Legislature, as well as the rules being more clearly stated in a manner that follows the actual “way things are done” in the regional water planning process.

Ms. Scott asked Mr. Nelson if TWDB or the State Demographer took the populations shifts in counties affected by Eagle Ford Shale into consideration when developing the respective projections. Mr. Nelson stated he didn’t believe specific population shifts due to recent activities were considered, but the Planning Group may do so at their level. Any requests for revisions by the Planning Group must be accompanied by supporting documentation. Ms. Scott asked if the Planning Group can do anything to prepare itself for questions or concerns from the public regarding population and water demand projections in the region. Mr. Mims asked the Planning Group if a work group could convene and begin studying the effects on population and water resources in Region L. Ms. Scott will chair the work group and Mr. Mims appointed Iliana Pena, Tony Wood, Art Dohmann, Donna Balin, Mike Mahoney, Greg Sengemann and Don Dietzmann as members of the work group. Mr. Mims asked a report be given at the next Planning Group meeting.

Mr. Mims asked Mr. Nelson if the unique stream segments, designated by Region L in the 2011 RWP, will be approved by Legislature this session and does the Planning Group need to take any action. Mr. Nelson stated the designated unique stream segments have been adopted into the 2012 State Water Plan and the Legislature will need to take action. Steve Raabe, SARA, recommended Planning Group members work through their local legislative representatives to encourage legislators to take action on recommended designated unique stream segments.

AGENDA ITEM NO. 8: Discussion and Appropriate Action Regarding Consultants Work and Schedule

Brian Perkins, HDR Engineering, reviewed the current schedule and revised TWDB deadlines for certain tasks with the Planning Group.

Mr. Perkins stated work could begin on Task 3, Evaluate Water Availability and Existing Supplies as Managed Available Groundwater (MAGs) numbers have been uploaded into TWDB’s database, while waiting for population and water demand projections (Task 2) from TWDB.

Mr. Perkins also stated discussions on evaluations of water management strategies could also begin. The Planning Group may authorize the consultant to begin developing draft scopes of work and budgets on certain water management strategies (WMS’).

Mr. Perkins presented “Regional Water Planning – What to Expect for 2016 Plan” and graphically showed how new or revised data will change the 2016 planning process from the 2011 planning process. New census numbers, modeled available groundwater (which affects existing supplies and new projects), changes to hydrologic assumptions, and environmental flows will all be taken in to consideration during this planning process and will require planning group input and/or decisions that will ultimately affect water management strategies and/or consideration of new projects.

Mr. Perkins informed the Planning Group through the hydrologic assumptions approval process, TWDB stated we are to use of SB3 values regarding the Edwards Aquifer, in terms of triggers and cutbacks, until such time the HCP is adopted and approved by US Fish and Wildlife. At that

time, the Planning Group will need to decide to continue to use SB3 values or use the new HCP values. The final decision affects all aspects of modeling, i.e., existing supplies, future projects and cumulative effects.

The implementation of the HCP will also need to be considered by the Planning Group as either an existing supply or a water management strategy. As a water management strategy (potentially in four pieces), at the planning group could use an existing supply of 320,000 ac-ft level for pumpage from the Edwards Aquifer and the spring flows consistent with the SB3 triggers and cutbacks. Utilizing this strategy, in times of critical drought, the springs will go dry. When the planning group begins looking at new strategies, the Edwards Aquifer, using 320,000 ac-ft, the spring flows or other projects, like surface water projects that depend on the spring flows, we would use the SB3 values. However, one of the strategies in the future supplies will be the implementation of the HCP. When performing the cumulative effects analyses begins, everything gets added together, including the implementation of the HCP and all other projects and the HCP spring flow values would be used. Using the HCP values as a recommended water management strategy would allow higher spring flow values coming out of the springs.

In response to additional questions from the planning group regarding timing of the implementation of the HCP and the evaluation of existing supplies, Mr. Mims recommended an EAHCP Work Group be created to assist HDR and coordinate discussions between HDR and the EAHCP Implementing Committee. Mr. Mims asked Mr. Taggart to Chair the Work Group and Tommy Hill, Steve Ramsey, Chuck Ahrens and Steve Raabe to make up the Work Group. Mr. Mims asked Mr. Taggart to work with HDR and the EAHCP Implementing Committee to consider the different options for implementing the HCP into the 2016 RWP, and for the Work Group to report back at the next Region L meeting their recommendation on how the HCP may be considered a water management strategy. Mr. Perkins also requested the Workgroup to weigh in on how existing surface water supplies should be evaluated with regards to the Edwards Aquifer springflows: using SB3 spring flows or HCP spring flows.

In reviewing the slide, "Regional Water Planning What to Expect for 2016 Plan", other changes in hydrologic assumptions between the 2011 RWP and the 2016 RWP with regards to existing supplies, there aren't many changes to how analyses will be done. With regards to evaluating new surface water management strategies, it is required we use TCEQ WAM (Water Availability Model) and we will not be allowed to use return flow in those analyses, unless the new strategy specifically includes effluent in its plan. Mr. Perkins stated there are also ongoing SB2 Instream Flow studies that feed in to SB3 recommendations and TCEQ standards on surface water permits.

AGENDA ITEM NO. 9: Discussion and Appropriate Action Regarding Submittal of Non-Municipal Water Demand Projections to TWDB

Mr. Perkins presented additional documentation on behalf of several entities requesting revisions to Mining and Irrigation draft projections from TWDB. Mr. Perkins reminded Planning Group members that at the August 2, 2012 Region L meeting, the planning group approved the draft non-population water demand projections for all categories, with the exception of Irrigation and Mining. Several members requested additional time to review the projections and supply documentation to verify a potential request for revisions for their counties. Greg Sengelmann stated he didn't see Gonzales County Groundwater Districts' irrigation numbers in the projections TWDB has provided and he had sent all documentation to TWDB before the draft projections were released. Mr. Sengelmann asked when those revisions would be accounted for.

Victoria County Groundwater Conservation District has requested a revision to Victoria County's irrigation projections to 21,215 ac-ft for years 2020 through 2060 based on documentation provided to them from irrigators in their county. Mr. Mims asked the Planning Group if they had any objections to asking TWDB to review the documentation provided by Victoria County and determine if it is adequate or not for the requested revision. There were no objections by the Planning Group.

Mr. Nelson stated additional requests for revisions to the projections must go through the Planning Group for approval, but TWDB will accept requested revisions from the Planning Group, with proper support documentation.

Mr. Mims asked the Planning Group if the previously approved Irrigation revisions requested by Goliad and DeWitt Counties at the August 2, 2012 meeting were still acceptable to the Planning Group. The Planning Group confirmed their recommendation for the requested revisions stands as approved.

Mr. Woods made a motion to approve Victoria County's request for increased Irrigation demands with a provision the Planning Group requests the right to revise the non-population water demand projections in the future, with proper documentation by requesting authority, so long as TWDB will accept the revisions. Evelyn Bonavita seconded the motion. The motion carried by consensus.

Mr. Perkins informed the Planning Group the draft projections for Calhoun County for Manufacturing did not cover Formosa Plastics need for 10,000 ac-ft. Mr. Perkins suggested the Planning Group keep the 2012 water demands projections which will account for the 10,000 ac-ft needed by Formosa Plastics rather than accept the TWDB projection for 2017. The Planning Group had no objections to this change.

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.

AGENDA ITEM NO. 10: Discussion and Appropriate Action Regarding Evaluation of Potentially Feasible Water Management Strategies

Mr. Perkins reviewed a listing of Potentially Feasible Water Management Strategies with the Planning Group. The listing includes WMSs presently listed in the 2011 RWP, as well as those WMSs HDR is aware of as potentially new WMSs and "dead" projects that will be pulled from the list. This listing will continue to be updated and presented to the Planning Group at each meeting and changes presented to the Planning Group. Mr. Perkins reminded the Planning Group in accordance with the TWDB Contract, HDR must draft scopes of work and budgets on identified potential WMSs and include the information into the Technical Memorandum to be submitted to TWDB. TWDB will provide a written notice to proceed to HDR to begin evaluating

WMSs. HDR may begin, at the Planning Group's discretion, to draft the scopes of work and budgets at any time.

Mr. Raabe suggested HDR revise the Potentially Feasible Water Management Strategies to reflect projects utilizing the same water source or projects that may drop from the list – a “recategorized” list. Greg Sengemann also asked if the list could reflect where the water is coming from and where it is going, if possible. Kevin Janak asked if the revised listing could be prioritized by potential project development so the Planning Group may see which projects are closer to becoming a reality than others, at a later date.

Mr. Mims asked HDR to revise the listing as suggested by Mr. Raabe and Mr. Sengemann. Once the listing has been cleaned up and reflects projects in relation to water sources, a Work Group will form to study the WMSs reflected on the new list utilizing the Carrizo Aquifer as a water source to identify and describe the interrelationships of each, noting, in particular, how the use of each strategy affects the use of the others and present a report at the next meeting. Mr. Mims asked Mr. Sengemann if he would chair the Work Group. Additional Work Group members are Mike Mahoney, Don Dietzmann and Will Conley. If possible, the Work Group will present a report at the next Planning Group meeting.

AGENDA ITEM NO. 11: Review/Approve Administrator's Budget for CY2013

Ms. Newberry presented a Statement of Administrative Costs for CY2012, as of September 30, 2012. We are currently trending under budget. Ms. Newberry reviewed a draft Administrator's Budget for CY2013 with the Planning Group, highlighting potential increased costs in 2013 for additional meetings and labor assistance for certain tasks in the TWDB contract. Mrs. Newberry recommended keeping the budget for 2013 at \$58,000. Mr. Naumann made a motion to approve the recommended Administrator's Budget for CY2013 at \$58,000. Mr. Taggart seconded the motion. The motion carried by consensus.

AGENDA ITEM NO. 12: Set Dates and Times for Regional Water Planning Group Meeting for 2013

Ms. Newberry presented a schedule of meeting dates, times and location to the Planning Group for 2013. The Planning Group will continue to meet quarterly on the first Thursday in February, May, August and November at SAWS' Customer Service Building, Room CR-145.

AGENDA ITEM NO. 13: Possible Agenda Items for the Next South Central Texas Regional Water Planning Group Meeting

Mr. Mims proposed the following agenda items for the February 7, 2013 meeting:

- EAHCP Update
- Status of SB3, Environmental Flows Process
- Election of Officers for Calendar Year 2013
- Report, Discussion and Appropriate Action from Work Groups
- Presentation and Discussion Regarding Population and Population-Related Water Demand Projections

AGENDA ITEM NO. 14: Public Comment

There was no public comment at this time.

There being no further business, the meeting adjourned by consensus at 2:00 p.m.

Recommended for approval.

GARY MIDDLETON, SECRETARY

Approved by the South Central Texas Regional Water Planning Group at a meeting held on March 14, 2013.

CON MIMS, CHAIR

AGENDA ITEM 3

Election of Officers for Calendar Year 2013

AGENDA ITEM 4

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)

AGENDA ITEM 5

Status of Edwards Aquifer Habitat Conservation Plan (HCP)

AGENDA ITEM 6

Report, Discussion and Appropriate Action from Work Groups

- EAA HCP Work Group – Tom Taggart, Chair
- Eagle Ford Shale Work Groups – 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

Edwards Aquifer Habitat Conservation Plan Work Group

Charge: To recommend to the Planning Group how to use the Edwards Aquifer HCP as a water management strategy in this planning cycle and present a report at the February meeting.

Members:

Tom Taggart, Chair
Tommy Hill
Steve Ramsey
Chuck Ahrens
Steve Raabe

Added on 2/24/13:

Nathan Pence
Rick Illgner
Roland Ruiz

Eagle Ford Shale Work Group

Charge: To investigate, in general, how the Eagle Ford Shale operations may affect Region L planning, with specific attention to population projections in affected areas, water demands based on population projections, the amounts and sources of water being used for drilling, including fracking and present a report at the February 7 meeting.

Members:

Suzanne Scott, Chair

Donna Balin

Iliana Pena

Evelyn Bonavita

Tony Wood

Art Dohmann

Mike Mahoney

Greg Sengemann

Don Dietzmann

*Note: Greg S. requested data be shared with GCD's

February 27, 2013

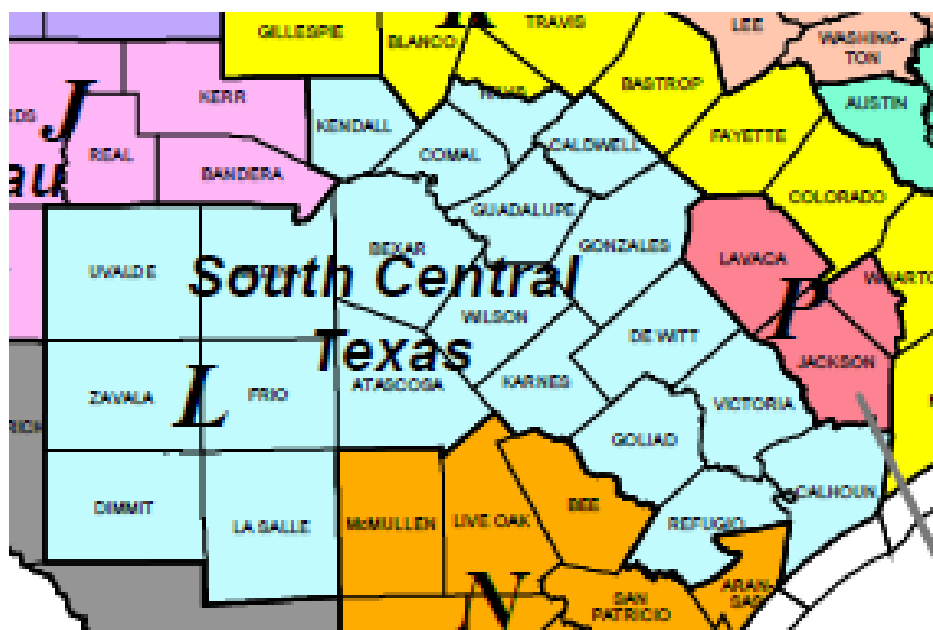
Ms. Suzanne B. Scott
General Manager
San Antonio River Authority
P.O. Box 839980
San Antonio, TX 78283-9980

RE: Region L Population Forecast Estimates

Dear Ms. Scott:

Based on conversations between the San Antonio River Authority (SARA) and the Center for Community and Business Research (CCBR), I am submitting this proposal to support SARA's need to forecast population growth for the Region L water area. We anticipate that SARA would benefit from an analysis reflecting an unanticipated population impact of the Eagle Ford Shale development activity on water usage for the area.

Region L consists of 21 counties that include Atascosa, Bexar, Caldwell, Calhoun, Comal, DeWitt, Dimmit, Frio, Goliad, Gonzales, Guadalupe, Hays (southern half), Karnes, Kendall, La Salle, Medina, Refugio, Uvalde, Victoria, Wilson and Zavala, which are outlined in the map below.



The Eagle Ford Workforce Analysis includes 12 of the Region L counties: Atascosa, Bexar, DeWitt, Dimmit, Frio, Gonzales, Karnes, La Salle, Uvalde, Victoria, Wilson and Zavala. In addition, the CCBR will develop a similar workforce estimate for Goliad and Guadalupe Counties, and incorporate it into population projections for Method I below.

In order to assist SARA, the CCBR at The University of Texas at San Antonio's Institute for Economic Development is proposing to produce a set of three population projections for Regional L counties based on the Eagle Ford Shale Workforce Analysis completed by the CCBR in October 2012. The first projection will be based on application of a population multiplier to the projected labor force. The second projection would be based on a ratio of housing units to labor force. Projections of housing units will then be converted into projected population in the Region L area. The third projection will be produced by determining a ratio of workforce to K-12 school enrollment. Projected enrollment will then be converted into projected population. . All three of these projection outputs would be compared to each other and against the State Demographer's one-half migration (0.5 - conservative) projections and migration (1.0 – more aggressive) projections. By using different methods to develop population projections, planners will have a set of cross-validated projections for a more robust projection of future water needs concerning residential population of the area.

PROPOSED STATEMENT OF SERVICES TO BE PERFORMED

We will provide three alternative forecast methodologies for the Regional L area in order to assist water use planning. In so doing, the research team shall:

Projection I

Region population projections based on UTSA Eagle Ford Shale workforce forecasts:

- Use county-level data contained in the Workforce Analysis for the Eagle Ford Shale for affected counties (Atascosa, Bexar, DeWitt, Dimmit, Frio, Goliad, Gonzales, Guadalupe, Karnes, La Salle, Uvalde, Victoria, Wilson and Zavala) to produce future population estimates based on number of workers forecast for 2021, and then extrapolate out to 2060. Labor force to population ratios (multiplier) will be determined by examining traditional ratios and ratios in other areas that have previously experienced rapid labor force growth resulting from extractive industry growth. Existing population estimates for the additional counties outside of the area of the Workforce Analysis will maintain the estimates provided by the State Demographer.

Projection II

- This Region L population projection will also be based on housing units in conjunction with persons-per-household multipliers in order to project population. In addition, ratios associated with the extractive industries workforce analysis may be used to uncover growth and mobility patterns, and housing unit type (e.g. apartments, single family, etc.) where possible.

Projection III

- This Region L population projection will be based on School Enrollment. In addition, persons-per-household multipliers, as well as, ratios associated with the extractive industries workforce analysis may be used to uncover growth and mobility patterns.

Each of these three projections will be compared to each other and to projections of populations of Region L counties in Texas produced by the Texas State Data Center and the Office of the State Demographer. Forecasts will be dependent on data from publicly available sources.

We budget project cost to be \$10,354 in professional and student labor, and supply, data, and other related costs. We conduct projects on a cost recovery rather than a for-profit basis. Should the actual cost be lower than what is estimated, that total would be reflected on the final billing.

We anticipate completing the revised population estimates and comparison within 8 weeks after receiving the go-ahead from SARA. The final report will contain the impact results, methodology, interpretation and summary, and presented in an electronic file as well as a physical report.

The findings and conclusions based on this methodology will be objective from the viewpoint of our research. I believe this objectivity is important for your purposes. We look forward to working with you on this project, which would provide a systematic approach to long-term economic planning for the Region L Water Plan.

Sincerely,

Thomas Tunstall, Ph.D.
Research Director
Institute for Economic Development
University of Texas at San Antonio
501 W Cesar E. Chavez Blvd,
San Antonio, Texas, 78207

| Region L Funding for Population Forecast Estimates in Eagle Ford Shale | | |
|---------------------------------------------------------------------------|---------------|--------------------|
| | | |
| Total Cost of Study: | | \$8,418.00 |
| Additional Cost for Goliad County Inclusion: | | \$968.00 |
| | Total: | \$9,386.00 |
| Additional Cost for Guadalupe County (added 2/27/13) | | \$968.00 |
| Total: | | \$10,354.00 |
| Contributions: | | |
| EAA | | (\$2,628.08) |
| GBRA | | (\$1,407.90) |
| SARA | | (\$1,906.60) |
| NRA | | (\$93.86) |
| VCGCD | | (\$187.72) |
| COV | | (\$187.72) |
| Guadalupe CGCD | | (\$1,155.72) |
| San Marcos | | (\$1,000.00) |
| STEER | | (\$1,786.40) |
| | | |
| Balance Remaining Unfunded: | | \$0.00 |

Carrizo Aquifer Water Management Strategy Work Group

Charge: To study water management strategies shown on the WMS list provided by Technical Consultants at February 2013 meeting that use or propose to use the Carrizo Aquifer as a water source to identify and describe the interrelationships of each, noting, in particular, how the use of each strategy affects the use of the others and present a report at the May 2013 meeting.

Members:

Greg Senglemann, Chair

Mike Mahoney

Jeanne Schnuriger

Alan Cockerell

Don Dietzmann

Will Conley

Note: Greg S. also asked if possible, to show where water was coming from and going to for all WMS'

AGENDA ITEM 7

Texas Water Development Board (TWDB) Communications

- Presentation on Revised Regional Water Planning Rules

AGENDA ITEM 8

Discussion and Appropriate Action Regarding Legislative Activities

AGENDA ITEM 9

Discussion and Appropriate Action Regarding Consultants Work and
Schedule

2016 South Central Texas Regional Water Plan Proposed Workplan for Development

| Tasks | Description | Complete | | | | | 2013 | | | | | | | | | | | | 2014 | | | | | | | | | | | | 2015 | | | | | | | | | | | |
|-----------|------------------------------------|----------|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| | | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| Task 1 | Planning Area Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 2a | Non-Pop. Based Demand Projections | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 2b | Population & Demand Projections | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 3 | Water Supply Analyses | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EAHCP | Implementation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TAP | Whooping Crane Lawsuit | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 4 | Water Management Strategies | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 4a | Needs Assessment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 4b | ID Potentially Feasible WMSs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 4b.1 | WMS Verification | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 4c | Technical Memorandum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 4d | WMS Technical Evaluations | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 5 | Conservation Recommendations | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 6 | Long-term Resource Protection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 6.1 | Cumulative Effects of RWP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 7 | Drought Response Information | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 8 | Policies & Recmdtns / Unique Sites | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 9 | Infrastructure Funding | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 10 | Plan Adoption | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 11 | Implement. & Compare to Prv RWPs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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Potential Issues For The 2016 SCTRWP

March 4, 2013

- 1) Carrizo Aquifer in Northern Gonzales County (Status: Workgroup Formed)
 - a) Multiple Potentially Feasible Projects Exceed MAG
 - b) TWDB will not allow for over-allocation in the 2016 RWP
- 2) Importing Groundwater from Other Regions (Status: No Action Thus Far)
- 3) Meeting Needs of Formosa (Status: Con Mims has discussed with LNRA)
 - a) Coordination with Regions P and N
- 4) Implementation of TCEQ Estuary Environmental Flow Standards (Status: Awaiting TCEQ)
- 5) Population and/or Water Demand Projections Revisions (Status: Awaiting TWDB, Survey in Development)
- 6) Eagle-Ford Shale Demands – Direct and Indirect (Status: Workgroup Underway)
- 7) Whooping Crane Litigation (Status: Awaiting Decision)
- 8) Meeting Steam-Electric Needs in Victoria County (Status: No Action Thus Far)
- 9) Inter-Regional Coordination (e.g. SAWS Competitive Sealed Proposals) (Status: No Action Thus Far)

AGENDA ITEM 10

Discussion and Appropriate Action Regarding Submittal to the TWDB
of Revised Non-Municipal Water Demand Projections for Mining as a
Result of the Revised Bureau of Economic Geology (BEG) Report
(Task 2A) and Steam – Electric Revision Request

From Original 2011 Oil and Gas Report

Projected Oil & Gas Water Use (acft/yr)

| County | 2020 | 2030 | 2040 | 2050 | 2060 |
|-----------|--------|--------|--------|--------|-------|
| Atascosa | 3,839 | 4,514 | 3,395 | 2,302 | 1,227 |
| Bexar | 0 | 0 | 0 | 0 | 0 |
| Caldwell | 7 | 7 | 7 | 8 | 8 |
| Calhoun | 52 | 54 | 41 | 30 | 19 |
| Comal | 0 | 0 | 0 | 0 | 0 |
| DeWitt | 1,997 | 1,876 | 1,385 | 897 | 410 |
| Dimmit | 5,279 | 4,866 | 3,662 | 2,524 | 1,391 |
| Frio | 1,246 | 1,132 | 864 | 610 | 357 |
| Goliad | 69 | 72 | 54 | 40 | 26 |
| Gonzales | 1,040 | 741 | 551 | 360 | 170 |
| Guadalupe | 10 | 10 | 10 | 10 | 10 |
| Hays | 0 | 0 | 0 | 0 | 0 |
| Karnes | 1,980 | 1,421 | 1,049 | 680 | 311 |
| Kendall | 0 | 0 | 0 | 0 | 0 |
| LaSalle | 6,005 | 5,557 | 4,202 | 2,925 | 1,653 |
| Medina | 0 | 0 | 0 | 0 | 0 |
| Refugio | 65 | 68 | 51 | 38 | 24 |
| Uvalde | 0 | 0 | 0 | 0 | 0 |
| Victoria | 71 | 75 | 56 | 41 | 27 |
| Wilson | 3,170 | 2,263 | 1,701 | 1,138 | 576 |
| Zavala | 3,072 | 2,477 | 1,876 | 1,290 | 707 |
| Total | 27,902 | 25,133 | 18,904 | 12,893 | 6,916 |

From Updated 2011 Oil and Gas Report

Projected Oil & Gas Water Use (acft/yr)

| County | 2020 | 2030 | 2040 | 2050 | 2060 |
|-----------|--------|--------|--------|--------|-------|
| Atascosa | 2,770 | 2,706 | 2,693 | 2,021 | 1,279 |
| Bexar | 0 | 0 | 0 | 0 | 0 |
| Caldwell | 123 | 98 | 72 | 46 | 20 |
| Calhoun | 52 | 55 | 41 | 30 | 19 |
| Comal | 0 | 0 | 0 | 0 | 0 |
| DeWitt | 1,858 | 1,421 | 958 | 500 | 42 |
| Dimmit | 4,919 | 5,001 | 4,337 | 2,824 | 1,315 |
| Frio | 1,217 | 1,250 | 1,178 | 986 | 620 |
| Goliad | 70 | 73 | 54 | 40 | 26 |
| Gonzales | 1,600 | 1,207 | 813 | 418 | 24 |
| Guadalupe | 10 | 10 | 10 | 10 | 10 |
| Hays | 0 | 0 | 0 | 0 | 0 |
| Karnes | 2,528 | 1,919 | 1,288 | 662 | 35 |
| Kendall | 0 | 0 | 0 | 0 | 0 |
| LaSalle | 4,617 | 4,772 | 4,263 | 2,819 | 1,380 |
| Medina | 0 | 0 | 0 | 0 | 0 |
| Refugio | 66 | 69 | 51 | 38 | 24 |
| Uvalde | 0 | 0 | 0 | 0 | 0 |
| Victoria | 72 | 75 | 56 | 41 | 27 |
| Wilson | 1,929 | 1,548 | 1,165 | 782 | 399 |
| Zavala | 2,531 | 2,257 | 1,977 | 1,559 | 932 |
| Total | 24,362 | 22,461 | 18,956 | 12,776 | 6,152 |

Difference

Projected Oil & Gas Water Use (acft/yr)

| County | 2020 | 2030 | 2040 | 2050 | 2060 |
|-----------|--------|--------|------|------|------|
| Atascosa | -1,069 | -1,808 | -702 | -281 | 52 |
| Bexar | 0 | 0 | 0 | 0 | 0 |
| Caldwell | 116 | 91 | 65 | 38 | 12 |
| Calhoun | 0 | 1 | 0 | 0 | 0 |
| Comal | 0 | 0 | 0 | 0 | 0 |
| DeWitt | -139 | -455 | -427 | -397 | -368 |
| Dimmit | -360 | 135 | 675 | 300 | -76 |
| Frio | -29 | 118 | 314 | 376 | 263 |
| Goliad | 1 | 1 | 0 | 0 | 0 |
| Gonzales | 560 | 466 | 262 | 58 | -146 |
| Guadalupe | 0 | 0 | 0 | 0 | 0 |
| Hays | 0 | 0 | 0 | 0 | 0 |
| Karnes | 548 | 498 | 239 | -18 | -276 |
| Kendall | 0 | 0 | 0 | 0 | 0 |
| LaSalle | -1,388 | -785 | 61 | -106 | -273 |
| Medina | 0 | 0 | 0 | 0 | 0 |
| Refugio | 1 | 1 | 0 | 0 | 0 |
| Uvalde | 0 | 0 | 0 | 0 | 0 |
| Victoria | 1 | 0 | 0 | 0 | 0 |
| Wilson | -1,241 | -715 | -536 | -356 | -177 |
| Zavala | -541 | -220 | 101 | 269 | 225 |
| Total | -3,540 | -2,672 | 52 | -117 | -764 |

Projected Water Use for Other Types of Mining (acft/yr)

| County | 2020 | 2030 | 2040 | 2050 | 2060 |
|-----------|--------|--------|--------|--------|--------|
| Atascosa | 1,316 | 1,335 | 1,238 | 1,195 | 1,196 |
| Bexar | 7,820 | 8,740 | 9,533 | 10,405 | 11,399 |
| Caldwell | 0 | 0 | 0 | 0 | 0 |
| Calhoun | 0 | 0 | 0 | 0 | 0 |
| Comal | 8,599 | 9,996 | 11,340 | 12,512 | 13,982 |
| DeWitt | 0 | 0 | 0 | 0 | 0 |
| Dimmit | 0 | 0 | 0 | 0 | 0 |
| Frio | 0 | 0 | 0 | 0 | 0 |
| Goliad | 0 | 0 | 0 | 0 | 0 |
| Gonzales | 0 | 0 | 0 | 0 | 0 |
| Guadalupe | 446 | 540 | 629 | 745 | 873 |
| Hays | 0 | 0 | 0 | 0 | 0 |
| Karnes | 0 | 0 | 0 | 0 | 0 |
| Kendall | 0 | 0 | 0 | 0 | 0 |
| LaSalle | 0 | 0 | 0 | 0 | 0 |
| Medina | 1,851 | 2,056 | 2,231 | 2,407 | 2,629 |
| Refugio | 0 | 0 | 0 | 0 | 0 |
| Uvalde | 2,661 | 2,916 | 3,037 | 3,279 | 3,564 |
| Victoria | 0 | 0 | 0 | 0 | 0 |
| Wilson | 0 | 0 | 0 | 0 | 0 |
| Zavala | 0 | 0 | 0 | 0 | 0 |
| Total | 22,693 | 25,583 | 28,008 | 30,543 | 33,643 |

Projected Water Use for Other Types of Mining (acft/yr)

| County | 2020 | 2030 | 2040 | 2050 | 2060 |
|-----------|--------|--------|--------|--------|--------|
| Atascosa | 1,311 | 1,337 | 1,242 | 1,191 | 1,199 |
| Bexar | 7,820 | 8,740 | 9,533 | 10,404 | 11,399 |
| Caldwell | 0 | 0 | 0 | 0 | 0 |
| Calhoun | 0 | 0 | 0 | 0 | 0 |
| Comal | 8,600 | 9,996 | 11,340 | 12,513 | 13,982 |
| DeWitt | 0 | 0 | 0 | 0 | 0 |
| Dimmit | 0 | 0 | 0 | 0 | 0 |
| Frio | 0 | 0 | 0 | 0 | 0 |
| Goliad | 0 | 0 | 0 | 0 | 0 |
| Gonzales | 0 | 0 | 0 | 0 | 0 |
| Guadalupe | 446 | 540 | 629 | 745 | 874 |
| Hays | 0 | 0 | 0 | 0 | 0 |
| Karnes | 0 | 0 | 0 | 0 | 0 |
| Kendall | 0 | 0 | 0 | 0 | 0 |
| LaSalle | 0 | 0 | 0 | 0 | 0 |
| Medina | 1,851 | 2,057 | 2,231 | 2,407 | 2,629 |
| Refugio | 0 | 0 | 0 | 0 | 0 |
| Uvalde | 2,661 | 2,916 | 3,037 | 3,279 | 3,564 |
| Victoria | 0 | 0 | 0 | 0 | 0 |
| Wilson | 0 | 0 | 0 | 0 | 0 |
| Zavala | 0 | 0 | 0 | 0 | 0 |
| Total | 22,689 | 25,586 | 28,012 | 30,539 | 33,647 |

Projected Water Use for Other Types of Mining (acft/yr)

| County | 2020 | 2030 | 2040 | 2050 | 2060 |
|-----------|------|------|------|------|------|
| Atascosa | -5 | 2 | 4 | -4 | 3 |
| Bexar | 0 | 0 | 0 | -1 | 0 |
| Caldwell | 0 | 0 | 0 | 0 | 0 |
| Calhoun | 0 | 0 | 0 | 0 | 0 |
| Comal | 1 | 0 | 0 | 1 | 0 |
| DeWitt | 0 | 0 | 0 | 0 | 0 |
| Dimmit | 0 | 0 | 0 | 0 | 0 |
| Frio | 0 | 0 | 0 | 0 | 0 |
| Goliad | 0 | 0 | 0 | 0 | 0 |
| Gonzales | 0 | 0 | 0 | 0 | 0 |
| Guadalupe | 0 | 0 | 0 | 0 | 1 |
| Hays | 0 | 0 | 0 | 0 | 0 |
| Karnes | 0 | 0 | 0 | 0 | 0 |
| Kendall | 0 | 0 | 0 | 0 | 0 |
| LaSalle | 0 | 0 | 0 | 0 | 0 |
| Medina | 0 | 1 | 0 | 0 | 0 |
| Refugio | 0 | 0 | 0 | 0 | 0 |
| Uvalde | 0 | 0 | 0 | 0 | 0 |
| Victoria | 0 | 0 | 0 | 0 | 0 |
| Wilson | 0 | 0 | 0 | 0 | 0 |
| Zavala | 0 | 0 | 0 | 0 | 0 |
| Total | -4 | 3 | 4 | -4 | 4 |

Total Projected Water Use for Mining (acft/yr)

| County | 2020 | 2030 | 2040 | 2050 | 2060 |
|-----------|--------|--------|--------|--------|--------|
| Atascosa | 5,155 | 5,849 | 4,633 | 3,497 | 2,423 |
| Bexar | 7,820 | 8,740 | 9,533 | 10,405 | 11,399 |
| Caldwell | 7 | 7 | 7 | 8 | 8 |
| Calhoun | 52 | 54 | 41 | 30 | 19 |
| Comal | 8,599 | 9,996 | 11,340 | 12,512 | 13,982 |
| DeWitt | 1,997 | 1,876 | 1,385 | 897 | 410 |
| Dimmit | 5,279 | 4,866 | 3,662 | 2,524 | 1,391 |
| Frio | 1,246 | 1,132 | 864 | 610 | 357 |
| Goliad | 69 | 72 | 54 | 40 | 26 |
| Gonzales | 1,040 | 741 | 551 | 360 | 170 |
| Guadalupe | 456 | 550 | 639 | 755 | 883 |
| Hays | 0 | 0 | 0 | 0 | 0 |
| Karnes | 1,980 | 1,421 | 1,049 | 680 | 311 |
| Kendall | 0 | 0 | 0 | 0 | 0 |
| LaSalle | 6,005 | 5,557 | 4,202 | 2,925 | 1,653 |
| Medina | 1,851 | 2,056 | 2,231 | 2,407 | 2,629 |
| Refugio | 65 | 68 | 51 | 38 | 24 |
| Uvalde | 2,661 | 2,916 | 3,037 | 3,279 | 3,564 |
| Victoria | 71 | 75 | 56 | 41 | 27 |
| Wilson | 3,170 | 2,263 | 1,701 | 1,138 | 576 |
| Zavala | 3,072 | 2,477 | 1,876 | 1,290 | 707 |
| Total | 50,595 | 50,716 | 46,912 | 43,436 | 40,559 |

Total Projected Water Use for Mining (acft/yr)

| County | 2020 | 2030 | 2040 | 2050 | 2060 |
|-----------|--------|--------|--------|--------|--------|
| Atascosa | 4,081 | 4,043 | 3,935 | 3,212 | 2,478 |
| Bexar | 7,820 | 8,740 | 9,533 | 10,404 | 11,399 |
| Caldwell | 123 | 98 | 72 | 46 | 20 |
| Calhoun | 52 | 55 | 41 | 30 | 19 |
| Comal | 8,600 | 9,996 | 11,340 | 12,513 | 13,982 |
| DeWitt | 1,858 | 1,421 | 958 | 500 | 42 |
| Dimmit | 4,919 | 5,001 | 4,337 | 2,824 | 1,315 |
| Frio | 1,217 | 1,250 | 1,178 | 986 | 620 |
| Goliad | 70 | 73 | 54 | 40 | 26 |
| Gonzales | 1,600 | 1,207 | 813 | 418 | 24 |
| Guadalupe | 456 | 550 | 639 | 755 | 884 |
| Hays | 0 | 0 | 0 | 0 | 0 |
| Karnes | 2,528 | 1,919 | 1,288 | 662 | 35 |
| Kendall | 0 | 0 | 0 | 0 | 0 |
| LaSalle | 4,617 | 4,772 | 4,263 | 2,819 | 1,380 |
| Medina | 1,851 | 2,057 | 2,231 | 2,407 | 2,629 |
| Refugio | 66 | 69 | 51 | 38 | 24 |
| Uvalde | 2,661 | 2,916 | 3,037 | 3,279 | 3,564 |
| Victoria | 72 | 75 | 56 | 41 | 27 |
| Wilson | 1,929 | 1,548 | 1,165 | 782 | 399 |
| Zavala | 2,531 | 2,257 | 1,977 | 1,559 | 932 |
| Total | 47,051 | 48,047 | 46,968 | 43,315 | 39,799 |

Total Projected Water Use for Mining (acft/yr)

| County | 2020 | 2030 | 2040 | 2050 | 2060 |
|-----------|--------|--------|------|------|------|
| Atascosa | -1,074 | -1,806 | -698 | -285 | 55 |
| Bexar | 0 | 0 | 0 | -1 | 0 |
| Caldwell | 116 | 91 | 65 | 38 | 12 |
| Calhoun | 0 | 1 | 0 | 0 | 0 |
| Comal | 1 | 0 | 0 | 1 | 0 |
| DeWitt | -139 | -455 | -427 | -397 | -368 |
| Dimmit | -360 | 135 | 675 | 300 | -76 |
| Frio | -29 | 118 | 314 | 376 | 263 |
| Goliad | 1 | 1 | 0 | 0 | 0 |
| Gonzales | 560 | 466 | 262 | 58 | -146 |
| Guadalupe | 0 | 0 | 0 | 0 | 1 |
| Hays | 0 | 0 | 0 | 0 | 0 |
| Karnes | 548 | 498 | 239 | -18 | -276 |
| Kendall | 0 | 0 | 0 | 0 | 0 |
| LaSalle | -1,388 | -785 | 61 | -106 | -273 |
| Medina | 0 | 1 | 0 | 0 | 0 |
| Refugio | 1 | 1 | 0 | 0 | 0 |
| Uvalde | 0 | 0 | 0 | 0 | 0 |
| Victoria | 1 | 0 | 0 | 0 | 0 |
| Wilson | -1,241 | -715 | -536 | -356 | -177 |
| Zavala | -541 | -220 | 101 | 269 | 225 |
| Total | -3,544 | -2,669 | 56 | -121 | -760 |

AGENDA ITEM 11

Presentation and Discussion Regarding Population and Population-Related Water Demand Projections

AGENDA ITEM 12

Discussion and Appropriate Action Regarding Evaluation of Potentially Feasible Water Management Strategies (Task 4B), Draft Scope of Work and Budget for Submittal to TWDB and Inclusion in Technical Memorandum

2016 South Central Texas Regional Water Plan

Identification of Potentially Feasible Water Management Strategies¹

~~February 2, 2012~~ March 1, 2013

In the development of the 2016 South Central Texas Regional Water Plan (SCTRWP), the process for Identification of Potentially Feasible Water Management Strategies outlined below will be followed²:

- 1) The South Central Texas Regional Water Planning Group (SCTRWPG) recognizes that the 2016 SCTRWP is an update of the 2011 SCTRWP.
 - a) There are new population and municipal water demand projections based on the 2010 Census.
 - b) The groundwater availability will now incorporate the Modeled Available Groundwater values from the Groundwater Management Area (GMA) process.
 - c) Approval of the Edwards Aquifer Habitat Conservation Plan later this ~~year-month~~ will define the groundwater withdrawals, critical period management, and resulting springflows from the Edwards Aquifer.
 - d) The adoption of environmental flow standards by TCEQ ~~will~~ define inflow passage requirements for the environment for new surface water projects.

These changes will affect the demand projections, existing supplies, and/or new supplies from Water Management Strategies (WMS). Hence, the SCTRWPG will be evaluating WMSs from the 2011 SCTRWP to determine if they are still viable in the 2016 SCTRWP.

- 2) Current water planning information, including specific water management strategies of interest, will be solicited from water user groups in Summer ~~2012~~ 2013.
 - a) Solicitation of planning information will include a draft list of water management strategies deemed potentially feasible to meet projected needs.
 - b) Draft list will generally include the recommended water management strategies in the 2011 SCTRWP and/or other strategies perceived to be of interest to water user groups.
 - c) Water user groups will be encouraged to classify each water management strategy on their draft list as recommended, alternative, or rejected.
- 3) Considering information responsive to the solicitation and information from required technical evaluations, lists of potentially feasible water management strategies will be prepared and comments received during the May, August, and November ~~2012-2013~~ meetings of the SCTRWPG.
- 4) ~~A-d~~ Draft versions of the scopes of work will be presented and comment received during the public meetings of the SCTRWPG in May, August, and/or November ~~2012~~ 2013.
- 5) Refined scope of work ~~with due consideration of comments received will be presented at the February 2013 SCTRWPG meeting and submitted to TWDB with the Technical~~

¹ Schedule shown is subject to change based on the availability of the fundamental data/decisions in Item 1 and/or TWDB discretion.

² Pursuant to the regional water planning rules which state: "Before a regional water planning group begins the process of identifying potentially feasible water management strategies, it shall document the process by which it will list all possible water management strategies and identify the water management strategies that are potentially feasible for meeting a need in the region."

Memorandum on February 28, 2013 for technical evaluations of Water Management Strategies will be performed upon TWDB approval.

Potentially Feasible Water Management Strategies for the 2016 South Central Texas Regional Water Plan (as of February 2013)

| Section in 2011 RWP | Description | Quantity of Water (acft/yr) | Status in 2011 SCTRWP | Notes | Source(s) | Groundwater Conservation District | MAG (acft/yr) | | Portion of MAG Available for New WMSs (acft/yr) | User(s) |
|-----------------------------------------------|-----------------------------------------------------------------|--------------------------------|--------------------------|------------------------------------|---------------------------------------------------|----------------------------------------|------------------|---------|-------------------------------------------------------|----------------------------------------|
| | | | | | | | YR 2020 | YR 2070 | | |
| WMSs - Edwards Aquifer | | | | | | | | | | |
| 4C.3 | Edwards Transfers | 51,875 | Recommended | Affected by EA HCP | Edwards Aquifer (Irrigation) | | N/A | N/A | N/A | Edwards Users |
| 4C.22 | Local Groundwater Supplies (Barton Springs Edwards) | 1,358 | Alternative | | New wells to supplement existing wells | | N/A | N/A | N/A | Various |
| WMS - Carrizo Aquifer ¹ | | | | | | | | | | |
| 4C.20 | Hays/Caldwell PUA Project | 35,000 | Recommended | Phased, Initial Permit Approved | Carrizo Aquifer - N Gonzales Co | Gonzales County UWCD | 62,316 | 75,970 | | CRWA Members, San Marcos, Kyle, & Buda |
| 4C.36 | TWA Regional Carrizo | 27,000 | Recommended | Phased | Carrizo Aquifer - N Gonzales Co | Gonzales County UWCD | 62,316 | 75,970 | | TWA/CLWSC |
| | TWA Blanco River Valley WMS | ??? | New | Proposed New Version of 4C.36 | Carrizo Aquifer - N Gonzales Co | Gonzales County UWCD | 62,316 | 75,970 | | TWA/CLWSC and Wimberley |
| | Regional Carrizo for Guadalupe Basin - SHWSC & Others | ??? | New | Proposed New Version of 4C.36 | Carrizo Aquifer - N Gonzales Co | Gonzales County UWCD | 62,316 | 75,970 | | Springs Hill WSC |
| 4C.17 | Regional Carrizo for Guadalupe Basin (GBRA) | 25,000 | Alternative | | Carrizo Aquifer - N Gonzales Co | Gonzales County UWCD | 62,316 | 75,970 | | GBRA Customers |
| 4C.27 | CRWA Members Wells Ranch Project | 11,000 | Recommended | Initial Permit Approved | Carrizo Aquifer - Gonzales Co | Gonzales County UWCD | 62,316 | 75,970 | | CRWA Members |
| 4C.19 | Regional Carrizo for SSLGC Project Expansion | 10,364 | Recommended | | Carrizo Aquifer - Gonzales Co | Gonzales County UWCD | 62,316 | 75,970 | | SSLGC Customers |
| | Regional Carrizo for SSLGC Project Expansion - Wilson Co Option | ??? | Further Study | | Carrizo Aquifer - Wilson Co | Evergreen UWCD | 36,986 | 44,794 | | SSLGC Customers |
| | SSLGC Planned Expansion + Wilson County Well Field | 10,364 + | New | Merger of 4C.19 & Wilson Co Option | Carrizo Aquifer - Wilson and Gonzales Co | Evergreen UWCD & Gonzales Co. UWCD | 99,302 | 120,764 | | SSLGC Customers |
| | Southern Bexar County Carrizo | 21,000 | New | Replaces BMWD Regional Carrizo | Carrizo Aquifer - S Bexar Co | None | 26,278 | 26,107 | | SAWS |
| | Uvalde Carrizo | ??? | New | New Supply Option | Carrizo Aquifer - N Zavala Co | Wintergarden GCD | 35,859 | 34,969 | | City of Uvalde |
| 4C.22 | Local Groundwater Supplies (Carrizo) | 33,873 | Recommended | | New wells to supplement existing wells | | Varies by County | | | Various |
| 4C.22 | Local Groundwater Supplies (Carrizo) (Yancy WSC) | 1,210 | Alternative | | New wells to supplement existing wells | | Varies by County | | | Yancy WSC |
| | Request For Competitive Sealed Proposals - Carrizo | 50,000 | New | By 2018, Decision by Summer 2013 | Carrizo Aquifer - Dimmit Co | Wintergarden GCD | 3,359 | 3,359 | | SAWS |
| WMSs - Wilcox Aquifer (Brackish) ¹ | | | | | | | | | | |
| 4C.23 | Brackish Wilcox Groundwater for SAWS | 26,400 | Recommended | New Quantity = 30,525 acft/yr | Wilcox Aquifer - Bexar, Wilson, & Atascosa Co | Evergreen UWCD | 132,040 | 146,709 | | SAWS |
| 4C.24 | Brackish Wilcox Groundwater for RWA | 14,700 | Recommended | | Wilcox Aquifer - Guadalupe & Wilson Co | Guadalupe Co. GCD & Evergreen UWCD | 47,819 | 58,835 | | CRWA Members |
| 4C.25 | Brackish Wilcox Groundwater for SSWSC | 1,120 | Recommended | | Wilcox Aquifer - Wilson Co | Evergreen UWCD | 36,986 | 44,794 | | SSWSC |
| WMSs - Trinity Aquifer | | | | | | | | | | |
| 4C.22 | Local Groundwater Supplies (Trinity) | 2,420 | Recommended | | New wells to supplement existing wells | | Varies by County | | | Various |
| WMSs - Gulf Coast Aquifer | | | | | | | | | | |
| 4C.22 | Local Groundwater Supplies (Gulf Coast) | 161 | Recommended | | New wells to supplement existing wells | | Varies by County | | | Various |
| 4C.26 | Calhoun County Brackish Groundwater Project | 1,344 | Alternative | | Gulf Coast Aquifer - Calhoun Co | Calhoun County GCD | 2,995 | 2,995 | | Calhoun County Rural |
| WMSs - Simsboro Aquifer ¹ | | | | | | | | | | |
| 4C.21 | GBRA Simsboro Project | 49,777 | Recommended | | Simsboro Aquifer - Bastrop and Lee Co | Lost Pines GCD | 44,002 | 55,878 | | GBRA Customers |
| | Request For Competitive Sealed Proposals - Carrizo/Simsboro | 50,000 | New | By 2018, Decision by Summer 2013 | Carrizo/Simsbor Aquifer - Lee Co | Lost Pines GCD | 24,023 | 27,380 | | SAWS |
| WMSs - Edwards-Trinity Aquifer | | | | | | | | | | |
| | Request For Competitive Sealed Proposals - Edwards-Trinity | 50,000 | New | By 2018, Decision by Summer 2013 | Edwards-Trinity Aquifer - Kinney and Val Verde Co | Kinney Co. GCD - None in Val Verde Co. | 95,326 | 95,326 | | SAWS |
| WMSs - Queen City Aquifer | | | | | | | | | | |
| | Request For Competitive Sealed Proposals - Queen City | 50,000 | New | By 2018, Decision by Summer 2013 | Queen City Aquifer - McMullen Co | McMullen GCD | 136 | 136 | | SAWS |

Notes:

1. MAG values shown are for the entire Carrizo/Wilcox Aquifer in the selected counties. The values due not represent MAG values for individual portions of the aquifer.

Potentially Feasible Water Management Strategies for the 2016 South Central Texas Regional Water Plan (as of February 2013)

| Section in 2011 RWP | Description | Quantity of Water (acft/yr) | Status in 2011 SCTRWP | Notes | Source(s) | User(s) |
|-------------------------------------------|---------------------------------------------------|--------------------------------|--------------------------|----------------------------------|----------------------------------------------|--------------------------------------------|
| WMSs - Local Strategies | | | | | | |
| 4C.1 | Water Conservation (Mun, Irr, Min) | 95,771 | Recommended | | | Various |
| 4C.2 | Drought Management | 41,240 | Recommended | Interim, Short-term | | Various |
| 4C.5 | Recycled Water Programs | 26,756 | Recommended | | Wastewater Effluent | Various - Non-potable |
| WMSs - Guadalupe River at Gonzales | | | | | | |
| 4C.15 | GBRA Mid-Basin (Surface Water) | 25,000 | Recommended | Permit Administratively Complete | Guadalupe River - Gonzales | GBRA Customers |
| 4C.16 | GBRA Mid-Basin Project (Conjunctive Use) | 25,000 | Alternative | | Guadalupe River - Gonzales, Carrizo Aquifer | GBRA Customers |
| WMSs - Lower Guadalupe River | | | | | | |
| 4C.13 | GBRA Lower Basin Storage (100 acre site) | 28,369 | Recommended | | Existing Water Rights | GBRA Customers |
| 4C.13 | GBRA Lower Basin Storage (500 acre site) | 59,569 | Alternative | | Existing Water Rights | GBRA Customers |
| 4C.14 | GBRA New Appropriation (Lower Basin) | 11,300 | Recommended | Permit Pending | Guadalupe River - Saltwater Barrier | GBRA Customers |
| 4C.11 | LGWSP for Upstream GBRA Needs at Reduced Capacity | 35,000 | Alternative | | Guadalupe River - Saltwater Barrier | GBRA Customers |
| 4C.12 | LGWSP for Upstream GBRA Needs | 60,000 | Alternative | | Guadalupe River - Saltwater Barrier | GBRA Customers |
| WMSs - Seawater Desalination | | | | | | |
| 4C.31 | Seawater Desalination | 84,012 | Recommended | | San Antonio Bay | SAWS and/or Others |
| | Seawater Desalination for Guadalupe River Basin | | Further Study | | San Antonio Bay / Gulf of Mexico | GBRA Customers |
| WMSs - Lavaca River | | | | | | |
| 4C.34 | Lavaca River Off-Channel Reservoir | 26,242 | Recommended | | Lavaca River | Formosa, Point Comfort, and Corpus Christi |
| 4C.35 | Palmetto Bend - Stage II | 22,964 | Further Study | | Lavaca River | Formosa, Point Comfort, and Corpus Christi |
| WMSs - Upper Guadalupe River | | | | | | |
| 4C.9 | Storage Above Canyon Reservoir (ASR) | 3,140 | Recommended | | Guadalupe River upstream of Canyon Reservoir | Kendall County Rural |
| 4C.8 | Wimberley and Woodcreek Water Supply Project | 4,480 | Recommended | | Other Water Management Strategies | Wimberley & Woodcreek Utilities |
| 4C.9 | Storage Above Canyon Reservoir (Off-Channel) | 4,300+ | Further Study | | Guadalupe River upstream of Canyon Reservoir | Kendall County Rural |
| WMSs - Cibolo Creek | | | | | | |
| 4C.28 | CRWA Members Siesta Project | 5,042 | Recommended | | Cibolo Creek & Wastewater | CRWA Members |

Potentially Feasible Water Management Strategies for the 2016 South Central Texas Regional Water Plan (as of February 2013)

| Section in 2011 RWP | Description | Quantity of Water (acft/yr) | Status in 2011 SCTRWP | Notes | Source(s) | User(s) |
|----------------------------------------------|--------------------------------------------|-----------------------------|-----------------------|-------------------------------------|---------------------------------------|---------------|
| WMSs - Other | | | | | | |
| | Purchase from WWP | - | Recommended | | Other Water Management Strategies | Various |
| | Surface Water Rights | - | Recommended | | Surface Water | Various |
| 4C.6 | Facilities Expansions | - | Recommended | Funding purposes | | Various |
| 4C.33 | Balancing Storage (ASR and/or Surface) | - | Further Study | For peaking of reduced transmission | | Various |
| 4C.7 | Brush Management (Above Canyon Reservoir) | 5,500 | Further Study | | Increased Runoff from Brush Removal | Various |
| | Rainwater Harvesting | | Further Study | | Capturing of Rainfall for On-Site Use | Various |
| | Weather Modification | | Further Study | | Increased Rainfall | Various |
| WMSs - No Longer Potentially Feasible | | | | | | |
| 4C.29 | LCRA-SAWS Water Project | 90,000 | Recommended | | | |
| 4C.10 | GBRA-Exelon Project | 49,126 | Recommended | | | |
| 4C.30 | Medina Lake Firm-Up (ASR) | 9,933 | Recommended | | | |
| 4C.30 | Medina Lake Firm-Up (OCR) | 9,078 | Alternative | | | |
| | Mesa Water Supply Project (SAWS) | | Further Study | | | |
| | Edwards Recharge and Recirculation Systems | | Further Study | | | |
| | CRWA Members Dunlap Project | | Further Study | | | |
| 4C.4 | Edwards Aquifer Recharge – Type 2 Projects | 21,577 | Recommended | | Enhanced Edwards Recharge | Edwards Users |
| | Regional Carrizo for BMWD | | Further Study | | Carrizo Aquifer - S Bexar Co | BMWD (SAWS) |

AGENDA ITEM 13

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

AGENDA ITEM 14

Public Comment