

c/o San Antonio River Authority 100 East Guenther Street San Antonio, Texas 78204 (210) 227-1373 Office www.RegionLTexas.org

**EXECUTIVE COMMITTEE** 

Suzanne Scott

Chair / River Authorities

Tim Andruss

Vice-Chair / Water Districts

Gary Middleton

Secretary / Municipalities

Kevin Janak

At-Large / Electric Generating Utilities

Adam Yablonski

At-Large/ Agriculture

**VOTING MEMBERS** 

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Counties

Alan Cockerell

Water Utilities

Rey Chavez
Industries

Will Conley Counties Curt Campbell GMA 9 Charlie Flatten

Environmental
Vic Hilderbran

GMA 7 Tom Jungman Agriculture

Russell Labus
Water Districts

Glenn Lord Industries Dan Meyer

GMA 10 Con Mims

River Authorities

Kevin Patteson River Authorities

Iliana Peña

Environmental Robert Puente

Municipalities
Humberto Ramos

Water Districts
Steve Ramsey

Water Utilities
Weldon Riggs

Agriculture
Roland Ruiz

Water Districts

Diane Savage GMA 13

Greg Sengelmann Water Districts

Mitchell Sowards

Small Business Heather Sumpter

GMA 15
Thomas Taggart
Municipalities

lan Taylor

Municipalities
Dianne Wassenich

Public Vacant

Small Business

DATE: Thursday, April 25, 2019

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, May 2, 2019

9:30 a.m.

San Antonio Water System Customer Service Building

Room CR C145

2800 US Highway 281 North

San Antonio, Bexar County, Texas 78212

Enclosed is a copy of the posted public meeting notice.

Steven J. Raabe, P.E.

Enclosure

Agenda Packet for May 2, 2019

#### 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, May 2, 2019, at 9:30 AM 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. Remarks from Texas Water Development Board Director Kathleen Jackson
- 3. Recognition of Retirement for Con Mims, General Manager of the Nueces River Authority, for his 21 Years of Service on the Region L Planning Group
- 4. Discussion and Appropriate Action regarding River Authority and County Representatives for the Region L Planning Group
- 5. Approval of the Minutes from the January 31, 2019, Meeting of the South Central Texas Regional Water Planning Group (SCTRWPG)
- 6. Status of Edwards Aquifer Habitat Conservation Plan (EAHCP), Scott Storment
- 7. 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)
- 8. Discussion and Appropriate Action to Nominate a BBASC Region L Representative
- 9. Texas Water Development Board (TWDB) Communications
- 10. Chair's Report
- 11. Discussion and Appropriate Action Regarding the Consultant's Work and Schedule
- 12. Discussion and Appropriate Action Regarding Chapter 8 Policy Recommendations from the Planning Group
- 13. Presentation of Water Management Strategy Evaluations
- 14. Discussion and Appropriate Action Identifying Potential Water Management Strategies
- 15. Discussion and Appropriate Action Authorizing the San Antonio River Authority (SARA) to Request a Notice-to-Proceed from the TWDB; authorizing the Consultant and/or SARA to work with the TWDB on any follow up information that might be required; and authorizing SARA to Negotiate and Execute the Subsequent TWDB Contract Amendment that will be Issued Following the Notice-to-Proceed.
- 16. Discussion and Appropriate Action to Approve a Budget Adjustment to the TWDB and SARA Contract
- 17. Possible Agenda Items for the Next Region L Meeting
- 18. Public Comment

1. Public Comment

2.	Remarks from Texas Water Development Board Director Kathleen Jackson

3. Recognition of Retirement for Con Mims, General Manager of the Nueces River Authority, for his 21 Years of Service on the Region L Planning Group

In recognition of Mr. Con Mims for his 21 years of service on the Region L Planning Group, the following is a list of his landmark accomplishments that have helped us get to where we are today:

- Mr. Mims was appointed to the Planning Group by the Initial Coordinating Body on April 2<sup>nd</sup>, 1998. By his appointment, the Initial Coordinating Body became the Region L Planning Group.
- Mr. Mims was appointed Chair of the Planning Group in January 2007. His first task was no small feat as he worked for the approval of the 2006 Regional Water Plan that had been submitted after the deadline.
- Over the course of 7 years and 2 state legislative sessions Mr. Mims accomplished the incredible task of having 5 streams designated as ecologically unique in our region.
- Lastly, with the adoption of the 2016 Regional Water Plan, Mr. Mims set the groundwork for the development of the guiding principles for the 2021 Regional Water Plan by recommending their creation in the policy recommendations of the 2016 plan.

4.	Discussion and Appropriate Action regarding River Authority and County Representatives for the Region L Planning Group



**GENERAL OFFICE** 

First State Bank Bldg., Suite 206 200 E. Nopal • P.O. Box 349 Uvalde, Texas 78802-0349 Tel: (830) 278-6810 • Fax: (830) 278-2025 COASTAL BEND DIVISION

602 N. Staples Street, Suite 280 Corpus Christi, Texas 78401 Tel: (361) 653-2110 • Fax: (361) 653-2115

April 16, 2019

BY EMAIL TO SBSCOTT@SARA-TX.ORG

Suzanne Scott, Chair South Central Texas Regional Water Planning Group (Region L) c/o San Antonio River Authority 100 E. Guenther Street San Antonio, TX 78204

#### Dear Suzanne:

I am retiring from the Nueces River Authority on April 30, 2019. Yesterday, the NRA Board of Directors employed John Byrum as my successor, effective May 1, 2019. The Board authorized me to ask Region L to allow Mr. Byrum to fill my position until a permanent replacement can be selected and to accept this letter as the Board's recommendation, nomination, and support of John Byrum as my permanent replacement on Region L.

John and I will be at the May 2 Region L meeting. Please let me know you need anything, else, from me in this regard.

Sincerely,

Con Mims

Executive Director

Cc: Steve Raabe, P.E.

Hillary Lilly

#### Office of the Hays County Judge



#### Bert Cobb, M.D.

111 E. San Antonio St., Suite 300 • San Marcos, Texas 78666 Phone: 512.393.2205 • E-mail: bert.cobb@co.hays.tx.us

November 28, 2017

San Antonio River Authority PO Box 839980 San Antonio, TX 78283-9980

Dear Ms. Scott

Please note that Will Conley will continue to represent Hays County as the appointed designee on the Region L planning group until further notice.

Thank you.

Sincerely,

Bert Cobb, M.D.

foru cols

Hays County Judge

5.	Approval of the Minutes from the January 31, 2019, Meeting of the South Central Texas Regional Water Planning Group (SCTRWPG)

# Minutes of the South Central Texas Regional Water Planning Group

#### May 2, 2019

Vice-Chair Tim Andruss called the meeting to order at 9:30 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.

27 of the 31 voting members, or their alternates, were present.

#### **Voting Members Present:**

Tim Andruss
Michah Volugaris for Curt Campbell
Pat Calhoun
Alan Cockerell
Charlie Flatten

Charlie Flatten Vic Hilderbran Kevin Janak

Tom Jungman Russell Labus Glenn Lord Dan Meyer Con Mims

Jonathan Stinson for Kevin Patteson Donovan Burton for Robert Puente

Iliana Pena

Humberto Ramos Steve Ramsey Weldon Riggs Roland Ruiz Diane Savage Greg Sengelmann

Andrew Young for Mitchell Sowards

Heather Sumpter Thomas Taggart Ian Taylor Dianne Wassenich Adam Yablonski

#### **Voting Members Absent:**

Rey Chavez Will Conley Gary Middleton Suzanne Scott

#### **Non-Voting Members Present:**

Elizabeth McCoy, Texas Water Development Board (TWDB) Marty Kelly, TX Dept. of Parks and Wildlife Jami McCool, TX Dept. of Agriculture Rusty Ray, Texas State Soil & Water Cons.Board

#### **Non-Voting Members Absent:**

Iliana Delgado, TCEQ-South TX Watermaster Specialists Don McGhee, Region M Liaison Ronald Fieseler, Region K Liaison Carl Crull, Region N Liaison Joseph McDaniel, Region J Liaison

Beginning with the February 11, 2016, meeting of the South Central Texas Regional Water Planning Group, all recordings are available for the public at www.regionltexas.org.

#### **AGENDA ITEM NO. 1: PUBLIC COMMENT**

There was no public comment to be heard.

# AGENDA ITEM NO. 2: APPROVAL OF THE MINUTES FROM THE NOVEMBER 1, 2018, MEETING OF THE SOUTH CENTRAL TEXAS REGIONAL WATER PLANNING GROUP (SCTRWPG)

Mr. Mims motioned for the approval of the minutes. Mr. Sengelmann seconded the motion and the minutes were approved with an amendment to correct the spelling of Mr. Eller's name.

#### AGENDA ITEM NO. 3: ELECTION OF OFFICERS FOR CALENDAR YEAR 2019

Ms. Scott asked the group if there were any nominations for officers. Mr. Puente took a point of order to introduce Mr. Mike Frisbe, SAWS new Chief Operating Officer. Ms. Wassenich then asked who the at-large officers were that were up for reelection. Mr. Mims moved to re-elect all current officers. Mr. Riggs seconded the motion and all members voted in favor of the re-election of the current officers.

# AGENDA ITEM NO. 4: STATUS OF EDWARDS AQUIFER HABITAT CONSERVATION PLAN (EAHCP), SCOTT STORMENT

Mr. Scott Stormant gave a brief update on the Edwards Aquifer Habitat Conservation Plan. He described the success of Phase One of the plan and went on to discuss the final phase that would span from 2020-2028. Mr. Stormant was confident in the conservation measures that had been determined in Phase One and will share a final proposal for future efforts to his committee in May.

# AGENDA ITEM NO. 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)

Ms. Scott reviewed the FY18-19 study updates with the group and highlighted that the phase three freshwater inflows study was cancelled. The monies that were dedicated to that phase were said to be reallocated by the Texas Water Development Board (TWDB) for other studies throughout the state. She confirmed that the upcoming BBASC meeting was still being scheduled and that the group would be notified of the meeting as it was scheduled.

## AGENDA ITEM NO. 6: TEXAS WATER DEVELOPMENT BOARD (TWDB) COMMUNICATIONS

Ms. McCoy gave an update on activities since the November 1, 2018 meeting including a briefing on the hydrologic variance that had been reviewed and approved, as well as the notice-to-proceed from the block 1 water management strategies. She gave a briefing on the uniform costing tool as well as the conservation planning tool that can be found on the TWDB website. She reminded the group that the SWIFT funding cycle is open for 2019 but that it would close on February 1, 2019. Ms. McCoy then gave a brief review of the uniform standards stakeholder committee meeting that

occurred in November 2018. The committee adopted two changes, standards 1A and 1B were updated to reflect current planning horizon decades and standard 2A language that relates to the allocation of five points was revised. Standard 2D was revised to remove the reference to the 2016 plan. She also stated that a TWDB guidance document would be made available for optional use. Ms. Scott highlighted that she was present at the meeting in November and that the general feeling was there was not an appetite for change, mainly just clarifications of the current language were supported.

Ms. McCoy then described the Texas Water Service Boundary Viewer that collects accurate retail water service boundaries to better estimate and project utility population for the region. She shared an example of what the tool looked like online as well as gave a handout to the planning members. Ms. Scott said that TWDB would be putting together some educational materials for unique stream segments and reservoirs. Ms. McCoy let the group know that if any members are interested in having materials produced the TWDB would be happy to help.

#### **AGENDA ITEM NO. 7: CHAIR'S REPORT**

Ms. Scott reviewed a number of bills that relate to the planning group including HB 723 on water availability models as well as HB 807 that would create an interregional planning council for more cohesive communication between regions. Mr. Sengelmann said that Chairman Larson would likely refile a brackish water bill and Ms. Wassenich made a comment on HB 722.

## AGENDA ITEM NO. 8: DISCUSION AND APPROPRIATE ACTION REGARDING THE CONSULTANT'S WORK AND SCHEDULE

Mr. Brian Perkins reviewed his schedule for the upcoming months, highlighting that the IPP is due in March of 2020 and that following that due date public meetings will be scheduled around the state. He then shared a handout of projects that Black & Veatch has been working on to keep everyone up to date. He gave a brief explanation of the hydrologic variance letter and that things are moving quickly to take care of the variance. Mr. Senglemann asked about public participation with the 2021 plan, and Mr. Perkins responded that once the draft regional water plan is complete, they would have public hearings for the public to come and ask questions, as well as share comments on the plan.

# AGENDA ITEM NO. 9: DISCUSSION AND APPROPRIATE ACTION TO AMEND THE ADOPTED POPULATION AND WATER DEMAND PROJECTION FOR THE 2021 SOUTH CENTRAL REGIONAL WATER PLAN

Mr. Perkins explained the reasoning behind the amendments to the population and water demand projections. He reminded the group of the previously approved amendments and shared the potential amendments that the group would then vote on, as well as the suggested amendments that would not move forward for approval. He referred to a letter sent by the Goliad County Groundwater Conservation District and explained why their projections would not be amended. Ms. Scott then reminded the group that these would be the final changes made to the projections if approved, though a comment period would be open until February 14, 2019.

Mr. Perkins then recapped the amendments that were previously approved for Cibolo, Green Valley SUD, and Guadalupe Steam-Electric. He went on to detail the amendments that are being proposed for the San Antonio Water System (SAWS) as well as Atascosa County Other. Mr. Perkins then reviewed the proposed changes for Comal County and reminded the group of a conference call in which the changes were proposed. Mr. Sengelmann asked who from Comal County was involved and did they approve of the amendments. Mr. Perkins listed the attendees of the call and shared that it was a compromise decision by those entities and the TWDB. Mr. Cockerell asked if the amendments would negatively impact other municipalities. Mr. Perkins said no, it would not impact the other municipalities. Ms. Scott asked Mr. Taylor if he had anything to add and he confirmed that he was happy with the direction things were going and thanked Mr. Perkins for his work on the amendments.

Mr. Perkins then requested an amendment from the planning group on the SAWS, Atascosa County, Comal County, Canyon Lake WSC, and NBU population water demand projections. He then explained the schedule following an approval of the item. A motion was made by Mr. Middleton, seconded by Mr. Lord and all voted in favor of the motion.

# AGENDA ITEM NO. 10: DISCUSSION AND APPROPRIATE ACTION REGARDING A REQUEST FOR THE TEXAS WATER DEVELOPMENT BOARD TO CONDUCT A SOCIOECONOMIC ANALYSIS OF NOT MEETING THE WATER NEEDS IN THE 2021 SOUTH CENTRAL TEXAS REGIONAL WATER PLAN

Mr. Perkins gave a brief explanation of the socioeconomic impact analysis process. He recommended to the group that they request that the study be conducted by the TWDB. Ms. Scott asked if the group would then adopt the study done by the TWDB, and Mr. Perkins said the group would have an opportunity to comment on the study and it would then be added as an attachment to the 2021 plan. Mr. Taggart made a motion to approve, Mr. Riggs seconded the motion and all voted in favor of the motion.

## AGENDA ITEM NO. 11: DISCUSSION AND APPROPRIATE ACTION IDENTIFYING POTENTIAL WATER MANAGEMENT STRATEGIES

Mr. Perkins started by reviewing the 11 water management strategies in Block 1 that were approved at the November meeting and explained that he would then share 18 additional strategies for Block 2 for the group's approval. He reviewed all scope and fee estimates in Block 2. Ms. Scott asked who would be sponsoring the Victoria County Steam-Electric Project. Mr. Perkins responded by saying that the sponsor had not been determined. Ms. Scott reminded the group that through their own guiding principles there must be a sponsor identified for each project. Mr. Hill said that GBRA and Victoria County would get together to discuss sponsorship. Mr. Middleton questioned the fee associated with the City of Victoria ASR project. He said that the demonstration project was almost complete and with most of the work already finished the listed fee is too large for the project. Mr. Perkins said that the fee may be on the high side because the values are all estimates but that his team would review. Mr. Puente asked if the funds were being spent in 2019 and who would be overseeing the expenditures and work being conducted. Mr. Perkins responded by explaining the process of review that takes place when invoices are sent from Black and Veatch to the San Antonio River Authority. Mr. Middleton requested that he be able to see the work and

hours that are charged to the ASR project. Mr. Ramos moved to approve all 18 water management strategies in Block 2, Ms. Pena seconded the motion and they were approved by vote from the group.

Mr. Perkins then reviewed seven potential water management strategies in Block 3 and asked the group for their approval to move forward in determining the scope and fees for those strategies.

Mr. Perkins explained the advanced water conservation goals that Ms. Wassenich had requested be brought to the attention of the planning group. Ms. Wassenich went into detail about the analysis and why she wanted to bring it to the group. She shared an excerpt from a Texas Living Waters report on conservation. Ms. Scott asked Mr. Perkins if he would be using the information to inform his analysis of water conservation. Mr. Perkins explained how the best management practices in the report could be helpful and would be utilized.

Mr. Perkins reminded the group that they had approved 29 water management strategies and the next few meetings would be heavy in water management strategy evaluation. Ms. Scott recommended that the next presentation would include a review that confirms that the strategies meet the requirements found in the guiding principles. She recommended that all strategies be reviewed before making any determinations on approval. Mr. Taggart asked if all strategies are recommended or were there any alternates? Mr. Perkins said at this time most are proposed to be recommended.

AGENDA ITEM NO. 12: DISCUSSION AND APPROPRIATE ACTION AUTHORIZING THE SAN ANTONIO RIVER AUTHORITY (SARA) TO REQUEST A NOTICE-TO-PROCEED FROM THE TWDB; AUTHORIZING THE CONSULTANT AND/OR SARA TO WORK WITH THE TWDB ON ANY FOLLOW UP INFORMATION THAT MIGHT BE REQUIRED; AND AUTHORIZING SARA TO NEGOTIATE AND EXECUTE THE SUBSEQUENT TWDB CONTRACT AMENDMENT THAT WILL BE ISSUED FOLLOWING THE NOTICE-TO-PROCEED

Ms. Scott read the above item referring to a contract amendment needed to proceed with the work on Block 2 of the water management strategies and Ms. Wassenich moved to approve. The motion was seconded by Mr. Middleton. The motion was approved by the Planning Group.

## AGENDA ITEM NO. 13: POSSIBLE AGENDA ITEMS FOR THE NEXT REGION L MEETING

The first item suggested for the next meeting was the review of the Block 3 water management strategies' scope and fees. Mr. Perkins reminded the group that within Chapter 8 of regional water plan, the group could make policy recommendations. It was suggested that Chapter 8 from the previous plan be printed out for the members and an item placed on the May agenda to discuss if the group would like to make any changes, additions or subtractions for the new plan. Ms. Wassenich recommends that the group discuss counties that no longer serve on the planning group such as Goliad and Hays counties. Mr. Mims announced his retirement and that this meeting would be his last to represent River Authorities. He was asked to have his board send a letter to

recommend a replacement for the planning group. Mr. Raabe explained the process that the group would need to take in replacing Mr. Mims. The group then thanked Mr. Mims for his leadership.

AGENDA ITEM NO. 14: PUBLIC COMMI	ENI
There was no public comment to be heard.	
The meeting adjourned at 11:27am.	
Approved by the South Central Texas Region 2, 2019.	al Water Planning Group at a meeting held on May
	GARY MIDDLETON, SECRETARY
	SUZANNE SCOTT, CHAIR

6.	Status of Edwards Aquifer Habitat Conservation Plan (EAHCP), Scott Storment

7.	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)

# 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) Update

#### **Studies Recently Reported on at BBASC:**

- a. Statewide Synthesis of Environmental Flow Studies from 2014 2017, Dr. Thom Hardy
- b. Assessing the effects of freshwater inflows and other key drivers on the population dynamics of blue crab and white shrimp using a multivariate time-series modeling framework, Dr. Lindsay Scheef
- c. Seasonal ecological assessment in the upper Guadalupe Delta, Mr. Ed Oborny
- d. Using comparative long-term benthic data for adaptive management of freshwater inflow to three estuaries (Colorado-Lavaca, Guadalupe, and Nueces), Ms. Melissa Rohal, delegate for Paul Montagna
- e. Environmental flows validation in three river basins (Brazos, Colorado-Lavaca, and Guadalupe-San Antonio), Dr. Kirk Winemiller
- f. Nutrient and sediment monitoring in four lower river basins (Trinity-San Jacinto, Colorado-Lavaca, Guadalupe-San Antonio, and Nueces), Mr. Mike Lee

To view copies of the above presentations please use this link:

 $\underline{https://www.tceq.texas.gov/permitting/water\_rights/wr\_technical-resources/eflows/guadalupe-sanantonio-\underline{bbasc/\#past}$ 

#### **Solicitation for Nominations:**

The GSA BBASC is soliciting nominees to fill five vacancies in the following stakeholder categories:

- 1. Chemical Manufacturing (1),
- 2. Commercial Fishermen (1),
- 3. Municipalities (1),
- 4. Recreational Water Users (1),
- 5. Industry: Refining (1).

To nominate a stakeholder, or to self-nominate, please complete the attached nomination form, and send to Jade Rutledge by email or mail. Nominations must be received by close of business on **August 30, 2019**. Please forward this message to anyone who may be interested.

There are three other vacancies that will be filled through direct solicitation of nominees from appropriate entities. These vacancies are in the Soil and Water Conservation Districts, River Authorities, and Regional Water Planning Groups stakeholder categories.

8.	Discussion and Appropriate Action to Nominate a BBASC Region L Representative

#### Guadalupe, San Antonio, Mission and Aransas Rivers And Mission, Copano, Aransas, and San Antonio Bays **Stakeholder Committee Member Nomination Form**

Person being nominated	Your contact details
Name:	Name:
Address/City/State:	Address/City/State:
Nominee's Basin of Residence:	
Title:	Title:
Affiliation:	Affiliation:
Phone: Fax:	Phone: Fax:
Email:	Email:
Texas Water Code, Section 11.02362):  agricultural irrigation free-range livestock concentrated animal feeding operation recreational water users Municipalities* soil and water conservation districts* industrial refining chemical manufacturing	electricity generation production of paper products or timber commercial fishermen public interest groups regional water planning groups* groundwater conservation districts* river authorities* environmental interests  ground and qualifications to represent the interest groups

Send nomination forms to:

Tel: 512-239-4559

Jade Rutledge, MC-160 Texas Commission on Environmental Quality PO Box 13087 Austin TX 78711-3087

(put "BBASC Nominations" in the subject line)

<sup>\*</sup>If an interest group is starred above, please attach an endorsement of the nominee from the entity chief executive officer or documented board action from the interest group.

### Meeting Rules for the

Guadalupe, San Antonio, Mission and Aransas Rivers/Mission, Copano, Aransas and San Antonio Basin and Bay Area Stakeholder Committee (BBASC)

#### Approved on September 15, 2017

#### 1. Meetings are Public:

While not subject to the requirements of the Open Meetings Act, the BBASC will conform to the intent of the Act to ensure adequate public notice, participation and transparency of the committee's actions. The agenda for each meeting will be posted on the website maintained for the BBASC by the Texas Commission on Environmental Quality (TCEQ) at least 72 hours in advance of the meeting.

Meeting agenda packets, presentation materials, and meeting minutes (following approved by the BBASC) will also be posted on the website.

#### 2. Administrative Support, Agendas and Record Keeping:

The TCEQ provides administrative support to the BBASC to include:

- Scheduling of meetings, arranging meeting locations, performing appropriate meeting support to conduct an efficient meeting at the location.
- Preparing and posting agendas, recording meetings and preparing minutes, distributing meeting agenda and support materials to BBASC members and interested parties and organizations who request notification of meetings.
- Maintaining website on which meeting notices and other material on the business of the BBASC will be posted.
- Providing guidance to the Chair, Vice Chair, and committee membership on agenda items.
- Managing all records on the business of the BBASC including agendas and minutes; contact databases of BBASC membership and designated alternates (see below); meeting attendance records and database of citizens and/or other interested parties and organizations with expressed interest in the business of the BBASC.

As soon as the date, time and location of a meeting are set by the BBASC, TCEQ staff shall send notification to the BBASC members and place the meeting notification on the website. The meeting agenda will be prepared as a draft and distributed to the BBASC members at least five days prior to the meeting. At each meeting, the first item on the agenda will be to reach agreement on the agenda. Prior to adjourning each meeting, the Chair will provide an opportunity for committee members to request items for future consideration by the BBASC. Upon agreement of the BBASC on the suggested agenda items, the Chair will coordinate with TCEQ staff to schedule the items to be placed on upcoming meeting agenda.

#### 3. Meeting schedule and location

Regular meetings shall be held on dates and locations (or a minimum the targeted county within the basin where a meeting location will be secured) approved by the membership at the first meeting held in the calendar year, or as soon thereafter as possible. All attempts will be made to secure a meeting schedule that will accommodate a majority of the membership. The Chair has the discretion to cancel regular meetings if it is determined in consultation with the TCEQ staff that the meeting is not necessary. Called special meetings will be scheduled at the Chair's discretion or on request of three voting members. Should a special meeting be scheduled, the Chair should strive to provide the BBASC membership ten (10) working days' notice.

The Chair has the discretion to change meeting locations and dates, with appropriate notice provided to the BBASC members. The BBASC members should be notified as soon as the change is known.

To facilitate the work of the BBASC, the Chair may appoint a work group of BBASC members or alternates to gather more information on a topic or to formulate recommendations for consideration by the full BBASC. TCEQ staff will inform the full BBASC membership of the meetings of a work group and attendance by all members is allowed.

The Chair will ask for volunteers from the BBASC to serve on the appointed work group without a limitation on the size of the work group. The Chair will request that a member of an appointed work group volunteer to work with TCEQ staff to ensure that the discussions at the work group meeting are accurately recorded and that meeting notes are prepared. The meeting notes shall be distributed to all the work group members as soon after a work group meeting as possible for review and modification. The work group meeting notes must then be distributed to the full membership of the BBASC prior to the next full meeting of the BBASC where a report by a work group is to be included on the agenda.

Work groups have no decision making authority and recommendations must be presented to the full BBASC for consideration. BBASC members, including those that may have served on the work group, have no obligation to support recommendations presented by a work group.

#### 4. Public Participation in the Meetings

The public will be allowed to speak at the beginning and end of each meeting when recognized by the Chair and, at the Chair's discretion, on specific agenda items. Comments will be limited on each occasion to three minutes unless waived by the Chair.

#### 5. Officers:

A Chair will be elected by the BBASC to preside over the meetings. A Vice-Chair will be elected by the BBASC to preside over the meetings in the absence of the Chair. Each officer shall serve a term of one year and until his/her successor takes the office with no restrictions on the number of consecutive terms an individual may serve. Officers will be elected at the first meeting of each calendar year, with the exception of the first year.

#### 6. Quorum

A quorum of the BBASC is defined as 51% of the voting membership, including alternates, in attendance.

Members participating via teleconferencing will be considered present for purposes of quorum and decision making. If a conference line is limited to certain number of participants, BBASC members maintain precedence over non-member public participants. If a conference call is available at the meeting location, the call-in information will be included in the meeting notice.

If a quorum of the BBASC is not in attendance, the Chair may ask those in attendance if they wish to proceed with items on the agenda, such as information briefings, but no discussions to reach consensus on an issue or votes (see item 11 below) can be taken without the presence of a quorum.

#### 7. Attendance and Alternates

Each required interest group/stakeholder should be represented by one of the following:

- Designated member appointed by the Texas Environmental Flows Advisory Committee,
- Member appointed by the BBASC to fill a vacancy in a stakeholder group in accordance with SB3,
- Standing or designated alternate identified by the appointed BBASC member

Each member of the BBASC may designate a standing alternate to serve in the members absence. The BBASC member shall submit his/her contact information to the Chair and TCEQ staff prior to the alternate's participation at a meeting. The BBASC members should through the designation of a standing alternate strive to maintain continuity in the participating alternate. The BBASC member is responsible for ensuring that his/her standing alternate remains informed of the activities of the BBASC. TCEQ staff will distribute all meeting agenda and packet materials to all identified standing alternates.

Alternates may participate in the meetings and, with the exception of the votes on membership to the Bay and Basin Expert Science Team (BBEST), vote in the member's absence. Alternates are considered part of the quorum.

If a BBASC member is unable to attend a meeting or may be required to leave during Meeting Rules

a meeting, the member is requested to inform the Chair and the TCEQ staff. The member is also required to notify his/her designated standing alternate to ensure representation at the meeting. If a member's standing alternate is unable to represent the BBASC member at meeting, then the BBASC member may designate a substitute alternate to participate in the meeting, but must inform the Chair and TCEQ as soon as possible before the meeting is convened of the substitute alternate's participation in the meeting. A BBASC member unable to attend a meeting or participate in the entire meeting may submit written comments to be shared at the meeting by his/her designated alternate.

BBASC members who have missed three (3) consecutive regular meetings without being represented by an alternate shall be considered to have engaged in excessive absenteeism. A BBASC member who has missed four (4) consecutive regular meetings may be subject to removal by the BBASC for excessive absenteeism.

# 8. Replacement of Members (in accordance with provisions of SB3), inserted below:

TWC 11.02362(g): Members of a basin and bay area stakeholders committee serve five-year terms expiring March 1. If a vacancy occurs on a committee, the remaining members of the committee by majority vote shall appoint a member to serve the remainder of the unexpired term.

#### 9. Voting

The BBASC shall attempt to make decisions based on consensus. Consensus is a decision built by identifying and exploring all members' interests and by assembling a package of agreement which satisfies these interests to the greatest extent possible. A consensus is reached when all voting members agree that their major interests have been taken into consideration and addressed in a satisfactory manner so that they can support the decision of the group. The process of building a consensus involves the development of alternatives and the assessment of the impacts of those alternatives.

Achieving consensus requires serious treatment of every group member's considered opinion. The process of achieving consensus is called consensus decision-making and has the components as shown in Figure 1: discussion of the item; formation of a proposal; call for consensus; identification and addressing of concerns; and modification of the proposal.

Figure 1. Flowchart of consensus decision-making process

Consensus does not necessarily mean unanimity. Some members may strongly endorse a particular solution or decision while others may accept it as a workable agreement. A BBASC member can participate in the consensus without embracing each element of the agreement, or necessarily having each of his/her interests satisfied to the fullest extent. In a consensus agreement, the members recognize that, given the combination of gains and trade-offs in the decision package and give the current

circumstances and alternative options; the resulting agreement is the best one the voting members can make at this time.

Proposal

Test for Consensus

Modification to Proposal

Concerns Raised

Stand Aside

Action Points

Action Points

If it appears to the Chair that consensus cannot be reached, then the Chair may entertain a motion to have the BBASC suspend the attempt to reach consensus on the proposal under consideration by the BBASC. No discussions to reach consensus on an issue or votes can be taken without the presence of a quorum.

For decisions on items deemed "routine," the vote to end the consensus process must receive an affirmative vote of at least51% of the membership currently present, including alternates, of the BBASC. A quorum is a precondition to any routine decision.

Routine items are limited to 1) soliciting new members for vacancies, 2) voting on new BBASC members, and 3) approving meeting minutes.

For decisions on items deemed "significant," the vote to end the consensus process must receive an affirmative vote of at least 2/3rds of the full voting membership. The Chair shall only call for the vote for significant items if 2/3rds of the voting membership, including alternates, is present at the meeting.

Significant items include, but are not limited to, removal of BBASC members, rule revisions, appointment of BBEST members, and recommendations regarding standards, studies, or work plans.

If the vote to end the consensus process is approved for either routine or significant items, the Chair will entertain motions on the specific proposal to be placed for a vote by the BBASC. Discussion and action on each motion would be facilitated in accordance with parliamentary procedure. For a motion regarding a routine item to be approved, it must receive an affirmative vote of at least 51% of the BBASC voting membership currently present, including alternates. For a motion regarding a significant item to be approved, it must receive an affirmative vote of 2/3rds of the full BBASC voting membership, including alternates.

Where decision making requires an immediate BBASC vote, which does not coincide with a scheduled BBASC meeting, the BBASC will organize a conference call to inform and discuss potential decisions. Voting will then be administered by email.

#### 10. Conduct of Meetings

To the extent not inconsistent with other aspects of these rules, the most current edition of Robert's Rules of Order will be used for guidance in the parliamentary procedure for the conduct of the meetings.

#### 11. Amendment of Meeting Rules

These Rules may be amended by an affirmative vote of 2/3rds of the full voting membership, including alternates, of the BBASC at a properly called and posted meeting. The agenda shall include a caption regarding the proposed section of the meeting rules proposed for amendment.

# Members of the Guadalupe, San Antonio, Mission, and Aransas Rivers and Mission, Copano, Aransas, and San Antonio Bays Stakeholders Committee

	Member	Alternate
1	<ul> <li>Suzanne Scott (Chair)</li> <li>210/227-1373</li> <li>sbscott@sara-tx.org</li> </ul>	• Steve Graham
2	<ul> <li>Dianne Wassenich (Vice-Chair)</li> <li>512/353-4628</li> <li>dianne@snamarcosriver.org</li> </ul>	<ul> <li>Tom Wassenich</li> <li>○ 512/393-3787</li> <li>○ tomwassl@gmail.com</li> </ul>
3	<ul> <li>Jim Bower</li> <li>210-846-5095</li> <li>jmbmail@satx.rr.com</li> </ul>	
4	Jace W. Tunnell     Jace.Tunnell@austin.utexas.edu     361-749-3046	• Dr. Liz Smith  o esmith@savingcranes.org  o 608-356-9462
5	<ul> <li>Thurman Clements</li> <li>361/655-3707</li> <li>clecatco@suddenlink.net</li> </ul>	• Tim Andruss  o 361/579-6863  timandruss@vcgcd.org
6	• Terry Dudley	• Steve Hixon  o 210/630-5764  o <u>hixonsaurs@gmail.com</u>
7	<ul> <li>Roland Ruiz</li> <li>Rruiz@edwardsaquifer.org</li> </ul>	• Rick Illgner-VACANT  o o
8	• Ian Taylor  o 830/6298482  o <u>itaylor@nbutexas.com</u>	<ul> <li>Roger Biggers</li> <li>830/29 8470</li> <li>rbiggers@nbutexas.com</li> </ul>
9	<ul> <li>Lance Thomasson-VACANT</li> <li>361/572-2317</li> <li>lance.e.thomasson@invista.com</li> </ul>	<ul> <li>Cindy Shilinga</li> <li>361-572-1210</li> <li>Cindy.l.shilinga@invista.com</li> </ul>
10	• Ken Dunton  o 361/749-6744  o ken.dunton@mail.utexas.edu	<ul> <li>James Dodson</li> <li>361/649-1518</li> <li>jdodson27@gmail.com</li> </ul>
11	<ul> <li>Garrett Engelking</li> <li>361/526-1483</li> <li>gengelking@gmail.com</li> </ul>	
12	<ul> <li>Jack Campbell-VACANT         <ul> <li>361/920-4111</li> <li>brokenarrowseadrift@hughes.net</li> </ul> </li> </ul>	

13	<ul> <li>Jay Gray         <ul> <li>830/672-6504</li> <li>grahamcattle@gvec.net</li> </ul> </li> </ul>	<ul> <li>Josh Gray         <ul> <li>830/672-6504</li> <li>joshgray@gvec.net</li> </ul> </li> </ul>
14	<ul> <li>Jennifer EllisVACANT</li> <li>o jennymcm@juno.com</li> </ul>	<ul> <li>Annie Schmitt</li> <li>512-610-7751</li> <li>SchmittA@nwf.org</li> </ul>
15	<ul> <li>Charlie Flatten</li> <li>512-694-1121</li> <li>charlie@hillcountryalliance.org</li> </ul>	
16	<ul> <li>Kate Garcia-VACANT         <ul> <li>kgarcia@victoriatx.org</li> <li>(361) 485-3235</li> </ul> </li> </ul>	
17	<ul> <li>Colin McDonald</li> <li>210-878-5536</li> <li>Mcd.colin@gmail.com</li> </ul>	
18	<ul> <li>Mike Mecke-VACANT</li> <li>830/896-0805</li> <li>mmecke@stx.rr.com</li> </ul>	<ul> <li>Eddie Seidensticker</li> <li>(281) 838-9546 (mobile)</li> <li>eddieseide@aol.com</li> </ul>
19	• Con Mims-VACANT  o 830/278-6810  o cmims@nueces-ra.org	<ul> <li>Steve Raabe</li> <li>210/302 3614</li> <li>sraabe@sara-tx.org</li> </ul>
20	<ul> <li>James Murphy-VACANT         <ul> <li>830/414-4130</li> <li>mangerian@gmail.com</li> </ul> </li> </ul>	
21	<ul> <li>Scott Courtney</li> <li>210-823-2193</li> <li>Premierhydro10@yahoo.com</li> </ul>	
22	<ul> <li>Robert Puente</li> <li>210/233-3848</li> <li>robert.puente@saws.org</li> </ul>	<ul> <li>Hope Wells/Steven Clouse</li> <li>210/233 3774</li> <li>sclouse@saws.org</li> <li>Hope.wells@saws.org</li> </ul>
23	<ul> <li>Doris Cooksey</li> <li>210-353-2077</li> <li>dmcooksey@CPSEnergy.com</li> </ul>	
24	<ul> <li>Milan Michalec</li> <li>(830) 816-2504</li> <li>redfish@gvtc.com</li> </ul>	<ul> <li>Micah Voulgaris</li> <li>(830) 816-2504</li> <li>manager@ccgcd.org</li> </ul>

25	<ul><li>David Mauk</li><li>830/796-7260</li><li>dmauk@bcragd.org</li></ul>	<ul> <li>Kayla Shearhart</li> <li>830-796-7260</li> <li>kshearhart@bcragd.org</li> </ul>
26	<ul> <li>Tommy Hill</li> <li>○ 830/379-5822</li> <li>○ thill@gbra.org</li> </ul>	<ul> <li>Nathan Pence</li> <li>830/379 5822</li> <li>npence@gbra.org</li> </ul>

9. Texas Water Development Board (TWDB) Communications

### 10. Chair's Report

#### **Bills Directly Related to Region L**

#### HB 723 Larson, Lyle – Water Availability Models

By December 1, 2022 TCEQ is to update the water availability models (WAMs) for the Brazos, Nueces, Red River, and Rio Grande river basins. No later than 12/1/2022. Set on Senate Intent Calendar for 04/30/2019

#### HB 807 Larson, Lyle - Interregional Planning Council

Creates an Interregional Planning Council consisting of one member from each regional water planning group. The purpose is to improve coordination amongst the regional planning groups and between each regional water planning group and TWDB "to meet the water needs of the state as a whole."

Referred to Senate Committee on Senate Water and Rural Affairs 04/04/2019

#### **Bills of Interest**

#### HB 720 Larson, Lyle – Aquifer Storage & Reuse

Seeks to allow TCEQ to create an expedited permit process for water permits converting to the use of ASR and for the capture of flood flows to be stored in ASRs. Set on the House Calendar 04/30/2019

#### HB 726 Larson, Lyle – Groundwater

Aligns production and export permits. Provides a procedure for a GCD to adopt a moratorium that includes notice and hearing including the hearing requirements.

Received in the Senate 04/16/2019

#### HB 1052 Larson, Lyle – State Water Plan Funding Mechanism

This bill creates an avenue for the TWDB to have ownership interest in desalination and aquifer storage and reuse projects through funding the projects from the state participation account II. Received in the Senate 04/23/2019

#### HB 13 Phelan, Dade - State Flood Planning

Relating to flood planning, mitigation, and infrastructure projects; making an appropriation Referred to Senate Committee on Senate Water and Rural Affairs 04/16/2019

#### SB 7 Perry, Charles – Flood and Disaster Funding

Relating to flood control planning and the funding of flood planning, mitigation and infrastructure projects.

Referred to House Natural Resources 04/30/2019

#### SB 8 Perry, Charles – State Flood Planning

Relating to state and regional flood planning.

Referred to House Natural Resources 04/30/2019

11. Discussion and Appropriate Action Regarding the Consultant's Work and Schedule

#### 2021 South Central Texas Regional Water Plan Estimated Schedule May 2019 RWPG Meeting

Task/		2019										2020												
Chapter	Description	Α	М	J	J	Α	S	0	N	D	J	F	M	Α	М	J	J	Α	S	0	N	D		
1	Planning Area Description																							
2	Population/Water Demands																							
3	Existing Supply Analyses																							
4	Identification of Needs																							
5	Identification & Evaluation of Potential WMSs																							
6	Impacts of Regional Water Plan; Cumulative Effects																							
7	Drought Response Information, Activities, & Recommendations																							
8	Policy Recommendations & Unique Sites																							
9	Infrastructure Financing Analysis																							
10	Public Participation & Plan Adoption													*										
11	Implementation & Comparison to Previous Plan																							
12	Prioritization																							
NA	Texas Legislative Sessions																							
NA	GMA DFC Revisions/Readption																							
		<u>†</u> † †									<b>† †</b>					<b>† † †</b>								
											2021 IPP Due Mar 3, 2020						2021 RWP Due Oct 14, 2020							



Black Veatch DRAFT 4/17/2019

12. Discussion and Appropriate Action Regarding Chapter 8 Policy Recommendations from the Planning Group

#### **GUIDING PRINCIPLES - ARTICLE XII COMMITTEES**

**Section 1 Establishment** The SCTRWPG may by motion establish committees and subgroups to assist and advise the SCTRWPG in the development of the regional water management plan. The committee or subgroup may be formed to address specific issues assigned by the SCTRWPG and may have a specified term of membership.

**Section 2 Membership** Membership in the committees and subgroups shall generally follow the requirements and procedures of Article V of these Bylaws; membership of the committees and subgroups should be inclusive, rather than exclusive, in nature; the interests identified in the initial coordinating body will be invited to participate, as well as other interests that have been identified. Appointment to committees or subgroups shall be made by the Chair. The terms of office for all members of committees and subgroups shall be either upon the expiration of the term, if any, specified by the SCTRWPG in the establishing motion for the committee or subgroup, or upon the expiration of the persons' membership in the SCTRWPG.

**Section 3 Officers** The Chair, Vice-Chair and Secretary of a committee or subgroup established by the SCTRWPG shall be elected from the members 21 of the committee or subgroup. The Chair, Vice-Chair and Secretary of the committee or subgroup established by the SCTRWPG shall be elected to their respective offices by a majority affirmative vote of the members of the committee or subgroup. Additional committee or subgroup officers with associated responsibilities may be created as necessary by a majority affirmative vote of the members of the committee or subgroup. The additional officers shall be elected by a majority affirmative vote of the members of the committee or subgroup.

**Section 4 Meetings** Requirements and procedures for committee or subgroup meetings shall follow those established in Article IX of these Bylaws, including requirements for notice. Committees or subgroups may adopt their own rules of procedure, if authorized by the SCTRWPG and the rules are not in conflict with state law, TWDB rules or these Bylaws.

**Section 5 Books and Records** Requirements and procedures for committee or subgroup books and records shall follow those established for the SCTRWPG in Article XI of these Bylaws.

**Section 6 Code of Conduct** Members of a committee or subgroup are subject to the requirements of Article V, Section 6 of these Bylaws.

#### **Chapter 8 – Policy Recommendations & Unique Sites**

TAC Title 31, Part 10, Rule §357.43

- a) The RWPs shall contain any regulatory, administrative, or legislative recommendations developed by the RWPGs
- b) ...RWPGs may include in adopted RWPs recommendations for all or parts of river and stream segments of unique ecological value located within the RWPA...
- c) ...RWPG may recommend sites of unique value for construction of reservoirs...



#### **Chapter 8 – Policy Recommendations & Unique Sites**

**TAC Title 31, Part 10, Rule §357.43 (cont.)** 

- d) Any other recommendations that the RWPG believes are needed and desirable to achieve the stated goals of state and regional water planning...
- e) RWPGs may develop information as to the potential impacts of any proposed changes in law prior to or after changes are enacted
- f) RWPGs should consider making legislative recommendations to facilitate more voluntary water transfers in the region



# **Chapter 8 – Policy Recommendations & Unique Sites**

**Suggested Updates to Chapter 8:** 

- Include information regarding the 2021 Plan Enhancement Process (Region L's Guiding Principles)
- Update information as it pertains to pending and enacted legislation since 2015
- Revisit the 6 Recommendations from the 2016 SCTRWP regarding Groundwater Management
- Update information as it pertains to GMA Process / DFCs
- Revisit specific language that applied to the 2016 SCTRWP and other minor edits



# 8 Policy Recommendations & Unique Sites [31 TAC §357.43]

# 8.1 Agricultural Water

#### 8.1.1 Irrigation Water Needs

The South Central Texas Regional Water Planning Group (SCTRWPG) finds that, under current conditions and regional water planning guidelines, it is not practical for the SCTRWPG to develop water management strategies (WMS) designed to develop new water supplies or infrastructure for agricultural water users for projected irrigation water shortages. The complexity of the factors that influence decisions regarding the development of agricultural water supplies (e.g., commodity prices, variability of quality and quantity of local, privately-owned water resources, broad geographic distribution of needs, and other economic considerations of individual agricultural producers) substantially limits the SCTRWPG's ability to conceive of and evaluate discrete strategies to supply water for future water needs in many cases. See Appendix F for a summary of the unmet needs and a quantitative description of the socioeconomic impacts of not meeting these needs.

The SCTRWPG recommends that the Texas Water Development Board (TWDB), in cooperation with the agriculture industry agencies and trade groups in Texas, undertake studies of the factors that influence decisions regarding development of irrigation water supplies for the purpose of developing the best approach to: 1) project future irrigation water needs, and 2) identify the instances in which regional water planning efforts would be the most appropriate mechanism for developing strategies to meet future needs.

# 8.1.2 Agricultural Water Conservation Programs

The SCTRWPG recommends adequately funding the agricultural water conservation programs provided by the TWDB.

#### 8.1.3 Water Use Information

The SCTRWPG recommends that TWDB develop the necessary programs and processes to accurately estimate annual water use for irrigation, including water use associated with agricultural activities unrelated to federal or state funding programs, and livestock watering categories.

# 8.2 Transport of Water

## 8.2.1 Water Transport Proposals

Given the number of proposals to transport large amounts of water within the areas represented by the SCTRWPG and surrounding regional water planning groups, the legislature should review the Texas Water Code to determine what, if any, changes should be made to address regional and interregional conflicts. Any changes to the

Code should include a provision for state funding to TWDB to support comprehensive technical studies to ensure that interested entities have the scientific data required to analyze and respond to such proposals. The technical studies and scientific data are essential to fully evaluate the effects of the proposals on the local communities, the environment, property owners, and the economy.

#### 8.2.2 Collaboration Between Regional Planning Areas

The SCTRWPG recommends that the Legislature clarify that the boundaries of the regional water planning regions were drawn primarily to define water planning regions and were not intended as barriers to prevent water transport from one region to another or to favor one region over another for any reason.

#### 8.3 Groundwater

#### 8.3.1 Groundwater Management

The SCTRWPG respects the rules and regulations of groundwater conservation districts, as it does those of all other subdivisions of the state and state agencies. The SCTRWPG respects the decision of the Texas Supreme Court that groundwater is a private property right (Chapter 36 TWC). The SCTRWPG believes that all rules should be adopted pursuant to accepted administrative procedures based on the standards of rationality, equity, and scientific evidence. The SCTRWPG supports the determinations of Modeled Available Groundwater (MAG) based on Desired Future Conditions (DFC) established by Groundwater Management Area (GMA) pursuant to Chapter 36 of the Texas Water Code. The SCTRWPG supports the use of aquifer monitoring programs developed by groundwater conservation districts within a GMA to evaluate achievement of and compliance with DFCs.

Recognizing the management challenges facing groundwater conservation districts with multiple recommended water management strategies potentially seeking permits to withdraw groundwater supplies in excess of amounts determined to be available, the SCTRWPG approved the following series of recommendations applicable at appropriate locations in the 2016 Regional Water Plan.

Recommendation #1: When allocated groundwater exceeds the MAG in any decade, the Workgroup recommends that exempt use be maintained at the full estimated amount, while the permitted and grandfathered use amounts are reduced proportionately for planning purposes so that the total firm supply equals the MAG.

Recommendation #2: Where potentially feasible WMSs are contemplated that require new permits and allocated groundwater exceeds the MAG, show a firm supply of zero in the plan for the WMSs for planning purposes, but explain that groundwater for the WMSs may be obtained under existing permits through the Carrizo/Wilcox Transfers WMS or under new permits issued in accordance with GCD rules.

Recommendation #3: Where potentially feasible WMSs are contemplated that require new permits and allocated groundwater is less than the MAG, but allocated groundwater plus WMSs exceeds the MAG, show firm supplies of no more than the difference between allocated groundwater and the MAG in the plan for planning purposes, but

explain that supplemental groundwater for the WMSs may be obtained under existing permits through the Carrizo/Wilcox Transfers WMS or under new permits issued in accordance with GCD rules.

Recommendation #4: For potentially feasible WMSs with firm supplies proportionately reduced or shown as zero for MAG compliance, evaluate facilities and costs for WMSs at both the reduced firm supply value associated with MAG compliance without transfers and at the supply amount that the sponsor seeks to develop.

Recommendation #5: For existing groundwater supplies that are fully permitted, or grandfathered, by a GCD and are proportionately reduced in quantity for planning purposes in this Plan for MAG compliance, include the following explanatory note in the regional water plan document and database at appropriate locations:

"For each aquifer in the region, the GCDs have adopted desired future conditions (DFCs). In some GCDs, full use of all groundwater supplies (permitted, grandfathered and exempt) may result in non-achievement of the DFCs for an aquifer. To ensure consistency with the DFCs, TWDB currently requires that groundwater availability for each aquifer be limited for planning purposes to the modeled available groundwater (MAG) for the aquifer. This has resulted, for planning purposes only, in adjustments to supply amounts in this plan for some areas for certain time periods. This should not be construed as recommending or requiring that GCDs make these adjustments. SCTRWPG recognizes and supports the ability of permit holders to exercise their rights to groundwater use in accordance with their permits and it recognizes and supports the GCDs' discretion to issue permits and grandfather historical users for amounts in excess of the MAG. SCTRWPG may not modify groundwater permits that GCDs have already issued or limit future permits that GCDs may issue. If the MAG is increased during or after this planning cycle, SCTRWPG may amend this Plan to adjust groundwater supply numbers that are affected by the new MAG amount."

Recommendation #6: For potentially feasible WMSs that have GCD permits for a portion of the needed supply and the remainder is not yet permitted, include the following explanatory note in the regional water plan document and database at appropriate locations:

"For each aquifer in the region, the GCDs have adopted desired future conditions (DFCs). In some GCDs, full use of all groundwater supplies (permitted, grandfathered and exempt) may result in non-achievement of the DFCs for an aquifer. To ensure consistency with the DFCs, TWDB currently requires that groundwater availability for each aquifer be limited for planning purposes to the modeled available groundwater (MAG) for the aquifer. This has resulted, for planning purposes only, in adjustments to permit amounts, and a lack of firm water available for future permits in this plan for some areas for certain time periods. This should not be construed as recommending or requiring that GCDs make these adjustments, or deny future permit applications. SCTRWPG recognizes and supports the ability of permit holders to exercise their rights to groundwater use in accordance with their permits and it recognizes and supports the GCDs discretion to issue permits and grandfather historical users for amounts in excess of the MAG. SCTRWPG may not modify groundwater permits that

GCDs have already issued or limit future permits that GCDs may issue. If the MAG is increased during or after this planning cycle, SCTRWPG may amend this Plan to adjust groundwater supply numbers that are affected by the new MAG amount."

#### 8.3.2 Groundwater Sustainability

The SCTRWPG recommends the management of groundwater resources toward the goal of long-term sustainability and recommends WMS that support achievement of this goal. This recommendation is intended to help protect all users of aquifers, to help preserve the long-term integrity of aquifers, and to build awareness of the effects of groundwater production and development on those aquifers. The SCTRWPG recommends that anyone implementing any WMS within this regional water plan relying on groundwater resources incorporate groundwater monitoring of both quantity and quality, recharge protection and enhancement, conservation methods and related practices, as determined to be appropriate by local groundwater districts. Where no district exists, the developer should monitor impacts and, when appropriate, take corrective action consistent with the goal of groundwater sustainability. The SCTRWPG recommends that the Texas Legislature and/or TCEQ develop a process requiring certified letters be sent to the Commissioners Court in the county/counties where the well field is located clearly describing the project.

#### 8.3.3 Shared Groundwater Resources among Planning Regions

In the event a Water User Group relies on a groundwater management strategy to meet the Water User Group's demand during the planning period and the strategy would have a significant impact on a groundwater resource shared among planning region(s), notice should be provided to the region(s) of the proposed date of implementation and anticipated acre-feet per year demand on the shared groundwater resource. The SCTRWPG provided such notice to the Lower Colorado (K) and Brazos G planning regions with regard to the Hays County – Forestar Project and the Vista Ridge Project (SAWS) recommended to meet projected needs in the 2016 South Central Texas Regional Water Plan.

#### 8.3.4 Reliance on Groundwater and Surface Water for Future Needs

The SCTRWPG recognizes a need to rely on both groundwater and surface water resources to develop a practical and reasonable plan to address water needs within the region for the future. The SCTRWPG recommends that the state provide incentives to develop conjunctive use projects that more efficiently utilize groundwater and surface water.

#### 8.3.5 Land Stewardship

The SCTRWPG encourages State support of implementing or enhancing land stewardship management practices that are shown to augment the quality and quantity of the state-owned surface water and privately-owned groundwater resources.

#### 8.3.6 Development and Use of Groundwater

The SCTRWPG encourages legislation that promotes public or private entities planning to develop groundwater projects to provide an economic analysis of the impact to communities, instream flows, and bay and estuary systems incurred by movement of the groundwater.

# 8.3.7 Coordination of Regional Water Planning and Groundwater Management Area Processes

The SCTRWPG recognizes that having the most current information on available groundwater supplies is critical to the planning process. The 83<sup>rd</sup> Texas Legislature, through SB1282, extended the deadline for GMAs to submit DFCs to May 1, 2016. This has created a compressed schedule that may impact the 2021 regional water plans. For example, if the Technical Memorandum for the 2021 Region L Plan is due to the TWDB by February 2018 and MAGs are released up to 24 months after the DFCs are submitted, then the new MAGs based upon May 2016 DFCs would be available three months after the due date of the Technical Memorandum for the 2021 Region L Plan. Thus, the Technical Memorandum for the 2021 Region L Plan could have to be prepared using the current MAGs based upon the DFCs established in 2010. It is the recommendation of the SCTRWPG that the TWDB release MAGs within 14 months of DFC submittal in May 2016.

## 8.4 Surface Water

### 8.4.1 Surface Water Rights Monitoring and Administration

The Texas Commission on Environmental Quality (TCEQ) should be adequately staffed and funded to ensure the legal and appropriate use of permitted surface water rights through comprehensive monitoring and administrative programs, such as the Watermaster program. Such monitoring and administrative programs should address surface water / groundwater interactions in cooperation with appropriate groundwater conservation districts and the administration of downstream water rights. The SCTRWPG reaffirms its commitment to safeguarding the integrity of downstream water rights.

#### 8.4.2 Reliance on Groundwater and Surface Water for Future Needs

The SCTRWPG recognizes a need to rely on both groundwater and surface water resources to develop a practical and reasonable plan to address water needs within the region for the future. The SCTRWPG recommends that the state provide incentives to develop conjunctive use projects that more efficiently utilize groundwater and surface water.

# 8.4.3 Surface Water Availability Model (WAM) Updates

The SCTRWPG recommends that the Guadalupe – San Antonio River Basin Water Availability Model (GSA WAM) be updated using available hydrologic data for at least the 1990-2013 historical period and that funding sufficient to accomplish this task be

allocated to the TCEQ. Although a new drought of record has not occurred since the 1950s, the recommended update would increase the simulation period by 43 percent and facilitate development of improved estimates of channel losses and missing streamflow records (esp. those during the drought of record) throughout the watersheds. Periodic updates to this model should be performed at intervals so that hydrologic data in the models includes data to within five years of the current date.

#### 8.5 Conservation

#### 8.5.1 Conservation Planning Guidelines

The Because of the central role of conservation in achieving the water supply objectives of the South Central Texas Regional Water Plan, the SCTRWPG has previously adopted the Water Conservation Implementation Task Force recommendations to establish GPCD Targets and Goals related to average annual reductions in residential indoor use. The SCTRWPG recognizes that the creation of conservation programs and the selection of specific conservation technologies is a matter of local choice and recommends that the water user groups reference the Water Conservation Best Management Practices Guide, TWDB Report 362, as an educational tool that can facilitate understanding of the importance of conservation efforts and the wide range of methods available for use.

Region L has addressed, defined, and adopted the most reasonably practical level of conservation to be:

- For Water Use Groups (WUGS) with per capita water use of 140 gallons per capita per day (gpcd) and greater in year 2011, reduce gpcd by 1 percent per year until reaching 140 gpcd, and reduce gpcd by 0.25 percent per year thereafter.
- 2. For WUGS with per capita water use less than 140 gpcd in year 2011, reduce gpcd by 0.25 percent per year.

# 8.5.2 Implementation of Water Conservation Advisory Committee Recommendations

SCTRWPG recognizes and supports recent legislative focus on successfully passing legislation which promotes implementation of broad-based conservation measures throughout the state. The SCTRWPG supports legislation and funding to implement the HB 4 (2007) Water Conservation Advisory Committee's recommendations, particularly the statewide public education programs such as Water IQ, further definition of gpcd definitions, and the development of regional conservation data that can be used by the SCTRWPG members to optimize future conservation efforts. The SCTRWPG also supports further efforts by the Legislature and state agencies that aggressively promote practical and successful water conservation measures as an important component to future water plans.

# 8.6 Innovative Strategies

#### 8.6.1 Assistance for Alternative Water Supply Strategies

The State should increase funding to assist water planning regions and local water entities in developing demonstration projects for alternative water supply strategies and technologies, such as, but not limited to, desalination, and direct potable reuse. By funding demonstration projects for alternative technologies, the State can help local water management entities avoid adverse impacts to the environment, to property rights, and to local socio-economic conditions. In this way, the State can play a crucial role in guiding regions to water supply solutions that meet needs. Funding to demonstrate the feasibility and value of innovative long-term strategies can help achieve cost-saving, efficient regional and local water management solutions.

#### 8.6.2 Brackish Groundwater and Seawater Desalination

The SCTRWPG supports the funding of state and/or federal programs for research and potential incentives to make desalination more affordable. Should financial incentives, technical advances, and/or other factors make a seawater desalination strategy similar to that described in Chapter 5 sufficiently attractive to a water user group or WWP that implementation prior to year specified herein is desired, it is explicitly recognized by the SCTRWPG that such rescheduled implementation is consistent with the 2016 South Central Texas Regional Water Plan.

#### 8.6.3 Codification of Seawater Desalination

The SCTRWPG recognizes the importance of seawater desalination as a source of new, drought-proof, water supply that can be integrated with other regional water supply strategies. The SCTRWPG encourages the Legislature to amend the Water Code to add a new Chapter to include seawater in the State's administration of water rights and supply.

# 8.6.4 Assistance for Alternative Rangeland Management (Brush Management)

The SCTRWPG encourages the Legislature to increase funding to the Texas State Soil and Water Conservation Board for the purpose of studying the effectiveness of brush control programs integrated with proven rangeland management practices.

# 8.6.5 Rainwater Harvesting and Other Systems

The SCTRWPG encourages the study of the effectiveness of rainwater harvesting systems in both commercial and residential new development. The SCTRWPG recommends the TWDB develop programs to educate the public and building industry on the potential benefits of rainwater harvesting, water re-use, and gray water systems.

#### 8.6.6 Weather Modification

The SCTRWPG urges the state to continue to support the existing Weather Modification Program.

#### 8.6.7 Drought Management

The SCTRWPG has applied the TWDB's Costing Tool for Regional Water Planning including the general methodology for estimating the economic impacts associated with implementation of drought management as a water management strategy. Application of this methodology for regional water planning purposes has facilitated comparison of drought management to other potentially feasible water management strategies on a unit cost basis. The SCTRWPG has found, and the San Antonio Water System (SAWS) has demonstrated, that water user groups having sufficient flexibility to focus on discretionary outdoor water use first and avoid water use reductions in the commercial and manufacturing use sectors may find some degrees of drought management to be economically viable and cost-competitive with other water management strategies. Recognizing that implementation of appropriate water management strategies is a matter of local choice, the SCTRWPG recommends due consideration of economically viable drought management as an interim strategy to meet near-term needs through demand reduction until such time as economically viable long-term water supplies can be developed.

#### 8.6.8 Aquifer Storage and Recovery

The SCTRWPG urges the state to continue to support existing and development of new Aquifer Storage and Recovery (ASR) facilities to supplement water supplies during extended drought and seasonal peaking conditions.

The SCTRWPG recognizes the value of ASR facilities as an effective way to store large volumes of water while avoiding evaporative losses experienced with reservoirs. The application and effectiveness of ASR varies with the geological formation of an aquifer. To date the application of ASR in Region L has been in the storage of groundwater from one aquifer in another aquifer where water quality between the water injected and stored and the natural occurring groundwater supply are similar or could mix without risk to the water quality of both sources. One advantage of this innovative ASR storage option could be to divert and store surface water flows that occur during floods and make the stored water available to meet established environmental flow standards during drought; however, the surface water injected would need to be treated to such a quality as to not cause water quality concerns in the receiving aquifer and be suitable for its ultimate use upon recovery. The SCTRWPG recommends that the TWDB and the TCEQ support the implementation of ASR storage for surface water supplies as an alternative to reservoirs and for support of environmental flows.

#### 8.6.9 Water Reuse

The SCTRWPG recognizes the potential offered by the reuse of treated municipal wastewater, agricultural return flows, and industrial process water to augment water supply. The SCTRWPG has approved multiple water management strategies that enable utilities and industries to extend use of their existing water resources through

treatment and reuse of water. The SCTRWPG recommends that the State, through the TWDB and TCEQ: 1) financially support research for determining appropriate technology and risk mitigation approaches necessary to significantly expand water reuse with appropriate protections for public, environmental, and worker health; and 2) assist the funding and development of incentive programs to advance water reuse projects. The SCTRWPG encourages the Legislature to amend the Water Code to add a new chapter to include reuse in the State's administration of water rights.

#### 8.7 Environmental

#### 8.7.1 Protection of Edwards Aquifer Springflow

The SCTRWPG supports implementation of the Edwards Aquifer Habitat Conservation Plan (EAHCP) as approved by the United States Fish & Wildlife Service (USFWS), resulting in the issuance of an Incidental Take Permit. The SCTRWPG recognizes that the EAHCP was developed to "protect the federally-listed species potentially affected by the management and use of the Aquifer and certain other activities in the Comal and San Marcos ecosystems (EAHCP Sec. 1.2.1)." Recognizing that implementation of the EAHCP is an ongoing, phased process, the SCTRWPG approved the following recommendations during its meeting of March 14, 2013:

"The Edwards Aquifer Habitat Conservation Plan (EAHCP) Workgroup recommends that the South Central Texas Regional Water Planning Group include the EAHCP as a recommended Water Management Strategy in the 2016 South Central Texas Regional Water Plan and use the spring flows associated with EAHCP implementation as an hydrologic modeling assumption for computation of existing surface water supplies and technical evaluation of water management strategies. The EAHCP Workgroup further recommends that existing water supplies from the Edwards Aquifer in the 2016 South Central Texas Regional Water Plan be those associated with EAHCP implementation and in specific amounts to be determined in consultation with the Edwards Aquifer Authority."

# 8.7.2 Ecosystem Health, Quality of Life, and Growth Management for Texas

The rapid growth occurring in South Central Texas has the potential to negatively impact quality of life. Human demands for water and infrastructure development may outstrip the ability of all of the region's resources to respond and to be sustainable. Texas should focus on these issues and evaluate land use and the health of its ecosystem in order to prepare for the future and support a sustainable quality of life for all Texans.

#### 8.7.3 Ecologically Unique Stream Segments and Unique Reservoir Sites

#### Designation of Five Unique Stream Segments

The Legislature has clarified that the designation of a stream segment as having unique ecological value "solely means that a state agency or political subdivision of the state

may not finance the actual construction of a reservoir in a specific river or stream segment designated by the legislature." The SCTRWPG conditionally recommends to the Texas Legislature that, in accordance with Subsection 16.051 of the Texas Water Code, it designate the following five stream segments in Region L as having unique ecological value:

- The Nueces River from the northern boundary of Region L downstream to United States Geological Survey (USGS) gauge # 08190000 at Laguna;
- The Frio River from the northern boundary of Region L downstream to USGS gauge #08195000 at Concan;
- The Sabinal River from the northern boundary of Region L downstream to the State Highway 187 crossing located approximately 2.7 miles upstream of USGS gauge #08198000 near Sabinal;
- The San Marcos River extending from IH 35 up to a point 0.4 miles upstream of Loop 82 in San Marcos; and
- The Comal River extending from the confluence with the Guadalupe River upstream to Klingemann Street in New Braunfels.

Because the consequences of such designations by the Legislature are not well understood, these recommendations are conditioned upon legislation providing for these designations containing the following clarifying provisions or substantially similar provisions approved by Region L:

The designation of a river or stream segment as being of unique ecological value:

- Does not affect the ability of a state agency or political subdivision of the state to finance, construct, operate, maintain, or replace a weir, a water diversion, flood control, drainage, or water supply system, a low water crossing or a recreational facility in the designated segment;
- Does not prohibit the permitting, financing, construction, operation, maintenance, or replacement of any water management strategy to meet projected water supply needs recommended in, or designated as an alternative in, either the 2011 or 2016 regional water plans for Region L; and
- Does not alter any existing property right of an affected landowner.

The SCTRWPG Recommendation of Stream Segments Having Unique Ecological Value for Legislative Designation is included as Appendix H, along with a letter from Texas Parks & Wildlife Department summarizing their review of the recommendation package.

Recognition of Potential Additional Stream Segments of Unique Ecological Value

The SCTRWPG believes that designating ecologically unique stream segments raises public awareness and voluntary stewardship that can result in the preservation of the character and environmental function of these segments. The SCTRWPG recognizes the ecologically significant stream segments designated by Texas Parks and Wildlife

Department in July 2005 (See Chapter 6). The SCTRWPG shall consider these stream segments as a guide for recommending additional Stream Segments of Unique Ecological Value for future legislative designation. The SCTRWPG recommends increased TWDB funding to be allocated for future planning cycles to conduct analyses necessary for designation of additional stream segments.

#### 8.7.4 Instream Flows and Bays and Estuaries

The SCTRWPG is appreciative of legislative action in the form of Senate Bill 3 (SB3, 80<sup>th</sup> Texas Legislature) that established and funded an environmental flows process integrating best-available science and diverse regional stakeholder input into the process for selection of appropriate instream flow and freshwater inflow goals on a stream-by-stream and estuary-by-estuary basis. The appropriate balance of environmental and human needs during severe drought has very significant effects on the firm yield and associated cost of potential water supply projects. The 2016 regional water plans are the first to be prepared using environmental flow standards adopted pursuant to the SB3 process.

The SCTRWPG encourages completion of the Texas Instream Flow Studies Program and improvement of the State's bays and estuaries freshwater inflow studies, with special attention paid to the report of the Science Advisory Committee of the Study Commission on Water for Environmental Flows.

#### 8.7.5 Environmental Studies

The SCTRWPG recognizes that significant needs exist in Bexar and the surrounding counties and that new supplies need to be developed in the Guadalupe River and San Antonio River watersheds. There are issues related to environmental impacts that need further study to determine feasibility of a range of recommended surface water, groundwater, reuse, and conjunctive use water management strategies. Therefore, the SCTRWPG recommends that additional environmental studies be undertaken to be able to evaluate the effects of such projects on the ecosystems that rely on inflow to San Antonio Bay and flows of the Guadalupe River and San Antonio River watersheds.

# 8.7.6 Water Quality

The primary focus of the Regional Water Planning process is to ensure that water supplies are identified in sufficient quantity to meet future water demands; however, the SCTRWPG also recognizes that the quality of those water supplies is also important to protect. Protecting groundwater and surface water supplies from contamination not only helps to reduce the cost to treat water to public drinking water standards, but also reduces pollutants that may harm the ecological health of the basin. The SCTRWPG recommends that the TCEQ and local governments promote practices and/or regulations to avoid or mitigate threats to water quality in surface water and groundwater sources.

# 8.8 Providing and Financing Water and Wastewater Systems

#### 8.8.1 Plan Implementation

Given the unprecedented level of time and money expended in the development of Regional Water Plans across the state, the SCTRWPG urges the Legislature to act promptly to help ensure full implementation of these plans.

#### 8.8.2 Funding

The SCTRWPG believes that State funding should be provided as a key incentive for partnership in funding from local, regional and federal governmental agencies.

The SCTRWPG encourages more active State support in solicitation of Federal funding for development of new water supply sources, especially when the need for which is based in part upon Federal requirements, such as the Endangered Species Act.

#### 8.8.3 State Water Implementation Fund for Texas

In 2013, the Texas Legislature authorized transferring \$2 billion from the state's "Rainy Day Fund" to create a new loan program to fund projects in the state water plan and make financing water projects more affordable. The creation of the State Water Implementation Fund for Texas (SWIFT), as this program has become known, was approved by Texas voters in November 2013. According to the TWDB website, the SWIFT is estimated to fund approximately \$27 billion in water supply projects over the next 50 years. The program will apply not less than 20 percent of SWIFT financial assistance for water conservation and reuse projects and an additional 10 percent will be for projects serving rural areas, including agricultural conservation projects. Since its approval, the TWDB has worked with the regional water planning groups to develop criteria to prioritize projects to be eligible to receive the SWIFT loans. The TWDB began accepting applications in late 2014 with the first loan closings to occur in late 2015.

The SCTRWPG supports the SWIFT as a reliable financing source for project sponsors to fund projects and will be monitoring its first implementation cycle. Based upon the results of this initial process, the SCTRWPG reserves the right to offer suggestions to the TWDB aimed at maximizing the program's future effectiveness.

# 8.8.4 State Water Plan Implementation

State support is fundamental for the successful implementation of the water resources projects in the State Water Plan resulting from the SB1 Regional Planning Process. Specifically, State support for implementation of the State Plan should include sufficient funding for TWDB and TCEQ to administer their programs and activities associated with planning, financing, and permitting of the projects in the State Plan.

# 8.8.5 Continuation of Regional Water Planning

The SB1 Planning Process is an important program, and funding should be continued to sustain the work of the Regional Water Planning Groups.

#### 8.8.6 2021 Plan Enhancement Process

In response to comments raised by members of the SCTRWPG and the public during the review of the Initially Prepared 2016 Regional Water Plan, the SCTRWPG has categorized strategic topic areas for discussion that will enable the group to improve its development of the 2021 Regional Water Plan. The process will be referenced as the 2021 Plan Enhancement Process. The topic areas to be discussed are listed in the September 3, 2015 report from the Public Comment and Plan Assessment Workgroup included as Appendix M. The 2021 Plan Enhancement Process will begin at the SCTRWPG's first meeting in 2016. Topics will be discussed as a group and actions will be taken, as needed, to document the direction and/or policy consensus reached by the SCTRWPG. The results from the 2021 Plan Enhancement Process will be used to guide the development of the next plan within the framework of state statute, TWDB rules, and state/local funding.

#### 8.8.7 Role of the TWDB

The SCTRWPG supports the concept that a state agency (TWDB) be responsible for implementation of and advocacy for projects in the State Water Plan with regard to funding and permitting at the state and federal levels.

#### 8.9 Data

#### 8.9.1 Water Data Collection

The Legislature should fully fund the cooperative, federal-state-local program of basic water data collection, including: (a) Stream gages-quantity and quality; (b) Groundwater monitoring-water levels and quality; (c) Hydrographic surveys and sediment accumulation in reservoirs; (d) Water surface evaporation rates; (e) Water use data for all water user groups; and (f) Population projections.

#### 8.9.2 Access to State Water Data

There should be adequate funding for the critical roles of TWDB and TCEQ in facilitating access to water data essential for local and regional planning and plan implementation purposes.

#### 8.9.3 Population and Water Demand Projections

The SCTRWPG recognizes that the TWDB bases its water demand projections on patterns of population and economic growth while also permitting revisions of state data to incorporate additional information developed by the planning regions. The SCTRWPG appreciates that the TWDB has facilitated more active involvement of the Regional Water Planning Groups in refining water demand projections for use in the 2016 regional water plans. Nevertheless, some groups believe that the methodology puts an unfair limitation on access to water for future growth, particularly in areas that may experience more rapid change than they have in the past. The SCTRWPG has struggled with the lack of flexibility within the methodology to address rapidly growing municipal water demands associated with the transient work forces and long-term operations and maintenance

personnel supporting extraction, collection, and transport of oil and gas resources found in the Eagle Ford shale. In circumstances such as this, the SCTRWPG encourages greater TWDB flexibility through relaxation of current methodological assumptions holding regional and state population projection totals fixed. Water demand projections used in developing the Regional Water Plan should be consensus figures arrived at by using TWDB data along with local input from the cities, counties, and groundwater districts.

#### 8.10 Other Issues

## 8.10.1 Water Management Strategies

Inclusion of a WMS in this plan, as either a recommended or alternative WMS, is not an endorsement by this planning group of that WMS for permitting, financing, or for any reason other than as a water supply that has met TWDB standards for being considered as a potential water supply for regional planning purposes.

#### 8.10.2 Planning for System Management Water Supplies

System management water supplies, i.e. supplies over and above those apparently needed to meet projected demands, may be included in the plan for the following reasons: 1) to recognize both the long lead times and the uncertainty associated with risk factors that may prevent implementation of water management strategies and necessitate replacement strategies; 2) to preserve flexibility for water user groups or wholesale water suppliers to select the most feasible projects among several consistent with the Regional Plan and therefore potentially eligible for permitting and funding; 3) to serve as additional supplies in the event rules, regulations, or other restrictions limit use of any planned strategies; and 4) to ensure adequate supplies in the event of a drought more severe than that which occurred historically. The plan should specify those factors affecting reliability of the recommended options and strategies and indicate what alternatives are available as possible replacements.

The amount of the management supply should be limited by consideration of the following factors: 1) potential disruptive impacts of planning for projects that have low probability of implementation; and 2) citing of specific reasons for management supplies that exceed the projected needs of the region.

#### 8.10.3 Public Education on Water

The State should fund a state-wide program to educate the general public about water in coordination with the Agricultural Extension Service offices. The program should produce water-related materials with special components adapted for each water planning region and should also include a component comparable to the "Major Rivers" program that would be available to the public schools through the Regional Education Service Centers and by other means.

SCTRWPG supports legislation for funding to implement the Water Conservation Task Force recommendations, particularly the statewide public education programs, such as Water IQ.

#### 8.10.4 County Authority

Counties should have additional authority for land use planning and for regulating development based on water availability and protection of water resources.

## 8.10.5 Planning Requirements

There should be no changes in the regional water planning process or additional planning requirements, except through the formal rule-making procedure. Contract requirements should be established and in place prior to submission of grant proposals.

#### 8.10.6 Condemnation and Eminent Domain

The SCTRWPG is of the opinion that it is not appropriate for a regional water planning group to tell a governmental entity to abandon its eminent domain powers if it wants its project to be approved as a recommended water management strategy. The SCTRWPG is further of the opinion that it is not within the planning group's jurisdiction to judge the merits of eminent domain. It is, however, the preference of the SCTRWPG that all land needed for implementation of water management strategies be obtained using a process of willing seller and willing buyer and that limited condemnation be used as a last resort.

13. Presentation of Water Management Strategy Evaluations

# **Status of WMS Evaluations**

- Advanced Water Conservation
- Drought Management
- Edwards Transfers
- Local Groundwater
- Local Carrizo Conversions
- Surface Water Rights
- Balancing Storage
- Facilities Expansion
- Recycled Water Strategies
- Expanded Local Carrizo (SAWS)
- Expanded Brackish GW (SAWS)
- ARWA/GBRA Project (Phase 1)
- ARWA Phase 2
- ARWA Phase 3 (Alternative; Reuse)
- GBRA Phase 2

- GBRA Lower Basin Storage
- GBRA Lower Basin Diversion
- Victoria County S-E Project
- CRWA Wells Ranch Phase 3
- CRWA Siesta Project
- CVLGC Carrizo Project
- SSLGC Expanded Carrizo Project (Guadalupe County)
- SSLGC Brackish Wilcox Project (Gonzales County)
- NBU ASR
- NBU Trinity Well Field Expansion
- NBU-Seguin Project
- Victoria ASR
- Victoria GW-SW Exchange
- Brackish Wilcox for SS WSC



# **Advanced Water Conservation (Municipal)**

**Objective:** Reduce the per capita water use without adversely affecting quality of life

- Use of low flow plumbing fixtures (Plumbing Retrofits)
- More efficient water-using appliances
- Modifying and/or installing less water intensive landscaping
- Repair of plumbing and water-using appliances to reduce leaks (Water Audits)
- Modification of personal behavior (Education / Water Conservation Pricing)



#### 21 Best Management

**Practices** 

# **Advanced Water Conservation (Municipal)**

- System Water Audit and Water Loss
  - Water Conservation Pricing
  - Prohibition on Wasting Water
  - Showerhead, Aerator, and Toilet Flapper Retrofit
  - Residential Ultra-Low Flow Toilet Replacement Programs
  - Residential Clothes Washer Incentive Program
  - School Education
  - Water Survey for Single-Family and Multi-Family Customers
  - Landscape Irrigation Conservation and Incentives
  - Water-Wise Landscape Design and Conversion Programs

- Athletic Field Conservation
- Golf Course Conservation
- Metering of all New Connections and Retrofitting of Existing Connections
- Wholesale Agency Assistance Programs
- Conservation Coordinator
- Reuse of Reclaimed Water
- Public Information
- Rainwater Harvesting and Condensate Reuse
- New Construction Graywater
- Park Conservation
- Conservation Programs for Industrial, Commercial, and Institutional Accounts



## **Advanced Meter Infrastructure**

- Install an AMI fixed network system
- Update meters and include Leak Sensors
- Provides more frequent and precise use information
- Vibration recordings identify leaks in the system

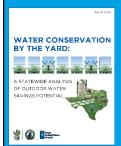


Itron 100W Communication Module with Leak Sensor

More precise meter information ensures that all water use is appearing on billing statements

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# Information from Texas Living Waters



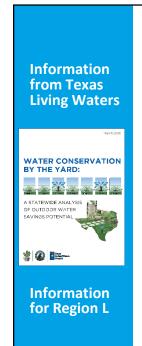
Information for Regions C, H, K, & L

# **Advanced Water Conservation (Municipal)**

- Regional and statewide perspective of outdoor water use and the potential savings from no more than twice per week watering restrictions
- Outdoor watering restrictions generally limit the following:
  - Number of days/week residents can water
  - · Hours during which residents can irrigate
  - Specific water delivering technologies allowed

Water utilities can enforce mandatory outdoor watering schedules by adopting these provisions as part of an ordinance or rule. Effective implementation requires careful planning, stakeholder input, education, and enforcement mechanisms to ensure compliance.





# **Advanced Water Conservation (Municipal)**

3.5%
of total municipal demand



- Texas Living Waters made calculations at WUG level.
- Estimated savings potential of twice/week outdoor watering restrictions ranges from 3.5 to 8.5 percent (of total municipal demand).
- Research indicates that education and enforcement have a direct impact on the effectiveness of outdoor watering restrictions.

PROJECTED MUNICIPAL SAVINGS BASED ON MUNICIPAL DEMANDS IDENTIFIED IN THE 2016 REGION L WATER PLAN						
Planning Decade	Water Savin	Water Savings (acft/yr)*				
	LOW EFFORT	HIGH EFFORT	Demand (acft/yr)			
Current	14,314	34,762	408,966			
2020	16,417	39,871	469,065			
2030	18,438	44,779	526,806			
2040	20,385	49,506	582,421			
2050	22,351	54,280	638,594			
2060	24,309	59,037	694,556			
2070	26,401	64,116	754,306			

(UNMET) NEEDS IDENTIFIED IN THE 2016 REGION L WATER PLAN						
Planning Decade	Water Savir	Water Savings (acft/yr)				
	LOW EFFORT	HIGH EFFORT	(Unmet) Needs (acft/yr)			
2020	23%	55%	72,636			
2030	17%	41%	108,068			
2040	14%	33%	148,627			
2050	11%	28%	197,279			
2060	10%	24%	249,846			
2070	9%	21%	304,164			
			-/			



# **Advanced Water Conservation (Municipal)**

#### 2021 SCTRWP Goals:

- For municipal WUGs with water use of 140 gpcd or more, reduce per capita water use by 1%/yr until the level of 140 gpcd is reached. Then reduce use by 0.25%/yr.
- For municipal WUGs with use of <140 gpcd, reduce per capita water use by 0.25%/yr.

If a WUG has more specific water conservation goal information, that information will be utilized



# **Advanced Water Conservation (Municipal) Statistics:**

Per Capita Water			Popul	ation	Water Demand		
Use in 2020 (gpcd)	Number of WUGs			Percent of Total	2020 (acft/yr)	Percent of Total	
Less than 140	66	47.5%	2,499,352	83.9%	325,953	75.5%	
140 and Greater	73	52.5%	478,313	16.1%	105,725	24.5%	
Totals	139	100.0%	2,977,863	100.0%	431,678	100.0%	

#### Total Use Reduction Needed to Meet Goals (acft/yr)

2020	2030	2040	2050	2060	2070
4,610	12,830	22,032	31,392	41,315	51,711

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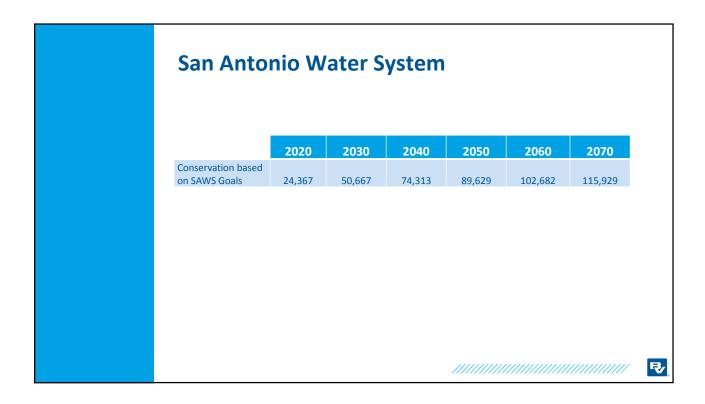
#### Costs

**Reductions Include:** 

- Plumbing Fixtures
- Clothes Washers Retrofit
- Lawn Irrigation Conservation

	2020	2030	2040	2050	2060	2070
Implementation Cost	\$3,155,710	\$8,777,244	\$15,026,246	\$21,406,759	\$28,124,759	\$35,176,338
Reduction (acft/yr)	4,610	12,830	22,032	31,392	41,315	51,711
Unit Cost (\$/acft)	\$684	\$684	\$682	\$682	\$681	\$680

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# **Expanded Local Carrizo for SAWS**

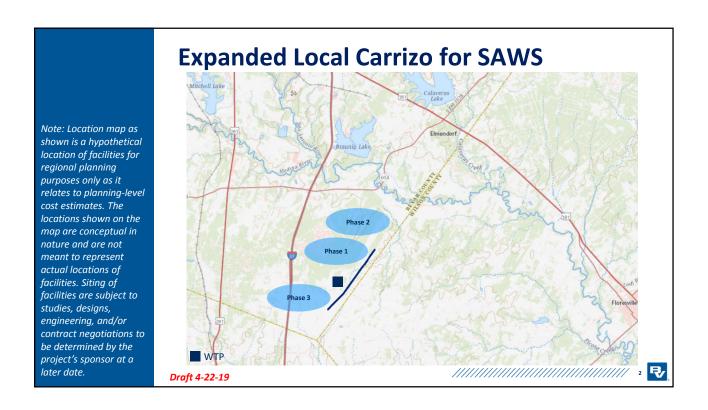
- Recommended WMS in 2016 SCTRWP
- Source and Supply:
  - Carrizo Aquifer Groundwater in Bexar County (No GCD)
  - Groundwater is Available within MAG
  - Total Project Firm Yield = 21,000 acft/yr

	Decade of Need	Yield (acft/yr)
Phase 1	2040	7,000
Phase 2	2040	7,000
Phase 3	2040	7,000

Delivery Point is SAWS H<sub>2</sub>Oaks Center

Draft 4-22-19





# **Expanded Local Carrizo for SAWS**

- Facilities:
  - Wells with average flow of 1,728 gpm

Phase 1: 4 wellsPhase 2: 3 wellsPhase 3: 3 wells

- Well Field on SAWS Property in Southern Bexar County
- Well collection pipelines and pumps
- Uniform Delivery (PF = 1.0)
- Iron & Manganese Treatment for 21,000 acft/yr
- Minimal Environmental Impacts

Draft 4-22-19



# **Expanded Local Carrizo for SAWS WMS Cost Summary Costs of Facilities** \$21,071,000 **Total Project Costs** \$29,496,000 **Annual Costs\*** \$4,376,000 Project Yield (acft/yr) 21,000 **Unit Costs** \$208 (\$/acft/yr) \*Includes amortization at 3.5% for 20-years, O&M, and Power Costs Draft 4-22-19

# **Expanded Brackish Wilcox Groundwater for SAWS**

- Recommended WMS in 2016 SCTRWP
- Source and Supply:
  - Brackish Wilcox Groundwater from Wilson County (Evergreen UWCD)
  - Groundwater is Available within MAG
  - Total Project Firm Yield = 70,160 acft/yr

Phase	Decade of Need	Total Pumpage (acft/yr)	Brine Reject (acft/yr)	Firm Yield (acft/yr)
Phase 2	2040	14,485	1,045	13,440
Phase 3	2040	7,243	523	6,720
Phase 4	~2060	34,489	2,489	32,000
Phase 5	~2060	19,400	1,400	18,000

Delivery point is H<sub>2</sub>Oaks Center

Draft 4-22-19





# **Expanded Brackish Wilcox Groundwater for SAWS**

- Facilities:
  - Wells with average flow of 800 gpm
    - Phase 2: 14 wells
    - Phase 3: 7 wells
    - Phase 4: 32 wells
    - Phase 5: 19 wells
  - Well collection pipelines and pumps
  - Uniform Delivery (PF = 1.0)
  - 1,500 mg/L TDS (Requires Brackish Desalination)
  - 450 gpm injection wells (depth of 5,000 ft) near WTP
- Minimal Environmental Impacts

Draft 4-22-19



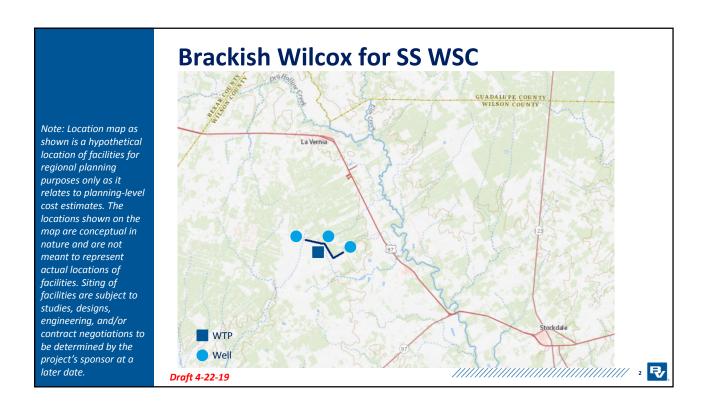
# **Expanded Brackish Wilcox Groundwater for SAWS WMS Cost Summary Costs of Facilities** \$539,949,000 **Total Project Costs** \$781,983,000 \$97,229,000 **Annual Costs\*** Project Yield (acft/yr) 70,160 **Unit Costs** \$1,386 (\$/acft/yr) \*Includes amortization at 3.5% for 20-years, O&M, and Power Costs Draft 4-22-19

## **Brackish Wilcox for SS WSC**

- Recommended WMS in 2016 SCTRWP
- Source and Supply:
  - Brackish Wilcox Groundwater from Wilson County (Evergreen UWCD)
  - Groundwater is Available within MAG
  - Total Project Firm Yield: 1,120 acft/yr (2060 Decade)
    - Pumped: 1,207 acft/yr
    - Brine: 87 acft/yr
  - Delivery point is Sutherland Springs Road Plant

Draft 4-22-19





#### **Brackish Wilcox for SS WSC**

- Facilities:
  - 3 Wells with average flow of 800 gpm (includes 1 contingency)
  - Well Field on SS WSC Property in Wilson County
  - Well Collection Pipelines and Pumps
  - 1,250 mg/L TDS
  - New WTP for Pretreatment and Desalination
  - 400 gpm Injection Well (Depth of 4,500 ft) near WTP
  - Peak Day Delivery (PF = 2.0)
  - Pipeline to tie into existing delivery system
- Minimal Environmental Impacts

Draft 4-22-19



# **Brackish Wilcox for SS WSC WMS Cost Summary Costs of Facilities** \$14,575,000 **Total Project Costs** \$20,384,000 **Annual Costs\*** \$3,260,000 Project Yield (acft/yr) 1,120 **Unit Costs** \$2,911 (\$/acft/yr) \*Includes amortization at 3.5% for 20-years, O&M, and Power Costs Draft 4-22-19

# **CRWA Wells Ranch Phase 3**

- Recommended WMS in 2016 SCTRWP
- Source and Supply:
  - Carrizo-Wilcox Aquifer Groundwater in Guadalupe County (Guadalupe County GCD)
  - Groundwater is Available within MAG
  - Total Project Firm Yield: 7,000 acft/yr
    - Phase 3a: 3,500 acft/yr (2020 Decade)
    - Phase 3b: 3,500 acft/yr (2030 Decade)
  - Delivery point is CRWA Wells Ranch WTP

Draft 4-22-19



#### **CRWA Wells Ranch Phase 3** Note: Location map as shown is a hypothetical location of facilities for regional planning purposes only as it relates to planning-level cost estimates. The locations shown on the map are conceptual in nature and are not meant to represent actual locations of facilities. Siting of facilities are subject to studies, designs, engineering, and/or WTP contract negotiations to be determined by the Well project's sponsor at a later date. Draft 4-22-19

# **CRWA Wells Ranch Phase 3**

- Facilities:
  - 9 New Wells with Average Flow of 650 gpm
  - Well Field Adjacent to Existing Wells Ranch Facilities in Guadalupe County
  - Well Collection Pipelines and Pumps
  - Uniform Delivery (PF = 1.0)
  - Wells Ranch WTP Expansion
- Minimal Environmental Impacts

Draft 4-22-19



# **CRWA Wells Ranch Phase 3 WMS Cost Summary Costs of Facilities** \$16,954,000 \$23,924,000 **Total Project Costs** \$7,085,000 **Annual Costs\*** Project Yield (acft/yr) 7,000 **Unit Costs** \$1,021 (\$/acft/yr) \*Includes amortization at 3.5% for 20-years, O&M, and Power Costs Draft 4-22-19

# **Facilities Expansion**

- Expansions of major components of existing infrastructure (facilities) so WUGs can continue to provide a safe and reliable water supply to their customers during the planning period
- WUGs:
  - Atascosa Rural WSC: Interconnects with City of Lytle and East Medina
  - Hays County: Transmission Facilities to Integrate New Supplies from Southern Hays County to the Wimberley/Woodcreek Area
  - GBRA: Western Canyon WTP Expansion
  - Springs Hill WSC: Lake Placid WTP expansion
  - SAWS: Water Resource Integration Pipeline Completion; ASR WTP Expansion
  - CPSE: Direct Reuse Pipeline from Dos Rios WWTP to Calaveras/Braunig Lakes
  - NBU: South WTP Expansion; Interconnect with City of Seguin
  - CRWA: Lake Dunlap WTP Expansion & Hays Caldwell WTP Expansion

Draft 4-24-19



# **Facilities Expansion**

WUG	Description	Decade of Need	Capacity of Expansion (acft/yr)	Project Cost	Annual Cost
Atascosa Rural WSC	12-in. dia. interconnection w/ City of Lytle	2020	2,800	\$1,119,000	\$133,000
Atascosa Rural WSC	12-in. dia. Interconnection w/ East Medina SUD	2020	2,800	\$1,119,000	\$133,000
Hays County	10.2 mile, 36-in. dia. pipe & 8.8 mile, 16-in. dia. pipe	2020	15,314	\$25,486,000	\$1,998,000
GBRA	Western Canyon WTP: 5 MGD WTP Expansion; Pump Station Improvements	2060	5,600	\$23,953,000	\$2,853,000
Springs Hill WSC	New 16-in. dia. pipe bored under Guadalupe River along TX46 (1000 LF)	2020	5,018	\$491,000	\$38,000
Springs Hill WSC	Expansion of Lake Placid WTP; Pump station upgrade as necessary	2020	2,240	\$12,995,000	\$1,683,000
SAWS	Water Resources Integration Pipeline - Phase 2 (48-in. dia.)	2020	84,000	\$113,039,000	\$9,123,000
SAWS	Expand ASR Treatment Plant	2030	35,500	\$10,506,000	\$3,202,000
CPS Energy (Bexar Co. Steam-Electric)	Direct Pipeline from Dos Rios WWTP to Calaveras Lake	2020	50,000	\$35,589,000	\$3,512,000
NBU	NBU-Seguin Interconnect	2020	2,500	\$2,427,000	\$529,000
NBU	Expand South WTP	2020	8,960	\$27,701,000	\$3,387,000
CRWA	Expand Hays Caldwell WTP	2030	2,300	\$11,362,000	\$1,539,000
CRWA	Expand Lake Dunlap WTP	2020	2,300	\$11,362,000	\$1,539,000

Draft 4-24-19

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14. Discussion and Appropriate Action Identifying Potential Water Management Strategic	es

# Water Management Strategy Evaluations: Block 3 Scope and Fee Estimates Draft April 22, 2019

#### **CRWA Brackish Wilcox Project\***

\$ 10.000

CRWA seeks to develop a brackish Wilcox Aquifer project adding an additional 14,700 acft/yr of treated brackish groundwater in the 2020 decade. The strategy evaluation will include documentation of CRWA's latest plans, evaluation of the groundwater supply available to the project in accordance with the MAG, assessment of the environmental impacts of the project, estimate of cost to develop the water supply, and documentation of the implementation issues. The information will be summarized in a Water Management Strategy evaluation.

\* Note: The CRWA Wells Ranch Phase 3 inadvertently identified the source of water as a brackish supply. The CRWA Wells Ranch Phase 3 is a fresh water supply of approximately 5,600 acft/yr. This CRWA Brackish Wilcox Project is the development of 14,700 acft/yr of brackish water supply as planned by CRWA.

#### **Martindale WSC New Water Supply Well**

\$6,000

Martindale WSC is seeking a new shallow well in Guadalupe County that would deliver raw water to the Martindale WTP. The new supply may be an alluvial well drawing groundwater under the influence of surface water, in which case would be regulated by TCEQ and may require conventional treatment. The strategy evaluation will include documentation of Martindale WSC's plans, evaluation of the supply available to the project in accordance with the MAG and/or surface water availability, assessment of the environmental impacts of the project, estimate of cost to develop the water supply, and documentation of the implementation issues. The information will be summarized in a Water Management Strategy evaluation.

#### **Maxwell WSC Trinity Well**

\$6,000

Maxwell WSC is seeking a Trinity Aquifer supply in Hays County that would deliver water to their system. The strategy evaluation will include documentation of Maxwell WSC's plans, evaluation of the supply available to the project in accordance with the MAG availability, assessment of the environmental impacts of the project, estimate of cost to develop the water supply, and documentation of the implementation issues. The information will be summarized in a Water Management Strategy evaluation.

#### **County Line WSC Trinity Supply**

\$ 6,000

County Line WSC is seeking a new Trinity Aquifer groundwater supply to deliver 1,000 acft/yr of water to their system through a phased approach. The strategy evaluation will include documentation of County Line WSC's plans, evaluation of the supply available to the project in accordance with the MAG availability, assessment of the environmental impacts of the project, estimate of cost to develop the

water supply, and documentation of the implementation issues. The information will be summarized in a Water Management Strategy evaluation.

#### **County Line WSC Brackish Edwards Supply**

\$ 6,000

County Line WSC is seeking a new brackish Edwards Aquifer groundwater supply to deliver 1,500 acft/yr of water to their system through a phased approach. The strategy evaluation will include documentation of County Line WSC's plans, evaluation of the supply available to the project in accordance with the MAG availability, assessment of the environmental impacts of the project, estimate of cost to develop the water supply, and documentation of the implementation issues. The information will be summarized in a Water Management Strategy evaluation.

#### **Additional WMSs As Necessary**

\$ 33,405

Region L would like to set aside \$33,405 for evaluation of up to 4 undefined water management strategies that may be necessary for the development of the 2021 Region L Water Plan. These strategy evaluations will include documentation and description of the strategy, evaluation of the supply available to the project in accordance with the MAG and/or surface water availability, assessment of the environmental impacts of the project, estimate of cost to develop the water supply, and documentation of the implementation issues. The information will be summarized in a Water Management Strategy evaluation.

#### Allocated as Part of Blocks #1 & #2:

1.	Advanced Water Conservation	\$15,000
2.	Drought Management	\$10,000
3.	Edwards Transfers	\$5,000
4.	Local Groundwater	\$20,000
5.	Local Carrizo Conversions	\$5,000
6.	Surface Water Rights	\$5,000
7.	Balancing Storage	\$5,000
8.	Facilities Expansion	\$10,000
9.	Recycled Water Strategies	\$12,500
10.	Expanded Local Carrizo (SAWS)	\$12,500
11.	Expanded Brackish GW (SAWS)	\$12,500
12.	ARWA/GBRA Project (Phase 1)	\$10,000
13.	ARWA Phase 2	\$11,000
14.	ARWA Phase 3 (Alternative; Reuse)	\$12,000
15.	GBRA Phase 2	\$12,500
16.	GBRA Lower Basin Storage	\$12,500
17.	GBRA Lower Basin Diversion	\$12,500
18.	Victoria County S-E Project	\$12,500
19.	CRWA Wells Ranch Phase 3	\$11,000
20.	CRWA Siesta Project	\$12,500

21. CVLGC Carrizo Project	\$11,000	
22. SSLGC Expanded Carrizo Project (Guadalupe County)	\$10,000	
23. SSLGC Brackish Wilcox Project (Gonzales County)	\$10,000	
24. NBU ASR	\$12,000	
25. NBU Trinity Well Field Expansion	\$10,000	
26. NBU-Seguin Project	\$8,000	
27. Victoria ASR	\$11,000	
28. Victoria GW-SW Exchange	\$5,000	
29. Brackish Wilcox for SS WSC	<u>\$10,000</u>	
Total Block #1 & #2	\$306,000	
Total Tack EA Budget	\$272 ADE	100.0%
Total Task 5A Budget:	\$373,405	
Total for Block 1:	\$112,500	30.1%
Total for Block 2:	\$193,500	51.8%
Total for Block 3:	\$67,405	18.1%
Unallocated Remaining:	\$0	0.0%

15. Discussion and Appropriate Action Authorizing the San Antonio River Authority (SARA) to Request a Notice-to-Proceed from the TWDB; authorizing the Consultant and/or SARA to work with the TWDB on any follow up information that might be required; and authorizing SARA to Negotiate and Execute the Subsequent TWDB Contract Amendment that will be Issued Following the Notice-to-Proceed.

# 16. Discussion and Appropriate Action to Approve a Budget Adjustment to the TWDB and SARA Contract

2021 SCTRWP - Proposed Task Budget Amendment

Task	Description	Original TWDB Budget (Total)	Original TWDB Budget (Funded)	TWDB Funding 4*	Proposed Task Budget Amendment	Revised Budget (Total)
1	Planning Area Description	\$17,408	\$17,408	\$0	\$0	\$17,408
2A	Non-population Water Demands	\$30,562	\$30,562	\$0	-\$17,000	\$13,562
2B	Population based water demands	\$43,060	\$43,060	\$0	-\$1,000	\$42,060
3	Existing Supply Analyses	\$104,594	\$104,594	\$0	-\$15,000	\$89,594
4A	Identification of Needs	\$12,715	\$12,715	\$0	-\$12,000	\$715
4B	ID of Potential WMS	\$18,912	\$18,912	\$0	\$0	\$18,912
4C	Tech Memo	\$18,777	\$18,777	\$0	\$0	\$18,777
5A	Eval and Recommendations	\$373,405	\$187,211	\$186,194	\$0	\$373,405
5B	Water Conservation Recs	\$38,405	\$38,405	\$0	\$0	\$38,405
6	Impacts of Regional Water Plan; Cumulative Effects	\$44,941	\$44,941	\$0	\$0	\$44,941
7	Drought Response Info, Activities, & Res	\$94,545	\$94,545	\$0	\$0	\$94,545
8	Policy Recommendations & Unique Sites	\$9,797	\$9,797	\$0	\$0	\$9,797
9	Infrastructure Financing Analysis	\$6,096	\$6,096	\$0	\$0	\$6,096
10	Public Participation & Plan Adoption	\$225,882	\$225,882	\$0	\$45,000	\$270,882
11	Implementation & Comparison to Previous Plan	\$21,801	\$21,801	\$0	\$0	\$21,801
12	Prioritization	\$8,100	\$8,100	\$0	\$0	\$8,100
Total		\$1,069,000	\$882,806	\$186,194	\$0	\$1,069,000

<sup>\*</sup> To occur in 2019

# 17. Possible Agenda Items for the Next Region L Meeting

# 2019 Future Meeting Dates

Thursday, August 1, 2019

Thursday, November 7, 2019

## 18. Public Comment