Region L
South Central Texas Regional Water Planning Group

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



DATE: Friday, July 26, 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, August 1, 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

There will be a Groundwater Management Area Joint Planning Overview presented by the TWDB at 9:00 AM prior to the Planning Group meeting.

Enclosed is a copy of the posted public meeting notice.

Steven J. Raabe, P.E.

Enclosure

Agenda Packet for August 1, 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, August 1, 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. (9:00 AM) Groundwater Management Area Joint Planning Overview by Texas Water Development Board (TWDB), Natalie Ballew
2. (9:30 AM) Roll-Call
3. Public Comment
4. Approval of the Minutes from the May 2, 2019, Meeting of the South Central Texas Regional Water Planning Group (SCTRWPG)
5. Status of Edwards Aquifer Habitat Conservation Plan (EAHCP), Scott Storment
6. 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)
7. Discussion and Appropriate Action to Nominate a BBASC Region L Representative
8. Texas Water Development Board (TWDB) Communications
9. Discussion and Appropriate Action Regarding Nomination of Region L Representative for Interregional Planning Council
10. Chair's Report
11. Discussion and Appropriate Action Regarding the Consultant's Work and Schedule
12. Presentations of Chapters of the Region L Regional Water Plan
13. Discussion and Appropriate Action Regarding Adherence to House Bill 807 Requirements
14. Discussion Regarding Chapter 8 Policy Recommendations from the Workgroup
15. Discussion and Appropriate Action Regarding the Development of an Emergency Interconnection Report
16. Presentation of Water Management Strategy Evaluations
17. Discussion and Appropriate Action to Authorize the Consultant to Proceed on Work for Task 5a Subtask 21 ii) Additional Water Management Strategies
18. Discussion and Appropriate Action to Authorize the San Antonio River Authority to Amend and Execute Their Regional Water Planning Contract with TWDB to Increase Authorized Funds to the Full Contract Amount
19. Discussion Regarding Amending the SCTRWPG Bylaws to Conform to Revision to the Open Meetings Act Regarding Public Comment
20. Possible Agenda Items for the Next Region L Meeting

21. Public Comment

3. Public Comment

4. Approval of the Minutes from the May 2, 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
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
____ 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: REMARKS FROM TEXAS WATER DEVELOPMENT BOARD DIRECTOR KATHLEEN JACKSON**

Ms. Jackson addressed the group on the importance of conservation and efficiency. Ms. Jackson recognized the good work done by Region L, the Texas Legislature, the San Antonio River Authority and Suzanne Scott on water conservation. Then Mr. Walker approached and, with Ms. Jackson, thanked Con Mims for his leadership of Region L.

**AGENDA ITEM NO. 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**

Mr. Andruss thanked Con Mims for all of the work he has done for Region L. He spoke about Mr. Mims' accomplishments with the Planning Group such as being one of the founding members and having five streams designated as ecologically unique in our region. Then Mr. Raabe presented Mr. Mims with a framed photo of the original Region L Planning Group and a memo, written by Mr. Mims and signed by current members of the Staff Work Group.

**AGENDA ITEM NO. 4: DISCUSSION AND APPROPRIATE ACTION REGARDING RIVER AUTHORITY AND COUNTY REPRESENTATIVES FOR THE REGION L PLANNING GROUP**

Mr. Andruss brought attention to the vacancies in voting members with the Region L Planning Group. He explained that Mr. Calhoun intends to continue to serve as a representative of Goliad County and has received permission from the Goliad Commissioners Court to do so. Will Conley, also representing counties had a letter from the Hays County Judge designating Mr. Conley as Hays County's representative on the Region L planning group. Then Mr. Raabe explained that there was only one potential candidate left to fill the river authority vacancy and that Mr. Mims recommended John Byrum, the new Executive Director of the Nueces River Authority, as his replacement. Mr. Ramos moved to elect Mr. Byrum and Mr. Campbell seconded the motion. All members voted in favor of electing Mr. Bryum. He took his seat and spoke briefly on his eagerness to work with the Region L Planning Group.

**AGENDA ITEM NO. 5: APPROVAL OF THE MINUTES FROM THE JANUARY 31, 2019, MEETING OF THE SOUTH CENTRAL TEXAS REGIONAL WATER PLANNING GROUP (SCTRWPG)**

Mr. Riggs moved for the approval of the minutes. Mr. Sengelmann seconded the motion and the minutes were approved.

**AGENDA ITEM NO. 6: STATUS OF EDWARDS AQUIFER HABITAT CONSERVATION PLAN (EAHCP), SCOTT STORMENT**

Mr. Storment gave an update on two items of significance. First, April 25th was the grand opening of a refugia facility at the national fish hatchery in San Marcos. He explained that this was created with the US. Fish and Wildlife Service as a fish and salamander species back up plan in the event of a massive disaster. Mr. Storment praised the work that had been done to complete this project then spoke about how they are currently in the adaptation process in making changes to EAHCP which is the guideline on how to do operations and the VISPO program. He talked about how they have set the VISPO program up as a forbearance program with irrigators in the Edwards Aquifer Region. The EAHCP is proposing to increase the amount of irrigation rights enrolled in the VISPO from 40,000 acre-feet to 41,700 acre-feet which will support the minimum spring flow requirement of 30 cubic feet per second at Comal Springs. Mr. Storment said that he is in the process of working with committees to get approval and then will come back with another update.

**AGENDA ITEM NO. 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)**

Ms.Wassenich spoke on the BBASC nomination search for 5 vacancies and informed the group on the nomination process. She requested that the Planning Group use the nomination sheet in the agenda packet and then send their nominations to Jade Rutledge with the TCEQ. Ms. Wasserich explained that the list of studies presented at the last BBASC meeting were also in the packet.

**AGENDA ITEM NO. 8: DISCUSION AND APPROPRIATE ACTION TO NOMINATE A BBASC REGION L REPRESENTATIVE**

Mr. Andruss explained that Con Mims was the Region L representative for BBASC and now that he has retired it is necessary to replace him. He asked the Planning Group if anyone wanted to serve in Mr. Mims' place, but received no response. Mr. Andruss decided to postpone any action until the next meeting and implored interested parties to reach out to Steve Raabe with nominations.

**AGENDA ITEM NO. 9: TEXAS WATER DEVELOPMENT BOARD (TWDB) COMMUNICATIONS**

Ms. McCoy gave an update on activities since the January 31, 2019 meeting including a briefing on the TWDB's approval of projections and received notice-to-proceed on Block 2 water management strategies. She gave a briefing on the uniform standards stakeholder committee meeting that occurred in November 2018 which will be used to approve 2021 plans. Ms. McCoy stated that recommendations will be sent to the Planning Group in letter in the near future and that the Chapter 7 template on drought response can be found on the TWDB website under the 5th Cycle Task 7. She also displayed new educational materials that explain the duties of regional water planning groups that can be found on the TWDB website as well. Lastly, Ms. McCoy mentioned that TWDB is discussing with SARA the combination of Block 2 and 3 notices to proceed into one contract amendment. Mr. Perkins said that once these have been approved he will be able to start work on them.

**AGENDA ITEM NO. 10: CHAIR REPORT**

Mr. Andruss called upon Ms. Lilly to give a legislative update. Ms. Lilly briefed the planning group on the two bills that would most effect the planning process. The first was HB 723 by Larson. The bill as written included the San Antonio and Guadalupe river basins in Water Availability Model updates. However the engrossed version excluded both the San Antonio and Guadalupe basins. The other bill mentioned was HB 807, also by Larson. The bill creates an interregional planning council between planning groups in the state. Lastly, Ms. Lilly highlighted that the senate flood bills were heard and left pending in the House Natural Resources Committee. Ms. Lilly explained that things were moving quickly and the River Authority will keep an eye on the legislature and update the Planning Group accordingly.

**AGENDA ITEM NO. 11: DISCUSSION AND APPROPRIATE ACTION REGARDING THE CONSULTANT'S WORK AND SCHEDULE**

Mr. Brian Perkins reviewed his schedule for the upcoming months, stating that Black & Veatch is currently evaluating management strategies and will be looking at the impacts of this plan in its entirety later this year. He stated that he was still on target for the draft plan due date on March 3rd 2020 and is planning on having public hearings in April of that year, with the final draft of the plan being finished in October 2020. Mr. Perkins also raised the idea of meeting twice in the early part of the year 2020 in order to give the Planning Group more time to talk about and adopt the plan draft. He said that this would not need to be scheduled until November so there is time to deliberate on this option.

**AGENDA ITEM NO. 12: DISCUSSION AND APPROPRIATE ACTION REGARDING CHAPTER 8 POLICY RECOMMENDATIONS FROM THE PLANNING GROUP**

Mr. Perkins began by reviewing the 2016 Chapter 8 copy and reminding the Planning Group that it is an opportunity to give recommendations on policy issues to the legislature, state agencies, and all others who work with water in the state of Texas. He recommended that the 2016 Chapter 8 version be updated with more current language. Mr. Perkins stated that this is an opportunity to add new information from the last five years to Chapter 8 and that Black & Veatch would be able to facilitate this. Mr. Andruss brought up the idea of a committee being created to develop these language recommendations. Ms. Wassenich stated that this committee would ideally meet before July and be populated by volunteers from the Planning Group. Mr. Raabe stated that Ms. Suzanne Scott had volunteered to Chair the committee. Several members indicated their interest in joining the group: Charlie Flatten, Thomas Taggart, Tim Andruss, Humberto Ramos, Iliana Pena, Dianne Wassenich, and Steven Siebert on behalf of Robert Puente. Mr. Calhoun moved for the formation of this committee and Ms. Wassenich seconded. All members voted in favor and the motion passed.

**AGENDA ITEM NO. 13: PRESENTATION OF WATER MANAGEMENT STRATEGY EVALUATIONS**

Mr. Perkins presented on six of the 29 water management strategies that have been approved for evaluation so far: Advanced Water Conservation, Facilities Expansion, Expanded Local Carrizo (SAWS), Expanded Brackish GW (SAWS), CRWA Wells Ranch Phase 3, and Brackish Wilcox

for SS WSC. These presentations can be found in the May 2, 2019 Planning Group agenda packet. On each presentation there was the wording "minimal environmental impact" which several Planning Group members worried may lead to future legal or public issues and requested that the language be changed. Mr. Perkins said that he will work with SWCA to get some future language for the write-ups.

**AGENDA ITEM NO. 14: DISCUSSION AND APPROPRIATE ACTION IDENTIFYING POTENTIAL WATER MANAGEMENT STRATEGIES**

Mr. Perkins presented the potential water management strategies in Block 3 including their scope and fees. After presenting this information Mr. Perkins stated that there will be approximately $33,405 left over from these projects. He suggested that the Planning Group set this money aside for undefined WUGS which could include water management strategies for the City of Karnes City, the City of Kenedy and the City of Goliad for wells replacement. Mr. Perkins said that some may go away while some may develop into full water management strategies as things come up so if the money is set aside these would be able to develop into plans without delay. He went on to say that this had been done for the previous Region L planning cycle and that it is beneficial to have these back up funds incase another entity approaches with a project. A motion was made by Mr. Cockerell, seconded by Mr. Jungman and all voted in favor of the motion.

**AGENDA ITEM NO. 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 CONTACT AMENDMENT THAT WILL BE ISSUED FOLLOWING THE NOTICE-TO-PROCEED**

Mr. Andruss read the above agenda item. A motion was made by Mr. Calhoun, seconded by Mr. Cockerell and all voted in favor of the motion.

**AGENDA ITEM NO. 16: DISCUSSION AND APPROPRIATE ACTION TO APPROVE A BUDGET ADJUSTMENT TO THE TWDB AND SARA CONTRACT**

Mr. Perkins stated that this agenda item was being requested because he projects that the budget for Task 10 could be exceeded by more than 35% which necessitates a budget adjustment by the TWDB. Funds from tasks that have been completed under budget could be transferred to Task 10 while maintainin the overall contract amount unchanged.. He asked for a contract amendment that would allow for the transfer of funds between those tasks. Ms. McCoy explained that the TWDB does not require an amendment for this. The request was approved by consensus.

**AGENDA ITEM NO. 17: POSSIBLE AGENDA ITEMS FOR THE NEXT REGION L MEETING**

Mr. Ramos suggested that there be a discussion on the GMA process. However, Mr. Stinson asked if it would be possible to have that presentation before the planning group meeting as there would

be 15 water management strategies to review during the next Planning Group meeting. Mr. Perkins agreed to arrive 30 minutes earlier to the next meeting to give a presentation on this subject.

**AGENDA ITEM NO. 18: PUBLIC COMMENT**

There was no public comment to be heard.

The meeting adjourned at 11:45 am.

Approved by the South Central Texas Regional Water Planning Group at a meeting held on May 2, 2019.

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GARY MIDDLETON, SECRETARY

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SUZANNE SCOTT, CHAIR

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

6. 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**

**Fiscal Years 2018-2019 Studies Update:**

a. *Environmental Flows Validation in Three River Basins (Bravos, Colorado-Lavaca, and Guadalupe-San Antonio).*
    i. *In Progress*

b. *Statewide Synthesis of Environmental Flow Studies from Funding Cycles I and II*
    i. *In Progress*

c. *Guadalupe Delta Ecological Assessment of Freshwater Inflows*
    i. *In Progress*

d. *Nutrient and Sediment Monitoring in Four Lower River Basins (Trinity-San Jacinto, Colorado-Lavaca, Guadalupe-San Antonio, Nueces)*
    i. *In Progress*

e. *Using Comparative Long-Term Benthic Data for Adaptive Management of Freshwater Inflow to Three Estuaries (Colorado-Lavaca, Guadalupe, and Nueces)*
    i. *In Progress; Extended to December 31, 2019*

f. *Influence of Freshwater Inflow Gradients on Estuarine Nutrient-Phytoplankton Dynamics in the Three Estuaries (Guadalupe, Nueces, and upper Laguna Madre)*
    i. *In Progress; Extended to December 31, 2019*

**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.

Table 1. Environmental flow studies selected for funding to support adaptive management in the Trinity-San Jacinto, Brazos, Colorado-Lavaca, Guadalupe-San Antonio, and Nueces basin and bay areas. *Note: Highlighted rows indicate studies in the Guadalupe-San Antonio basin-bay area.*

| TWDB Contract No. | Study topic | Cooperator | Completion Date | Budget |
|---|---|---|---|---|
| 1800012317 | Environmental flows validation in three river basins (Brazos, Colorado-Lavaca, and Guadalupe-San Antonio) | Texas A&M University (Awarded via RFQ-580-18-0067) | December 15, 2020 | $245,000 |
| 1900012284 | Statewide synthesis of environmental flow studies from 2014–2017 | Texas State University (Awarded via RFQ-580-18-0069) | August 31, 2020 | $237,000 |
| 1900012323 | Monitoring of nutrient and sediment loads from the Trinity-San Jacinto and Guadalupe-San Antonio river basins into Galveston and San Antonio bays | U.S. Geological Survey | August 31, 2021 | $150,000 |
| 1800012223 | Using comparative long-term benthic data for adaptive management of freshwater inflow to three estuaries (Colorado-Lavaca, Guadalupe, and Nueces) | Harte Research Institute | December 31, 2019 | $135,000 |
| 1800012228 | Influence of freshwater inflow gradients on estuarine nutrient-phytoplankton dynamics in the three estuaries (Guadalupe, Nueces, and Upper Laguna Madre) | Texas A&M University Corpus Christi | December 31, 2019 | $100,000 |
| 1800012267 | Seasonal ecological assessment in the upper Guadalupe delta | Guadalupe-Blanco River Authority | December 31, 2019 | $75,000 |
| 1800012195 | Building and testing the Trinity River delta hydrodynamic model | University of Texas at Austin | January 31, 2020 | $82,387 |
| 1800012283 | Evaluation of rainfall/runoff trends in the upper Colorado River basin, phase II | LRE Water, LLC (Awarded via RFQ-580-18-0070) | August 31, 2019 | $75,000 |
| 1800012226 | Trinity River Senate Bill 3 flow assessment, phase III | Trinity River Authority | August 31, 2020 | $75,000 |
| 1800012268 | Assessment of the relationship between freshwater inflow and biological indicators in Lavaca Bay | Harte Research Institute (Awarded via RFQ-580-18-0068) | December 31, 2019 | $75,000 |
| 1900012305 | Investigation of surface water-groundwater interaction along the lower Colorado River | Lower Colorado River Authority | August 31, 2020 | $125,000 |
| 1800012239 | Analysis of the riverine estuary in the Brazos basin | Environmental Institute of Houston | December 31, 2019 | $75,000 |
| **Total for environmental flow studies for adaptive management** | | | | **$1,449,387** |

7. 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: |

Is nominee willing to serve? Yes ☐ Don't know ☐

Identify interest group(s) nominee is recommended to represent (for full description of each interest group, see Texas Water Code, Section 11.02362):

| | | | |
|---|---|---|---|
| agricultural irrigation | ☐ | electricity generation | ☐ |
| free-range livestock | ☐ | production of paper products or timber | ☐ |
| concentrated animal feeding operation | ☐ | commercial fishermen | ☐ |
| recreational water users | ☐ | public interest groups | ☐ |
| Municipalities* | ☐ | regional water planning groups* | ☐ |
| soil and water conservation districts* | ☐ | groundwater conservation districts* | ☐ |
| industrial refining | ☐ | river authorities* | ☐ |
| chemical manufacturing | ☐ | environmental interests | ☐ |

Please make a brief statement of the nominee's background and qualifications to represent the interest group:

*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.

Send nomination forms to:

Jade Rutledge, MC-160
Texas Commission on Environmental Quality
PO Box 13087
Austin TX 78711-3087
Tel: 512-239-4559

- or -

jade.rutledge@tceq.texas.gov
(put "BBASC Nominations" in the subject line)

8. Texas Water Development Board (TWDB) Communications

# The 86th Texas Legislature: Updates Relevant to Regional Water Planning*

**Elizabeth McCoy**
Water Use, Projections, & Planning
Texas Water Development Board
*August 1, 2019*

**Unless specifically noted, this presentation does not necessarily reflect official Board positions or decisions.*



## Legislative Update

During the regular session, the Legislature passed three bills directly relevant to regional water planning and significant bills related to flood planning and project funding. This update covers the following bills:

- HB 807
- HB 721
- HB 723
- SB 7 and SB 8 (flood)

## House Bill 807

- TWDB required to appoint an interregional planning council (based on RWPG nominations) consisting of one member from each RWPG during each five-year planning cycle prior to the adoption of a new state water plan.
- Adds several new requirements to the development of RWPs (listed on next slide).



## House Bill 807

1. Identify unnecessary or counterproductive variations in drought response strategies.
2. Provide a specific assessment for ASR projects to meet significant water needs identified in the RWPA.
3. Set specific GPCD goals for each decade for municipal WUGs.
4. Assess the progress in encouraging cooperation between WUGs to develop WMSs that achieve economies of scale and benefit the entire region.
5. Recommend legislative changes to improve the water planning process.

# House Bill 807

***Implementation:***

- TWDB is currently working on the logistics for the interregional planning council.
- Rulemaking will be initiated to address HB 807 requirements.
- Preliminary input on rulemaking will be solicited from RWPG stakeholders.



# House Bill 807

- **Texas Water Code (TWC) §16.053(e)(3)(E) —** Unnecessary or counterproductive variations in drought response strategies
- **TWDB Guidance**
  - *RWPGs should review information collected through current requirements outlined in 31 TAC §357.42(c) and (i) and Section 7.5 of Exhibit C.*
  - *Drought response strategies determined to be "unnecessary or counterproductive" should be documented in Chapter 7 of the RWP.*

# House Bill 807

- **TWC §16.053(e)(10)** — Specific assessment of Aquifer Storage and Recovery (ASR) potential if significant identified needs
- **TWDB Guidance**
  - *The threshold(s) for "significant" identified water needs are to be defined by the RWPG.*
  - *RWPGs must clearly articulate in their RWP how they determined the threshold of significant water needs for this requirement.*
  - *If significant needs, the RWPG shall generally assess ASR potential to the best of its ability.*
  - *TWDB will provide a list of the agency's currently available and relevant information on ASR for the RWPGs to consider.*



# House Bill 807

- **TWC §16.053(e)(11)** — Setting Gallons Per Capita Daily (GPCD) goal(s) for each planning decade
- **TWDB Guidance**
  - *TWDB will provide a list of municipal WUGs in each RWPG as well as supporting information.*
  - *GPCD goals may be a specific GPCD, or ranges of GPCD; may be based on specific municipal WUGs, or groupings of municipal WUGs as determined appropriate by the RWPG.*
  - *To be included in Subchapter 5B of the RWP.*

# House Bill 807

- **TWC §16.053(e)(12)** — Assess progress of "regionalization"
- **TWDB Guidance**
  - *RWPGs shall include documentation of the RWPG's general assessment of progress of the RWPA in encouraging cooperation between WUGs for the purpose of achieving economies of scale and otherwise incentivizing strategies that benefit the entire region.*
  - *To be included in Chapter 11 of the RWP.*



# House Bill 807

- **TWC §16.053(i)** — Recommendations on process improvements
- **TWDB Guidance**
  - *RWPGs should include any legislative recommendations that members of the planning group believe would improve the regional and state water planning process.*
  - *To be included in Chapter 8 of the RWP.*

# House Bill 721

Requires TWDB to:

1. Conduct studies of ASR projects and aquifer recharge projects in the SWP or identified by interested persons, and report on the results of those studies to RWPGs and interested persons.
2. Conduct a statewide survey to identify the relative suitability of various major and minor aquifers for use in ASR projects or aquifer recharge projects and prepare a report of the survey.



# House Bill 721

***Anticipated Implementation:***

- Complete first feasibility study by September 2020.
- Statewide survey report due to state leadership December 15, 2020.

## House Bill 723

- Requires the Texas Commission on Environmental Quality (TCEQ) to obtain or develop updated WAMs for the Brazos, Neches, Red, and Rio Grande River Basins.
- TCEQ to obtain or develop WAM updates by December 1, 2022.



## Senate Bill 7 (Flood Funding)

Aimed at providing funding through multiple funds and accounts for:

- Flood planning/protection/mitigation
- Data collection and modeling
- Hurricane Harvey Projects (through TDEM)

# Senate Bill 8 (Flood Planning)

- Establishes a state and regional flood planning process administered by TWDB.
- Flood planning regions will be by river basin.
- First regional flood plans due January 10, 2023.
- First state flood plan due September 1, 2024.
- Requires the State Soil and Water Conservation Board to prepare a 10-year dam repair, rehabilitation, and maintenance plan for flood control dams under their jurisdiction.



# Flood Stakeholder Input

- TWDB is planning stakeholder meetings around the state to gather preliminary input on SB7 and SB 8 implementation.
- These meetings will provide input for rulemaking.
- Contact Flood@twdb.texas.gov with questions.
- Sign up for TWDB updates to keep informed:

  http://www.twdb.texas.gov/newsmedia/signup.asp

# Questions?

## TWDB is hiring!

http://www.twdb.texas.gov/jobs/index.asp

**Elizabeth McCoy**
Project Manager
Water Use, Projections, & Planning
Texas Water Development Board
elizabeth.mccoy@twdb.texas.gov
(512) 475-1852

9. Discussion and Appropriate Action Regarding Nomination of Region L Representative for Interregional Planning Council

Texas Water Development Board

P.O. Box 13231, 1700 N. Congress Ave.
Austin, TX 78711-3231, www.twdb.texas.gov
Phone (512) 463-7847, Fax (512) 475-2053

July 8, 2019

Dear Regional Water Planning Group Chairs:

House Bill (HB) 807, as passed by the 86th Texas Legislature, directs the Texas Water Development Board (TWDB) to appoint an Interregional Planning Council (Council). In accordance with HB 807, the purposes of the Council are to

- improve coordination among the Regional Water Planning Groups (RWPG), and between the RWPGs and the TWDB in meeting goals of the state water planning process;
- facilitate dialogue regarding regional water management strategies; and
- share operational best practices of the regional water planning process.

Additionally, HB 807 requires the Council to

- hold at least one public meeting; and
- prepare a report to the TWDB Board on the Council's work.

To support the Council's directive to facilitate dialogue regarding regional water management strategies, TWDB is initiating the Council establishment process so that information from the initially prepared plans may be discussed in early spring 2020. Although RWPGs may nominate more than one member to serve on the Council, the Council as appointed by the TWDB Board will consist of one member from each RWPG. Council membership will be appointed each five-year cycle prior to the adoption of a new state water plan and appointments will expire once a new state water plan is adopted. The Board will take into consideration nominations from each RWPG in appointing the Council, and Council appointments are anticipated to occur by the end of 2019.

To meet the goal of appointing the Council by the end of this year, we request that each RWPG take appropriate action at their next RWPG meeting to nominate one or more members. Please provide the nomination information, including the interest category the individual represents, committee membership (if applicable), a brief background statement including time served on the RWPG, contact information (email, phone number, and mailing address), and any other supporting information deemed relevant by the RWPG to Sarah Backhouse at Sarah.Backhouse@twdb.texas.gov.

The TWDB offers to facilitate the required public meeting and assist in development of the report, as requested by the Council. The TWDB also offers to assist with any supporting information the Council may deem necessary. Information for coordination of meeting time

and logistics as well as support services or materials will be distributed in Council member appointment notification letters later this year. If your RWPG has any opinions on meeting timelines or goals that they would like to share with TWDB, you may include such information in your nomination packet.

Thank you for your participation in the regional water planning process and consideration of this request. Please contact Sarah Backhouse at Sarah.Backhouse@twdb.texas.gov or at (512) 936-2387 with any questions you might have.

Sincerely,

Jeff Walker
Executive Administrator

cc: Designated Political Subdivisions for RWPGs

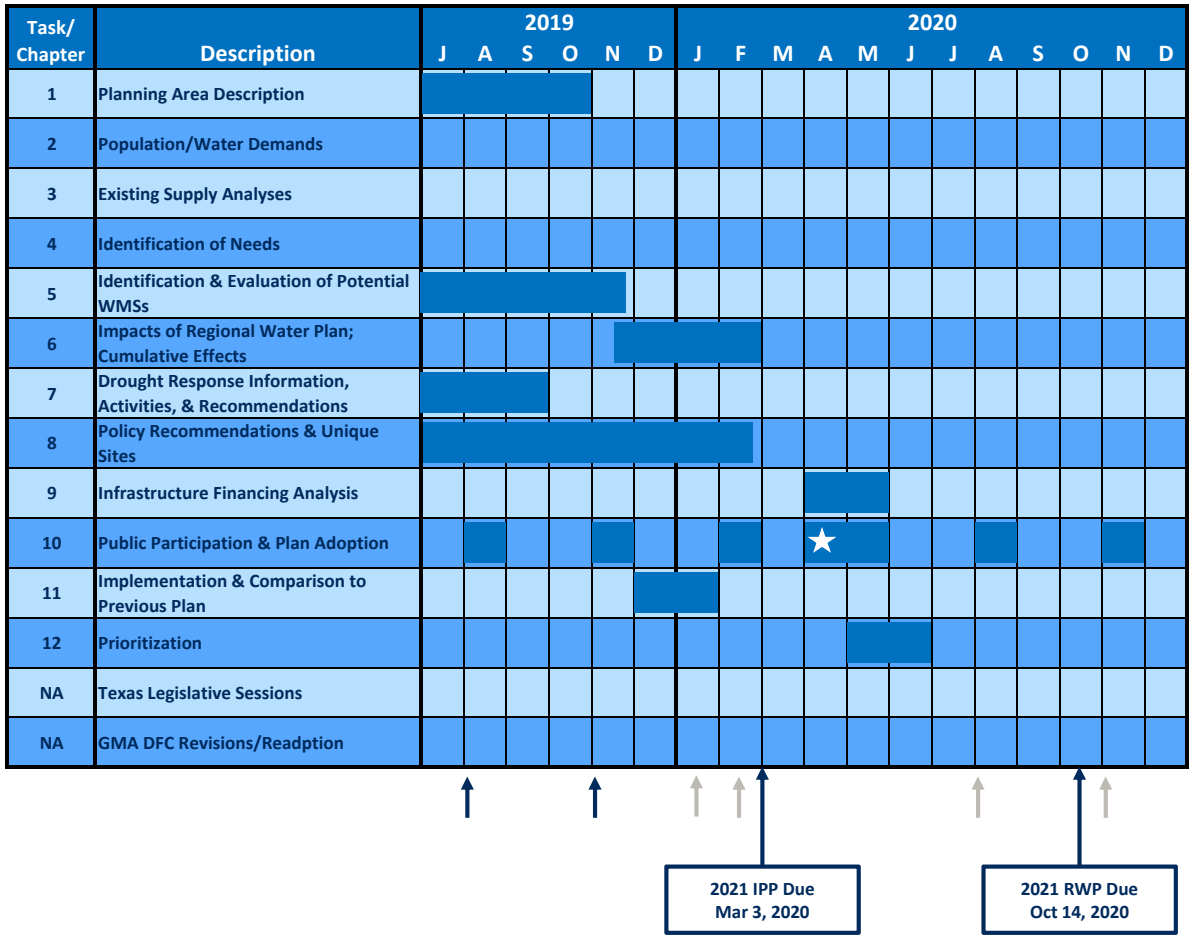
10. Chair's Report

Future SCTRWPG Meetings

i. Thursday, November 7th, 2019
ii. Thursday, January 23rd, 2020
iii. Thursday, February 20th, 2020

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

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




**KEY:**

- *Scheduled Region L Meetings*
- *Anticipated Region L Meetings*
- *Public Hearing(s) on 2021 IPP*
- *Anticipated Activity*

12. Presentations of Chapters of the Region L Regional Water Plan

# BUILDING A WORLD OF DIFFERENCE

## SCTRWP: Chapter 1

SCTRWPG Meeting
August 1, 2019

BUILDING A WORLD OF DIFFERENCE®

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## Wholesale Water Providers (WWP)

**Any person or entity, including river authorities and irrigation districts, that delivers or sells water wholesale (treated or raw) to WUGs or other WWPs or that the RWPG expects or recommends to deliver or sell water wholesale to WUGs or other WWPs during the period covered by the plan.**

| | |
|---|---|
| San Antonio Water System (SAWS) | Cibolo Valley Local Government Corporation (CVLGC) |
| Guadalupe-Blanco River Authority (GBRA) | Alliance Regional Water Authority (ARWA) |
| Canyon Region Water Authority (CRWA) | Schertz-Sequin Local Government Corporation (SSLGC) |

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# Major Water Providers (MWP)

**Determined by the SCTRWPG to be any municipal water user group (WUG) or WWP, including river authorities and irrigation districts, that has more than 20,000 acft/yr in demands.**

| | |
|---|---|
| ARWA | SAWS |
| CRWA | San Marcos |
| CVLGC | SSLGC |
| GBRA | Victoria |
| New Braunfels (NBU) | |

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3

# County Population, Area, and Density

| County | Population (2010) | Area (sq. mi.) | Population Density | County | Population (2010) | Area (sq. mi.) | Population Density |
|---|---|---|---|---|---|---|---|
| Atascosa | 44,911 | 1,232 | 36.5 | Hays (part) | 125,686 | 374 | 336.1 |
| Bexar | 1,714,773 | 1,247 | 1,375.1 | Karnes | 14,824 | 750 | 19.8 |
| Caldwell | 38,066 | 546 | 69.7 | Kendall | 33,410 | 663 | 50.4 |
| Calhoun | 21,381 | 512 | 41.8 | LaSalle | 6,886 | 1,489 | 4.6 |
| Comal | 108,472 | 562 | 193.0 | Medina | 46,006 | 1,328 | 34.6 |
| DeWitt | 20,097 | 909 | 22.1 | Refugio | 7,383 | 770 | 9.6 |
| Dimmit | 9,996 | 1,331 | 7.5 | Uvalde | 26,405 | 1,557 | 17.0 |
| Frio | 17,217 | 1,133 | 15.2 | Victoria | 86,793 | 883 | 98.3 |
| Goliad | 7,210 | 854 | 8.4 | Wilson | 42,918 | 807 | 53.2 |
| Gonzales | 19,807 | 1,068 | 18.5 | Zavala | 11,677 | 1,299 | 9.0 |
| Guadalupe | 131,533 | 711 | 185.0 | | | | |
| | | | | **Total** | **2,535,451** | **20,025** | **126.6** |

Source: U.S. Census Bureau, U.S. Department of Commerce.

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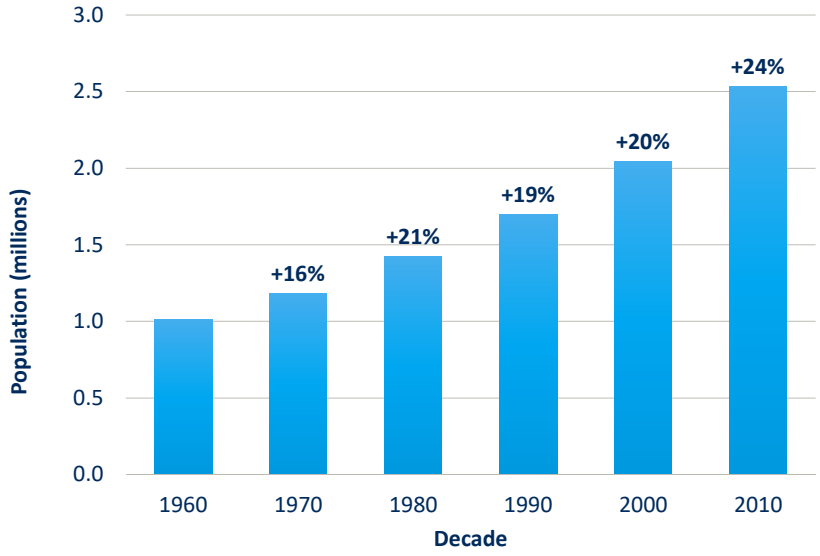
## Historical Region L Population Growth

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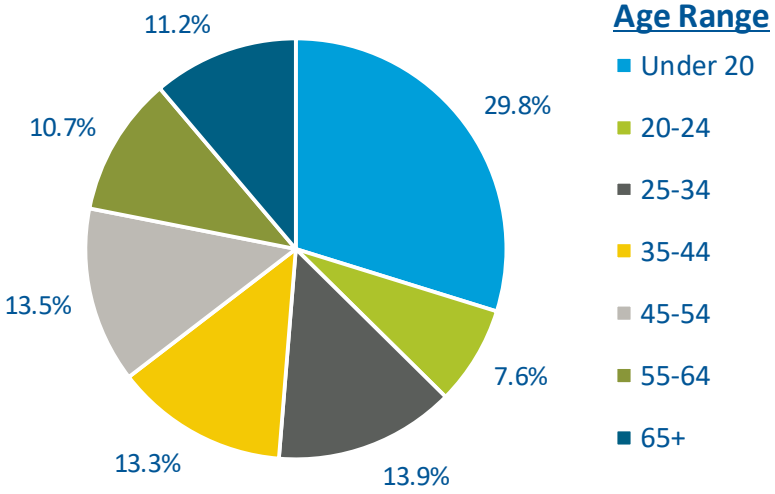
## 2010 Census – Age Demographics

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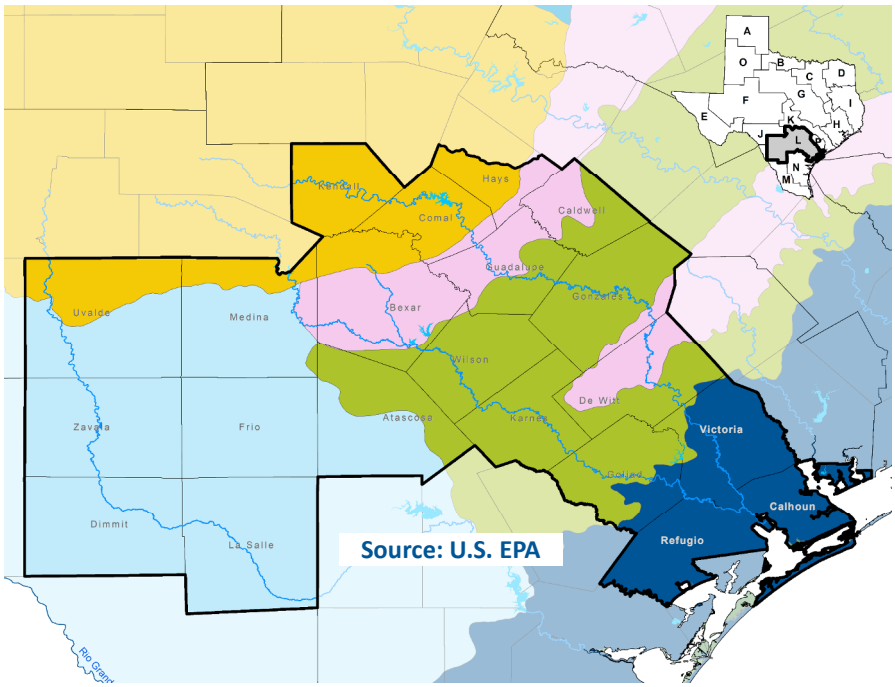
# Ecoregions

**Legend**

- Edwards Plateau
- Texas Blackland Prairies
- East Central Texas Plains
- Southern Texas Plains
- Western Gulf Coastal Plain

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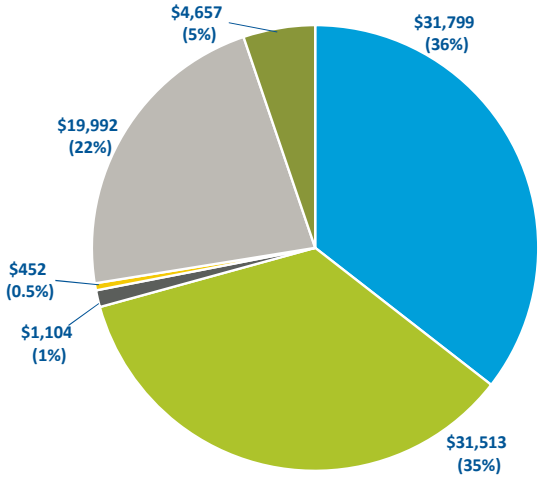
# Economic Activity




- Trades & Services Economic Activity (million dollars)[1]
- Manufacturing Economic Activity (million dollars)[2]
- Market Value of All Livestock (million dollars)[3]
- Market Value of All Crops (million dollars)[3]
- Value of Oil Production (million dollars)[4]
- Value of Gas Production (million dollars)[5]

1. Source: 2007 Economic Census, U.S. Department of Commerce
2. Source: 2012 Economic Census, U.S. Department of Commerce
3. Source: 2017 Census of Agriculture, Volume 1 Geographic Area Series, "Table 1. County Summary Highlights: 2017."
4. Determined by using the number of barrels produced as reported to the Texas Railroad Commission times $61.40/bbl (the average price for 2018).
5. Determined by using the mcf produced as reported to the Texas Railroad Commission times $3.67/mcf (the average price for 2018).

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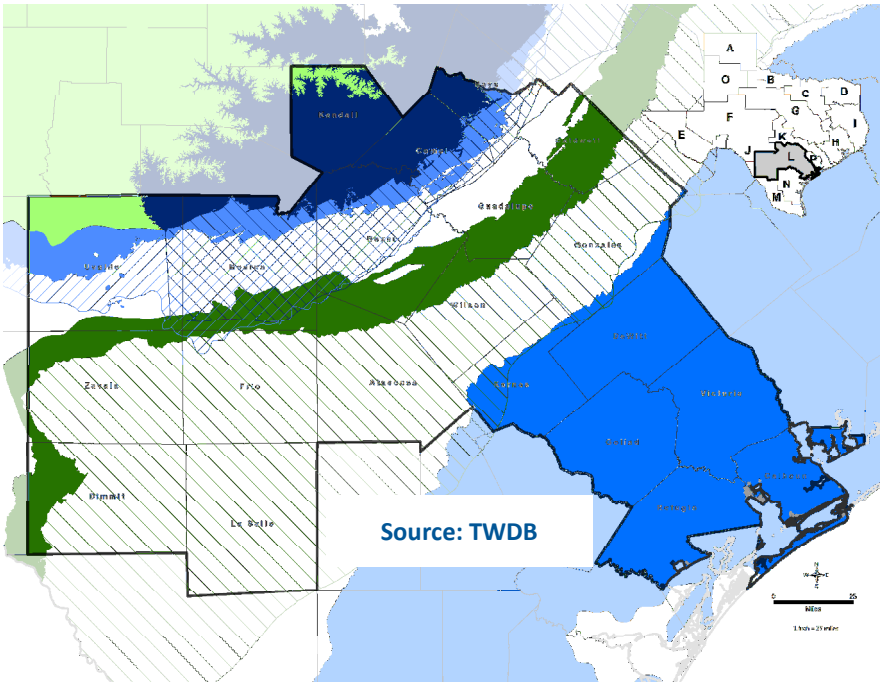
# Major Aquifers

**Legend**

- Gulf Coast
- Carrizo-Wilcox (outcrop)
- Carrizo-Wilcox (subcrop)
- Edwards-Trinity (outcrop)
- Edwards-Trinity (subcrop)
- Edwards (outcrop)
- Edwards (subcrop)
- Trinity (outcrop)
- Trinity (subcrop)

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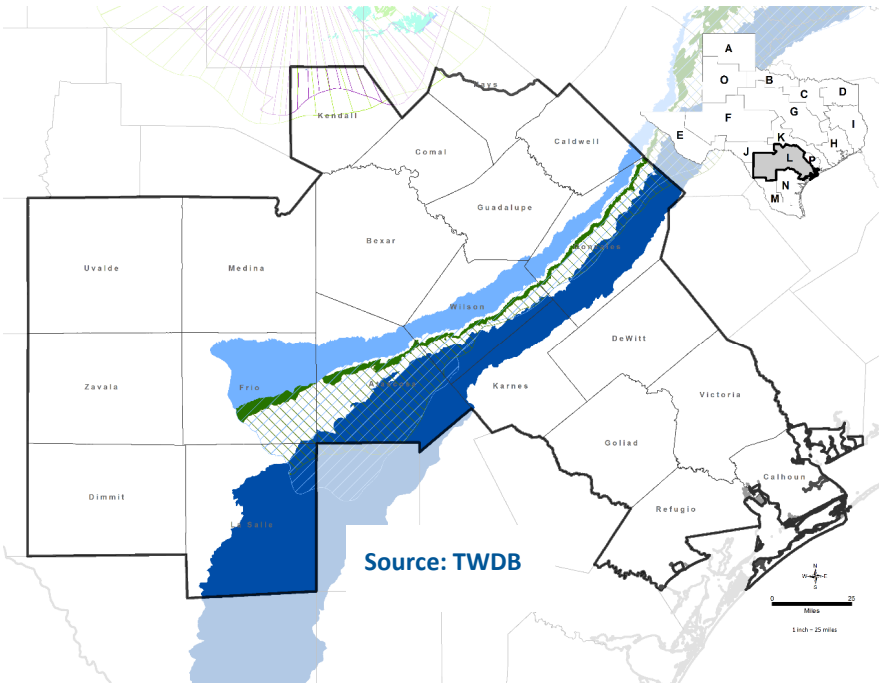
# Minor Aquifers

**Legend**

- Marble Falls
- Sparta (outcrop)
- Sparta (subcrop)
- Hickory (outcrop)
- Hickory (subcrop)
- Queen City (outcrop)
- Queen City (subcrop)
- Yegua Jackson
- Lipan (subcrop)
- Ellenburger-San Saba (subcrop)

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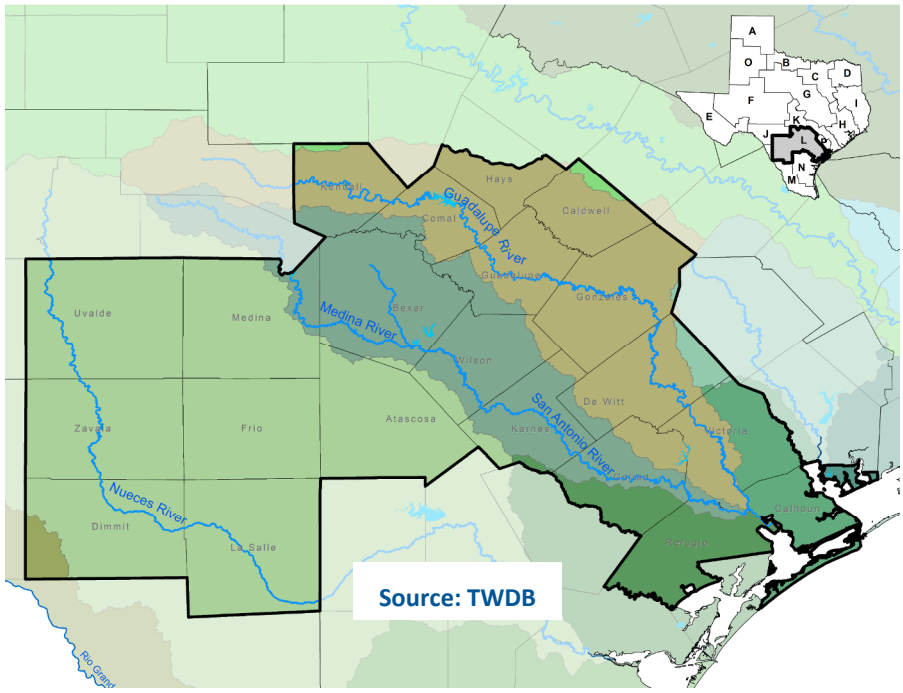
# River Basins

**Legend**

- Colorado
- Colorado-Lavaca
- Nueces
- Guadalupe
- Lavaca
- Lavaca-Guadalupe
- Rio Grande
- San Antonio
- San Antonio-Nueces

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# BUILDING A WORLD OF DIFFERENCE

## SCTRWP: Chapter 2

SCTRWPG Meeting
August 1, 2019

BUILDING A WORLD OF DIFFERENCE®

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## Population Projections by County

| COUNTIES | 2020 | 2030 | 2040 | 2050 | 2060 | 2070 |
|---|---|---|---|---|---|---|
| Atascosa | 52,574 | 60,755 | 68,210 | 75,481 | 82,324 | 88,676 |
| Bexar | 1,974,041 | 2,231,550 | 2,468,254 | 2,695,668 | 2,904,319 | 3,094,726 |
| Caldwell | 47,008 | 57,553 | 67,955 | 78,243 | 88,639 | 98,754 |
| Calhoun | 24,037 | 26,866 | 29,622 | 32,276 | 34,906 | 37,454 |
| Comal | 152,499 | 193,188 | 234,515 | 276,239 | 317,682 | 357,464 |
| Dewitt | 20,855 | 21,555 | 21,900 | 22,216 | 22,425 | 22,572 |
| Dimmit | 10,875 | 11,725 | 12,275 | 12,825 | 13,246 | 13,585 |
| Frio | 19,186 | 21,144 | 22,846 | 24,488 | 25,967 | 27,304 |
| Goliad | 8,427 | 9,519 | 10,239 | 10,545 | 10,759 | 10,884 |
| Gonzales | 21,751 | 23,921 | 25,963 | 28,330 | 30,738 | 33,256 |
| Guadalupe | 182,693 | 235,318 | 276,064 | 315,934 | 356,480 | 396,261 |
| Hays | 183,278 | 240,549 | 303,637 | 353,172 | 441,377 | 541,765 |
| Karnes | 15,456 | 15,938 | 15,968 | 15,968 | 15,968 | 15,968 |
| Kendall | 42,185 | 52,213 | 62,807 | 73,308 | 84,028 | 94,549 |
| La Salle | 7,776 | 8,517 | 9,209 | 9,987 | 10,657 | 11,279 |
| Medina | 52,653 | 59,694 | 65,676 | 70,896 | 75,605 | 79,700 |
| Refugio | 7,687 | 7,929 | 7,985 | 8,119 | 8,175 | 8,213 |
| Uvalde | 28,846 | 31,548 | 33,861 | 36,257 | 38,543 | 40,734 |
| Victoria | 93,857 | 100,260 | 105,298 | 109,785 | 113,470 | 116,522 |
| Wilson | 54,266 | 66,837 | 79,044 | 90,016 | 100,411 | 109,771 |
| Zavala | 13,189 | 14,758 | 16,161 | 17,521 | 18,786 | 19,956 |
| **TOTAL** | **3,013,139** | **3,491,337** | **3,937,489** | **4,357,274** | **4,794,505** | **5,219,393** |

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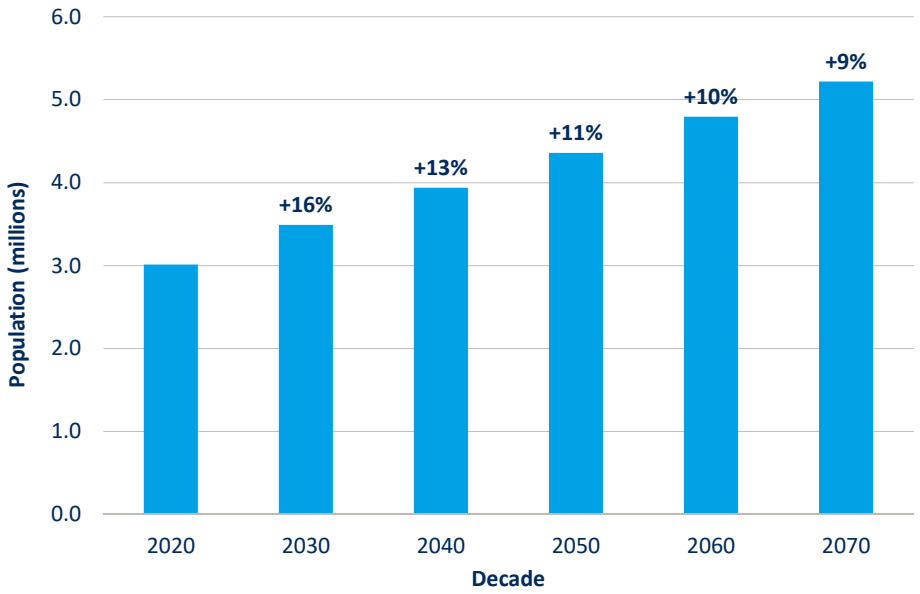
## Region L Population Projections




*Source: TWDB*

*Draft 7-26-2019*

3

## Water Demand Projections (acft/yr) by County

| COUNTIES | 2020 | 2030 | 2040 | 2050 | 2060 | 2070 |
|---|---|---|---|---|---|---|
| Atascosa | 8,204 | 9,223 | 10,174 | 11,158 | 12,148 | 13,077 |
| Bexar | 265,338 | 289,932 | 313,393 | 338,279 | 363,282 | 386,599 |
| Caldwell | 5,535 | 6,530 | 7,575 | 8,653 | 9,799 | 10,934 |
| Calhoun | 3,040 | 3,271 | 3,520 | 3,791 | 4,090 | 4,384 |
| Comal | 27,981 | 34,742 | 41,665 | 48,629 | 55,769 | 62,682 |
| Dewitt | 3,572 | 3,602 | 3,589 | 3,606 | 3,633 | 3,655 |
| Dimmit | 2,411 | 2,542 | 2,623 | 2,727 | 2,812 | 2,883 |
| Frio | 3,702 | 3,991 | 4,259 | 4,535 | 4,801 | 5,047 |
| Goliad | 1,211 | 1,324 | 1,395 | 1,423 | 1,449 | 1,466 |
| Gonzales | 4,908 | 5,292 | 5,674 | 6,153 | 6,665 | 7,209 |
| Guadalupe | 24,556 | 30,784 | 35,549 | 40,356 | 45,411 | 50,420 |
| Hays | 21,821 | 28,405 | 34,306 | 39,452 | 45,400 | 52,186 |
| Karnes | 3,595 | 3,636 | 3,589 | 3,568 | 3,563 | 3,563 |
| Kendall | 6,782 | 8,369 | 10,060 | 11,741 | 13,538 | 15,308 |
| La Salle | 1,807 | 1,942 | 2,072 | 2,232 | 2,379 | 2,518 |
| Medina | 7,799 | 8,508 | 9,116 | 9,689 | 10,260 | 10,770 |
| Refugio | 1,201 | 1,200 | 1,177 | 1,189 | 1,194 | 1,200 |
| Uvalde | 6,196 | 6,626 | 7,000 | 7,434 | 7,888 | 8,334 |
| Victoria | 20,139 | 21,065 | 21,782 | 22,528 | 23,253 | 23,877 |
| Wilson | 8,344 | 10,037 | 11,710 | 13,249 | 14,759 | 16,123 |
| Zavala | 2,871 | 3,133 | 3,379 | 3,651 | 3,909 | 4,151 |
| **TOTAL** | **431,013** | **484,154** | **533,607** | **584,043** | **636,002** | **686,386** |

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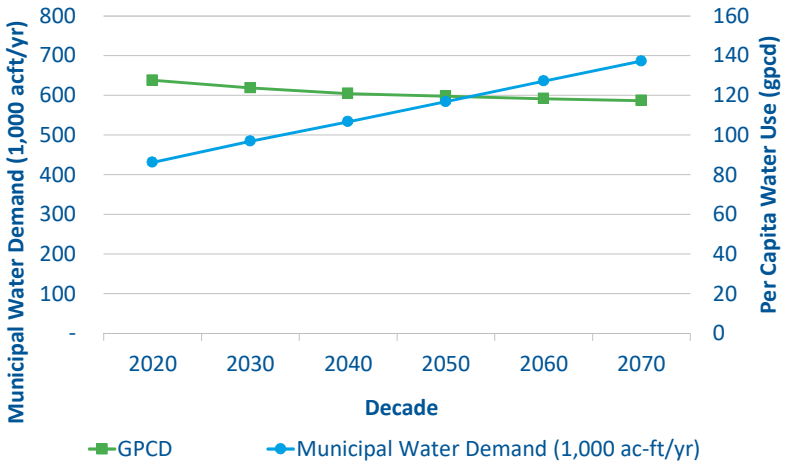
4

# Municipal Demand and Per Capita Water Use Projections

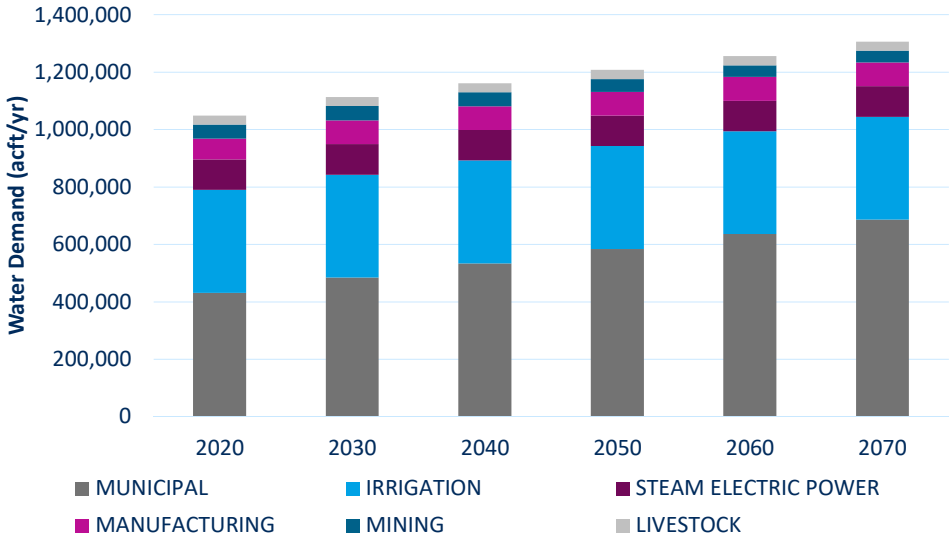



*Draft 7-26-2019*

***Source: TWDB***



# Water Demand Projections by Use Type




*Draft 7-26-2019*

***Source: TWDB***

**Region L Regional Water Planning**
**Chapter 7 - Drought Management**
**Summary of Drought Response Measures**

| Entity Name | DCP Date | Stage Number | Triggers | | | | | | | | | | Responses | | | | | | | | | | Water Supply | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | WWP | Demand/Capacity Based | Failure/Contamination | Groundwater Level | Season | Reservoir Level | Supply-Based | Well Pumping Time/Flow | Storage Tank Recovery Time | Other | Assessment and Identification | Water Rate Change or Surcharge | Irrigation Schedule | Mandatory Reduction | Notification of Public Agencies or Specific Users | Prohibited Use | Discontinue Water Diversions | Potential Suspend Service | Water Allocation | Others | Surface Water | Ground Water |
| Aqua WSC | 2015 | 1 | | • | | | | | | • | | | | | • | | | • | | • | | • | | |
| | | 2 | | • | | | | | | • | | | | | • | | | • | | • | | | | |
| | | 3 | | • | | | | | | • | | | | | • | | | • | | • | | | | • |
| | | 4 | | • | | | | | | • | | | | | | | | • | | • | | | | |
| Canyon Lake WSC | 2019 | 1 | | • | | | | • | • | | | • | | | • | | | | | | | • | | |
| | | 2 | | • | | | | • | | | | | | | • | | | • | | | | | | |
| | | 3 | | • | | | | • | | | • | | • | | • | | | • | | | | • | • | • |
| | | 4 | | | | | | | | | | • | • | • | • | • | • | • | | | | • | | |
| | | Emergency | | | • | | | • | | | • | • | • | • | • | • | • | • | | | | • | | |
| Canyon Regional Water Authority | 2019 | 1 | | | | | | • | | | | | • | | | | • | | | | | • | | |
| | | 2 | | | | | | • | | | | | • | | | • | • | | | | | | • | • |
| | | 3 | | | | | | • | | | | | • | | | • | • | | • | | • | | | |
| | | 4 | | | • | | | | | | | • | • | | | | • | | | | | | | |
| City of Converse | 2013 | 1 | • | | | • | | | | | | | | • | • | | | • | | | | • | | |
| | | 2 | • | | | • | | | | | | | | • | • | | | • | | | | • | | |
| | | 3 | • | | | • | | | | | | | | • | • | | | • | | | | • | | • |
| | | 4 | • | | | • | | | | | | | | • | • | | | • | | | | • | | |
| | | 5 | • | | | • | | | | | | | | • | • | | | • | | | | • | | |
| Crystal Clear SUD | 2019 | 1 | | | • | | | | | | • | | | | • | | | | | | | | | |
| | | 2 | | | • | | | | | | • | | | | • | | | • | | | | | | |
| | | 3 | | | • | | | | | | • | | | | • | | | • | | | | | • | • |
| | | 4 | | | • | | | | | | • | | | | • | | | • | | | | | | |
| | | 5 | | | • | | | | | | • | | | | | | | • | | | | | | |
| County Line Special Utility District | 2019 | 1 | • | | | | | | | • | • | • | | | • | | | | | | | | | |
| | | 2 | • | | | | | | | • | • | • | | | • | | | • | | | | | | |
| | | 3 | • | | | | | | | • | • | • | | | • | | | • | | | | | • | • |
| | | 4 | • | | | | | | | • | • | • | | | • | | | • | | | | • | | |
| | | 5 | | | • | | | | | | | | | | • | • | | • | | | | • | | |
| Goforth Special Utility District | 2019 | Conservation Period | | | | | • | | | | | | | | | | | | | | | • | | |
| | | 1 | • | • | | | | | • | | | | • | | | | • | • | | | | • | | |
| | | 2 | • | • | | | | | • | | • | | • | | • | | • | • | | | | • | • | • |
| | | 3 | • | • | | | | | • | | • | | • | | • | | • | • | | | | • | | |
| | | 4 | • | • | • | | | | • | | | | • | | • | | • | • | | | • | • | | |

**Region L Regional Water Planning**
**Chapter 7 - Drought Management**
**Summary of Drought Response Measures**

| Entity Name | DCP Date | Stage Number | Triggers | | | | | | | | | | Responses | | | | | | | | | | Water Supply | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | WWP | Demand/Capacity Based | Failure/Contamination | Groundwater Level | Season | Reservoir Level | Supply-Based | Well Pumping Time/Flow | Storage Tank Recovery Time | Other | Assessment and Identification | Water Rate Change or Surcharge | Irrigation Schedule | Mandatory Reduction | Notification of Public Agencies or Specific Users | Prohibited Use | Discontinue Water Diversions | Potential Suspend Service | Water Allocation | Others | Surface Water | Ground Water |
| Guadalupe Blanco River Authority | 2014 | 1 | | • | | | | • | • | | | • | | | • | | • | • | | | | • | • | • |
| | | 2 | | • | | | | • | • | | | • | | | • | • | • | • | • | | | • | | |
| | | 3 | | • | | | | • | • | | | • | | | • | • | • | • | • | | • | | | |
| | | 4 | | • | • | | | | • | | | • | • | | • | | • | • | • | | • | | | |
| City of Kyle | 2014 | 1 | | | | | • | | | | | | | | • | | | | | | | | • | • |
| | | 2 | | | | | | | | | | • | | | • | | | • | | | | | | |
| | | 3 | | | | | | | | | | • | | | • | | | • | | | | | | |
| City of Marion | 2014 | 1 | | | | | | • | | • | | | | | • | | | | | | | | • | • |
| | | 2 | | | | | | • | | • | | | | | • | | • | • | | | | | | |
| | | 3 | | | | | | • | | • | | | | | • | | • | | | | | | | |
| | | 4 | | • | • | | | • | | • | | | | | • | | • | • | | | • | | | |
| McCoy WSC | 2014 | 1 | | • | | | | | | | | • | | | • | | | | | | | • | | |
| | | 2 | | • | | | | | | | • | | | | • | | | • | | | | | | • |
| | | 3 | • | • | • | | | | | | | • | | | • | | | • | | | | | | |
| City of New Braunfels | 2019 | 1 | | | | • | | | • | | | | | | • | | | | | | | | • | • |
| | | 2 | | | | • | | | • | | | | | | • | | | • | | | | | | |
| | | 3 | | | | • | | | • | | | | | | • | | | • | | | | | | |
| | | 4 | | | | | • | | | | | • | | | | | | | | | | • | | |
| City of San Marcos | 2019 | 1 | | | • | • | | | • | | | | | | • | | | • | | | | | • | • |
| | | 2 | | | • | • | | | • | | | | | | • | | | • | | | | | | |
| | | 3 | | | • | • | | | • | | | | | | • | | | • | | | | | | |
| | | 4 | | | • | • | | | • | | | | | | • | | | • | | | | | | |
| | | 5 | | • | • | • | | | • | | | • | | | • | | | • | | | | • | | |
| SAWS | 2019 | 1 | | | | • | | | | | | | | | • | | | • | | | | • | • | • |
| | | 2 | | | | • | | | | | | | | | • | | | • | | | | • | | |
| | | 3 | | | | • | | | | | | | | | • | | | • | | | | • | | |
| | | 4 | | • | | • | | | • | | | • | | • | • | | | • | | | | • | | |
| City of Schertz | 2019 | 1 | | • | | • | | | | | | • | | | • | | | • | | | | | | • |
| | | 2 | | • | | • | | | | | | • | | | • | | | • | | | | | | |
| | | 3 | | • | • | • | | | | | | • | | | • | | | • | | | | | | |
| | | 4 | | • | • | • | | | | | | • | | | | | | • | | | | | | |

**Region L Regional Water Planning**
**Chapter 7 - Drought Management**
**Summary of Drought Response Measures**

| Entity Name | DCP Date | Stage Number | Triggers | | | | | | | | | | Responses | | | | | | | | | | Water Supply | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | WWP | Demand/Capacity Based | Failure/Contamination | Groundwater Level | Season | Reservoir Level | Supply-Based | Well Pumping Time/Flow | Storage Tank Recovery Time | Other | Assessment and Identification | Water Rate Change or Surcharge | Irrigation Schedule | Mandatory Reduction | Notification of Public Agencies or Specific Users | Prohibited Use | Discontinue Water Diversions | Potential Suspend Service | Water Allocation | Others | Surface Water | Ground Water |
| S.S. Local Government Corporation | 2019 | 1 | | • | • | • | | | | | | • | | | | | • | | | | | | | |
| | | 2 | | • | • | • | | | | | | • | | | | | • | | | | | | | • |
| | | 3 | | • | • | • | | | | | | • | | | | | • | | | | | | | |
| | | 4 | | • | • | • | | | | | | • | • | • | | | • | | | • | • | | | |
| S.S. WSC | 2014 | 1 | | • | | | | | | | | | | | • | | | | | | | | | |
| | | 2 | | • | | | | | | | | | | | • | | | • | | | | | | |
| | | 3 | | • | | | | | | | | | | | • | | | • | | | | | | • |
| | | 4 | | • | | | | | | | | | | | • | | | • | | | | | | |
| | | 5 | | | • | | | | | | | | | | | | | • | | • | | • | | |
| Sunko Water Supply Corporation | 2019 | 1 | | | • | | | | | • | • | | | | • | | | | | | | | | |
| | | 2 | | | • | | | | | • | • | | | | • | | | • | | | | | | |
| | | 3 | | | • | | | | | • | • | | | | • | | | • | | | | | | • |
| | | 4 | | | • | | | | | • | • | | | | • | | | • | | | | • | | |
| | | 5 | | | • | | | | | | | | | | | | | • | | | | • | | |
| TBM Resident WSC | 2017 | 1 | | | | | | | | | | • | | | • | | | • | | | | | | |
| | | 2 | | • | | | | | | | | | • | | • | | | | | | | | | • |
| | | 3 | | • | | | | | | | | | | | • | | | • | | | | • | | |
| | | 4 | | • | | | | | | | | | • | | • | | | • | | | | • | | |
| Three Oaks WSC | 2019 | 1 | | | | | | | | • | • | • | | | • | | | | | | | | | |
| | | 2 | | | | | | | | • | • | • | | | • | | | • | | | | | | |
| | | 3 | | | | | | | | • | • | • | | | • | | | • | | | | | | • |
| | | 4 | | | | | | | | • | • | • | | • | • | | | • | | | | | | |
| | | Emergency | | | • | | | | | | | | | | | | | • | | | | | | |
| Universal City | 2014 | 1 | | | | • | | | | | | | | | • | | • | • | | | | | | |
| | | 2 | | | | • | | | | | | | | | • | | | • | | | | | | • |
| | | 3 | | | | • | | | | | | | | | • | | | • | | | | | | |
| | | 4 | | | • | • | | | | | | | | | • | | | • | | | | | | |
| City of Victoria | 2019 | 1 | | | | | | | • | | | • | | | | | | | | | | • | | |
| | | 2 | | | | | | | • | | | • | | | • | | | | | | | | | |
| | | 3 | | | | | | • | | | | • | | | • | | | • | | | | | • | • |
| | | 4 | | | | | | • | | | | | | | • | | | • | | | | • | | |
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**Region L Regional Water Planning**
**Chapter 7 - Drought Management**
**Summary of Drought Response Measures**

| Entity Name | DCP Date | Stage Number | Triggers | | | | | | | | | | Responses | | | | | | | | | | Water Supply | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | WWP | Demand/Capacity Based | Failure/Contamination | Groundwater Level | Season | Reservoir Level | Supply-Based | Well Pumping Time/Flow | Storage Tank Recovery Time | Other | Assessment and Identification | Water Rate Change or Surcharge | Irrigation Schedule | Mandatory Reduction | Notification of Public Agencies or Specific Users | Prohibited Use | Discontinue Water Diversions | Potential Suspend Service | Water Allocation | Others | Surface Water | Ground Water |
| Victoria County WCID No. 1 | 2019 | 1 | | | | | | | | | | | | | | | | | | | | | | |
| | | 2 | | • | | | | | | | | | | | • | | | • | | | | | | • |
| | | 3 | | • | | | | | | | | | | | • | | | • | | | | | | |
| | | 4 | | • | • | | | | | | | | | | • | | | • | | | | | | |

13. Discussion and Appropriate Action Regarding Adherence to House Bill 807 Requirements

Texas Water Development Board

P.O. Box 13231, 1700 N. Congress Ave.
Austin, TX 78711-3231, www.twdb.texas.gov
Phone (512) 463-7847, Fax (512) 475-2053

July 19, 2019

Dear Stakeholder:

Texas Water Development Board (TWDB) is primarily preparing to propose revisions to 31 Texas Administrative Code (TAC) Chapter 357 to address statutory changes from House Bill 807, 86th(R) Legislative Session. The scope of the potential rule revisions may include other changes.

House Bill 807, 86th Legislative Session, relating to the state and regional water planning process, includes the establishment of an Interregional Planning Council (Council), and five new regional water planning requirements.

Before determining the scope and specific content of the draft rulemaking, we would like your input on these new provisions. Attachment A presents the HB 807 requirements to be addressed in rulemaking and includes potential items to consider as a starting point for input. If interested, please provide comments related to these topics that will be addressed in rule or any other potential revisions associated with 31 TAC Chapter 357.

TWDB anticipates formally publishing proposed rules in the fall of 2019. A public comment period will follow publication. Adoption of final rules by our Board may be considered in spring 2020.

Please provide your comments and any additional suggested revisions to RulesComments@twdb.texas.gov by August 19, 2019. Please include the words "2019 Regional Water Planning Rulemaking" in the subject line. If you have any questions about the rulemaking process, you may contact Sarah Backhouse at (512) 936-2387 or Sarah.Backhouse@twdb.texas.gov.

Sincerely,

Jessica Zuba
Deputy Executive Administrator
Water Supply & Infrastructure

Attachment: Potential Regional Water Planning Rule Items for Implementation of HB 807

Attachment: Potential Regional Water Planning Rule Items for Implementation of HB 807

## 1. Interregional Planning Council

1.1 A new rule section [or new rule under 31 TAC §357.42] will be proposed to implement the requirements in HB 807.

1.2 Rulemaking items to consider:
   a. Should rules specify that Council nominations must be current RWPG voting members?
   b. Should rules specify the location or frequency of Council meetings?
   c. Should rules provide requirements and a deadline for the Council's report?

## 2. Unnecessary or counterproductive variations in drought response strategies §16.053(e)(3)(E)

2.1 New rule will be proposed under 31 TAC §357.42 to adopt requirements that "RWPGs should identify unnecessary or counterproductive variations in specific drought response strategies, including outdoor watering restrictions, among user groups in the regional water planning area (RWPA) that may confuse the public or otherwise impede drought response efforts".

## 3. Specific assessment of Aquifer Storage and Recovery (ASR) potential if significant identified needs (TWC §16.053(e)(10)).

3.1 New rule will be proposed under 31 TAC §357.34 to adopt requirements that, "if a regional water planning area (RWPA) has significant identified water needs, [the RWP shall provide] a specific assessment of the potential for aquifer storage and recovery [ASR] projects to meet those needs".

3.2 Rulemaking items to consider:
   a. Should there be specific consistent parameters for ASR studies across regions?
   b. What should be considered as the minimum scope/level of assessment?

## 4. Setting Gallons Per Capita Daily (GPCD) goal(s) for each planning decade (TWC §16.053(e)(11)).

4.1 New rule will be proposed under 31 TAC §357.34 to adopt requirements that, the RWP shall "set one or more specific goals for gallons of water use per capita per day [GPCD] in each decade of the period covered by the plan for the municipal water user groups in the RWPA".

4.2 Rulemaking items to consider:
   a. Could an RWPG set a GPCD goal that applies to all municipal WUGs in the RWPA?
   b. Should GPCD goals be based on dry year, average year conditions, or both?
   c. Should the GPCD goal be based on regional water planning (dry year) GPCD calculations?
   d. How would GPCD goals tie into an entity's conservation plan goals?

## 5. Assess progress of "regionalization" (TWC §16.053(e)(12))

5.1 New rule will be proposed under 31 TAC §357.45 to adopt requirements that the RWP "shall assess the progress of the RWPA in encouraging cooperation between water user groups for the purpose of achieving economies of scale and otherwise incentivizing strategies that benefit the entire region".

5.2 Rulemaking items to consider:
   a. What common measures could be used to assess progress in incentivizing and implementing regional strategies that benefit the region?

b. Is a standardized assessment methodology necessary or beneficial for consistency among regions?

**6. Recommendations on process improvements (TWC §16.053(i))**

6.1 New rule will be proposed under 31 TAC §357.43 to adopt requirements that that RWPGs shall include recommendations "for any other changes that the members of the planning group believe would improve the water planning process".

# Region L Adherence to House Bill (HB) 807

- Passed by the 86th Legislature in 2019
- Signed into Law June 10th, 2019; effective immediately
- TWDB will begin rulemaking, with anticipated completion around March 2020
- Establishes an Interregional Planning Council
- Includes 5 new requirements in Texas Water Code (TWC) §16.053, discussed in subsequent slides



## 1. Unnecessary or Counterproductive Variations in Drought Response Strategies

| | |
|---|---|
| **Requirement in TWC §16.053(e)(3)(E):** | "RWPGs should identify unnecessary or counterproductive variations in specific drought response strategies, including outdoor watering restrictions, among user groups in the regional water planning area (RWPA) that may confuse the public or otherwise impede drought response efforts." |
| **Region L RWPG's Plan to Address Requirement:** | • At August meeting:<br>– Consider how to define "unnecessary or counterproductive variations in specific drought response strategies."<br>– Review summary of existing drought response strategies and provide direction.<br>• At November meeting:<br>– Review Chapter 7 that will incorporate RWPG's direction. |

## Drought Response Strategies

| | |
|---|---|
| Irrigation Schedule | Notification of Public Agencies or Specific Use |
| Prohibited Use | Assessment and Identification |
| Water Rate Change or Surcharge | Discontinue Water Diversions |
| Potential Service Restriction or Suspension | Mandatory Reduction |
| Others | Water Allocation |



## 2. Specific Assessment of Aquifer Storage and Recovery (ASR) Potential if Significant Identified Needs

| | |
|---|---|
| **Requirement in TWC §16.053(e)(10):** | "If a RWPA has significant identified water needs, [the RWP shall provide] a specific assessment of the potential for aquifer storage and recovery projects to meet those needs." |
| **Region L RWPG's Plan to Address Requirement:** | • At August meeting:<br>– Consider how to define "significant" identified water needs.<br>– Discuss and provide action on path forward. |

## Significant Identified Water Needs

- 2021 RWP is currently evaluating ASR for: SAWS, GBRA, NBU, Victoria, and Buda (via Region K)

Potential Concepts:

- Municipal WUGs with Needs > ____ by 2070
  - 10,000 acft/yr = SAWS, NBU, San Marcos, and Hays County-Other
  - 7,500 acft/yr = SAWS, NBU, San Marcos, Hays County-Other, and Victoria
  - 5,000 acft/yr = SAWS, NBU, San Marcos, Hays County-Other, Victoria, Schertz, and Canyon Lake WSC
- Include WWPs?



## 3. Setting Gallons Per Capita Daily (GPCD) Goals for Each Planning Decade

| | |
|---|---|
| **Requirement in TWC §16.053(e)(11):** | The RWP shall "set one or more specific goals for gallons of water use per capita per day in each decade of the period covered by the plan for the municipal water user groups in the RWPA." |
| **Region L RWPG's Plan to Address Requirement:** | Region L already calculates GPCD goals for each municipal WUG as part of the Advanced Water Conservation WMS. The method for identifying GPCD goals and the goals themselves will be documented in Chapter 5B. TWDB has provided a spreadsheet to document gpcd goals. |

## 4. Assess Progress of "Regionalization"

| | |
|---|---|
| **Requirement in TWC §16.053(e)(12):** | The RWP shall "assess the progress of the RWPA in encouraging cooperation between water user groups for the purpose of achieving economies of scale and otherwise incentivizing strategies that benefit the entire region." |
| **Region L RWPG's Plan to Address Requirement:** | Region L already has examples of water management strategies that incorporate "regionalization." Chapter 11 will document existing cooperation and emphasize how the RWPG encourages regionalization. |



## 5. Recommendations on Process Improvements

| | |
|---|---|
| **Requirement in TWC §16.053(i):** | RWPGs should make legislative recommendations "for any other changes that the members of the planning group believe would improve the water planning process." |
| **Region L RWPG's Plan to Address Requirement:** | Region L will include a new section in Chapter 8 that summarizes all policy- and funding-related legislative recommendations. |

14. Discussion Regarding Chapter 8 Policy Recommendations from the Workgroup

# 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 83rd 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:

1. 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, 80th 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.

15. Discussion and Appropriate Action Regarding the Development of an Emergency Interconnection Report

16. Presentation of Water Management Strategy Evaluations

## Status of WMS Evaluations (Presented)

- Advanced Water Conservation
- Local Groundwater
- Facilities Expansion
- Expanded Local Carrizo (SAWS)
- Expanded Brackish GW (SAWS)
- 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
- Victoria ASR
- Brackish Wilcox for SS WSC

*Presented in May 2019*
***Presented in August 2019***



## Status of WMS Evaluations (Remaining)

- Drought Management
- Edwards Transfers
- Local Carrizo Conversions
- Surface Water Rights
- Balancing Storage
- Recycled Water Strategies
- 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
- Victoria GW-SW Exchange
- Martindale WSC New WS Well
- Maxwell WSC Trinity Well
- County Line WSC Trinity
- County Line WSC Brackish Edwards
- CRWA Brackish
- City of Kenedy Carrizo Wells

# CRWA Siesta Project

- Recommended WMS in 2016 SCTRWP
- Source and Supply:
  - Cibolo Creek Surface Water Rights
    - CA #19-1155: 42 acft/yr (CRWA owns)
    - CA #19-1151: 86 acft/yr (CRWA owns)
    - CA #19-1152: 35 acft/yr (CRWA lease)
    - CA #19-1157: 117 acft/yr (CRWA lease)
    - New Amendment to CA #19-1155*
  - MOUs with SARA, CCMA, and Green Valley SUD for Treated Effluent Discharges
  - Total Project Firm Yield = 5,042 acft/yr
  - Diversion Point is Siesta Cattle Company

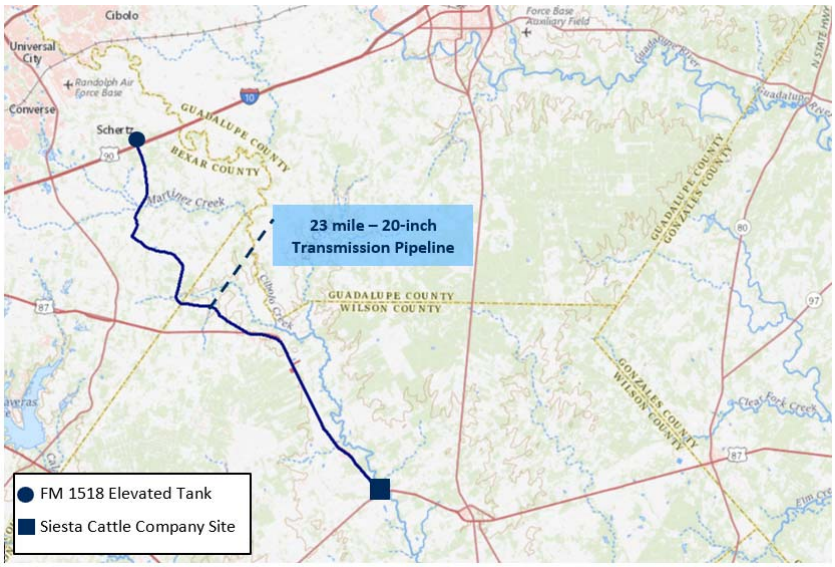
** Increases annual authorized diversion by 4,762 acft/yr*

***Draft 7-18-19***



# CRWA Siesta Project

*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 contract negotiations to be determined by the project's sponsor at a later date.*




***Draft 7-18-19***

# CRWA Siesta Project

- Facilities:
  - Intake and Pump Station; Booster Station
  - 23 mile, 20-inch Diameter Transmission Pipeline
  - 6.75 MGD WTP
  - Peaking Factor = 1.5
- Delivery to FM 1518 Elevated Tank
- Decade of Need = 2060

*Draft 7-18-19*



# Environmental Considerations

- Vegetation and Land Use 1
  - Vegetation would be expected to quickly re-establish once construction is complete
- Aquatic Resources 1
  - Project will require an on-site delineation of streams, ponds and wetlands
- Threatened, Endangered, and Species of Concern 2
  - Project area may contain suitable habitat for federal candidate/state-threatened species
  - Site-specific field surveys would be required to determine the quality of habitat and potential for impacts to state-listed species
  - Pre-construction surveys for active bird nests are recommended
- Cultural Considerations 2
  - 5% to 91% likelihood that the landform crossed contains significant unidentified archaeological resources
  - The design should avoid the cemeteries in the area
  - Structured cultural resources survey of the final design plan is recommended

**Environmental/ Cultural Assessment Rating**

0 N/A
1 Minimal concerns; precautions recommended
2 Additional studies recommended

*Draft 7-26-19*

# CRWA Siesta Project

| WMS Cost Summary | |
|---|---|
| Costs of Facilities | $75,582,000 |
| Total Project Costs | $107,161,000 |
| Annual Costs* | $12,456,000 |
| Project Yield (acft/yr) | 5,042 |
| Unit Costs ( $/acft/yr) | $2,470 |

**Includes amortization at 3.5% for 20-years, O&M, and Power Costs*

***Draft 7-18-19***

# SSLGC Brackish Wilcox Project

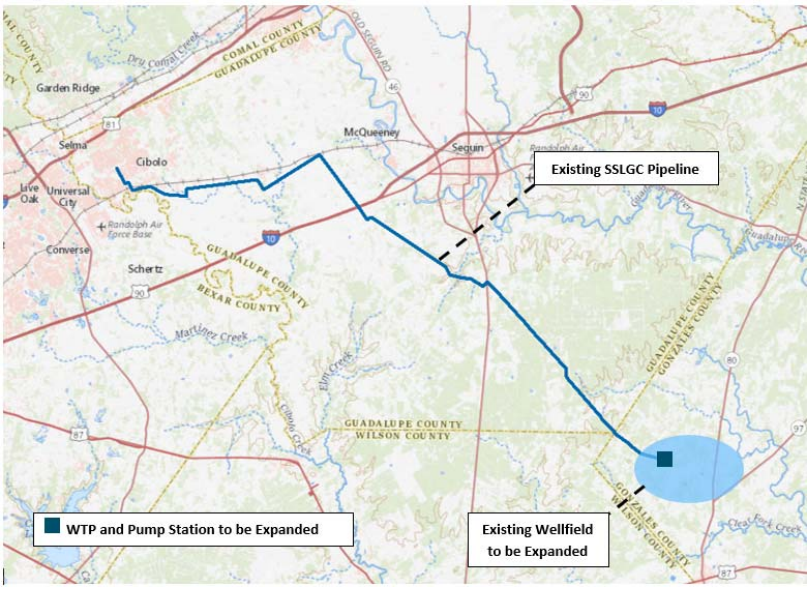
- Recommended WMS in 2016 SCTRWP
- Source and Supply:
  - Brackish Wilcox Groundwater from Gonzales County (Gonzales County UWCD)
  - Total Project Firm Yield = 5,000 acft/yr
- SSLGC Has Permits
- Primary Users are Seguin and Schertz

*Draft 7-12-19*



# SSLGC Brackish Wilcox Project

*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 contract negotiations to be determined by the project's sponsor at a later date.*




*Draft 7-12-19*

# SSLGC Brackish Wilcox Project

- Facilities:
  - 7 Wilcox Aquifer Wells, Average Flow of 800 gpm
  - Well Collection Pipelines and Pumps
  - 450 mg/L TDS blended water
    - Blend 1,500 mg/L TDS brackish water with 300 mg/L TDS groundwater
  - WTP Expansion of 5 MGD
- Peaking Factor = 1.25
- Decade of Need: 2040

*Draft 7-12-19*



# Environmental Considerations

- Vegetation and Land Use 1
  - Result in conversion of land from undeveloped vegetation to areas of industrial use
- Aquatic Resources 1
  - Does not contain ecologically significant stream segments as designated by TPWD
  - Project will require an on-site delineation of streams, ponds and wetlands
  - Well facilities can typically be sited to avoid impacts to waters of the U.S.
- Threatened, Endangered, and Species of Concern 1
  - Suitable habitat does not occur for any of the federally listed threatened or endangered species
  - Site-specific field surveys would be required to determine the quality of habitat and potential for impacts to state-listed species
  - Pre-construction surveys for active bird nests are recommended
- Cultural Considerations 2
  - 4% to 58% likelihood that the landform crossed contains significant unidentified archaeological resources
  - Structured cultural resources survey of the final design plan is recommended

**Environmental/ Cultural Assessment Rating**

0 N/A
1 Minimal concerns; precautions recommended
2 Additional studies recommended

# SSLGC Brackish Wilcox Project

| WMS Cost Summary | |
|---|---|
| Costs of Facilities | $22,530,000 |
| Total Project Costs | $31,941,000 |
| Annual Costs* | $3,316,000 |
| Project Yield (acft/yr) | 5,000 |
| Unit Costs ( $/acft/yr) | $663 |

**Includes amortization at 3.5% for 20-years, O&M, and Power Costs*

*Draft 7-12-19*

# SSLGC Expanded Carrizo Project

- Recommended WMS in 2016 SCTRWP
- Source and Supply:
  - Groundwater from Guadalupe County (Guadalupe County GCD)
  - Total Project Firm Yield = 6,000 acft/yr
- SSLGC Permits:
  - Carrizo Aquifer: 4,035 acft/yr
  - Wilcox Aquifer: 1,290 acft/yr
- Primary Users include Seguin and Schertz

*Draft 7-18-19*



# SSLGC Expanded Carrizo Project

*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 contract negotiations to be determined by the project's sponsor at a later date.*


*Draft 7-18-19*

# SSLGC Expanded Carrizo Project

- Facilities:
  - 8 Carrizo Aquifer Wells, Average Flow of 500 gpm
  - 2 Wilcox Aquifer Wells, Average Flow of 400 gpm
  - Well Collection Pipelines and Pumps
  - Peaking Factor = 1.25
  - 6.0 MGD WTP*
  - 34 mile, 42-inch Shared Pipeline* Parallel to Existing SSLGC Pipeline
- Decade of Need: 2020 (Scheduled for 2023)

**Shared facilities with CVLGC Carrizo Well Field Project in Wilson County*

***Draft 7-18-19***



# Environmental Considerations

- Vegetation and Land Use (1)
  - Vegetation would be expected to quickly re-establish once construction is completed
- Aquatic Resources (2)
  - Does not contain ecologically significant stream segments as designated by TPWD
  - Project will require an on-site delineation of streams, ponds and wetlands for 34-mile pipeline; additional studies recommended
  - Well facilities can typically be sited to avoid impacts to waters of the U.S.
- Threatened, Endangered, and Species of Concern (2)
  - Suitable habitat does not occur for any of the federally listed threatened or endangered species
  - Site-specific field surveys would be required to determine the quality of habitat and potential for impacts to state-listed species and federal candidate freshwater mussels
  - Pre-construction surveys for active bird nests are recommended
- Cultural Considerations (2)
  - 5% to 85% likelihood that the landform crossed contains significant unidentified archaeological resources
  - Structured cultural resources survey of the final design plan is recommended

**Environmental/ Cultural Assessment Rating**

- (0) N/A
- (1) Minimal concerns; precautions recommended
- (2) Additional studies recommended

# SSLGC Expanded Carrizo Project

| WMS Cost Summary | |
|---|---|
| Costs of Facilities | $53,427,000 |
| Total Project Costs | $75,542,000 |
| Annual Costs* | $7,239,000 |
| Project Yield (acft/yr) | 6,000 |
| Unit Costs ( $/acft/yr) | $1,207 |

**Includes amortization at 3.5% for 20-years, O&M, and Power Costs*

*Draft 7-18-19*

# CVLGC Carrizo Well Field

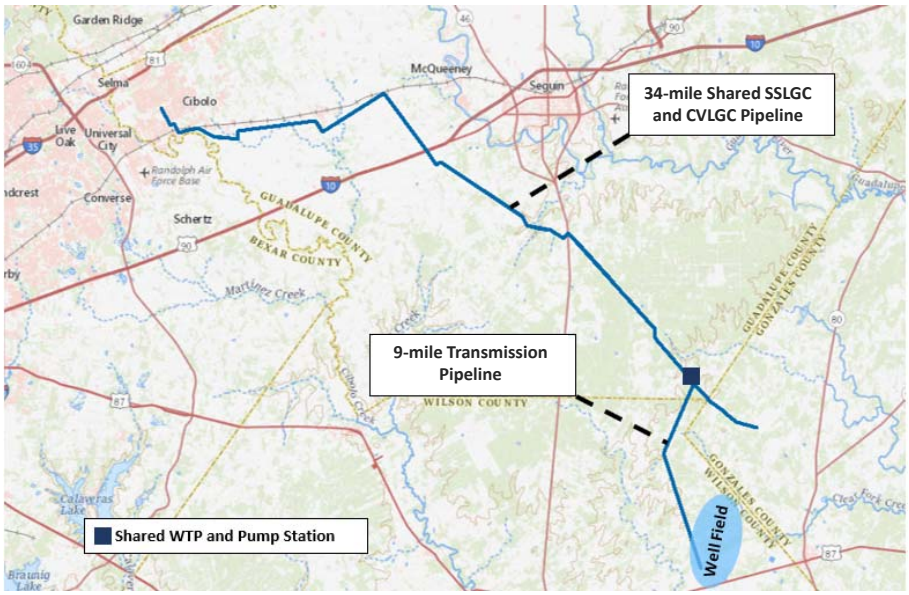
- Recommended WMS in 2016 SCTRWP
- Source and Supply:
  - Carrizo Groundwater from Wilson County (Evergreen UWCD)
  - Total Project Firm Yield = 10,000 acft/yr
  - Delivery Point is Cibolo and Schertz
- CVLGC Has Lease Agreements in Place
- CVLGC Has Not Obtained Permits

*Draft 7-18-19*

1

# CVLGC Carrizo Well Field

*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 contract negotiations to be determined by the project's sponsor at a later date.*




*Draft 7-18-19*

2

# CVLGC Carrizo Well Field

- Facilities:
  - 6 Carrizo Aquifer Wells, Average Flow of 1,100 gpm
  - Well Collection Pipelines and Pumps
  - 12.0 MGD Expansion of Shared WTP*
  - 9 mile, 36-inch Transmission Pipeline to Shared WTP*
  - 34 mile, 42-inch Shared Pipeline* Parallel to Existing SSLGC Pipeline
  - Peaking Factor = 1.25
- Decade of Need: 2030

**Shared facilities with SSLGC Expanded Carrizo Well Field Project in Guadalupe County*

*Draft 7-18-19*



# Environmental Considerations

- Vegetation and Land Use 1
  - Vegetation would be expected to quickly re-establish once construction is completed
- Aquatic Resources 2
  - Does not contain ecologically significant stream segments as designated by TPWD
  - Project will require an on-site delineation of streams, ponds and wetlands for 34-mile pipeline; additional studies recommended
  - Well facilities can typically be sited to avoid impacts to waters of the U.S.
- Threatened, Endangered, and Species of Concern 2
  - Suitable habitat does not occur for any of the federally listed threatened or endangered species
  - Site-specific field surveys would be required to determine the quality of habitat and potential for impacts to state-listed species and federal candidate freshwater mussels
  - Pre-construction surveys for active bird nests are recommended
- Cultural Considerations 2
  - 5% to 85% likelihood that the landform crossed contains significant unidentified archaeological resources
  - Structured cultural resources survey of the final design plan is recommended

**Environmental/ Cultural Assessment Rating**

0 N/A
1 Minimal concerns; precautions recommended
2 Additional studies recommended

# CVLGC Carrizo Well Field

| WMS Cost Summary | |
|---|---|
| Costs of Facilities | $92,487,000 |
| Total Project Costs | $130,227,000 |
| Annual Costs* | $12,302,000 |
| Project Yield (acft/yr) | 10,000 |
| Unit Costs ( $/acft/yr) | $1,230 |

**Includes amortization at 3.5% for 20-years, O&M, and Power Costs*

***Draft 7-18-19***

# NBU ASR Project

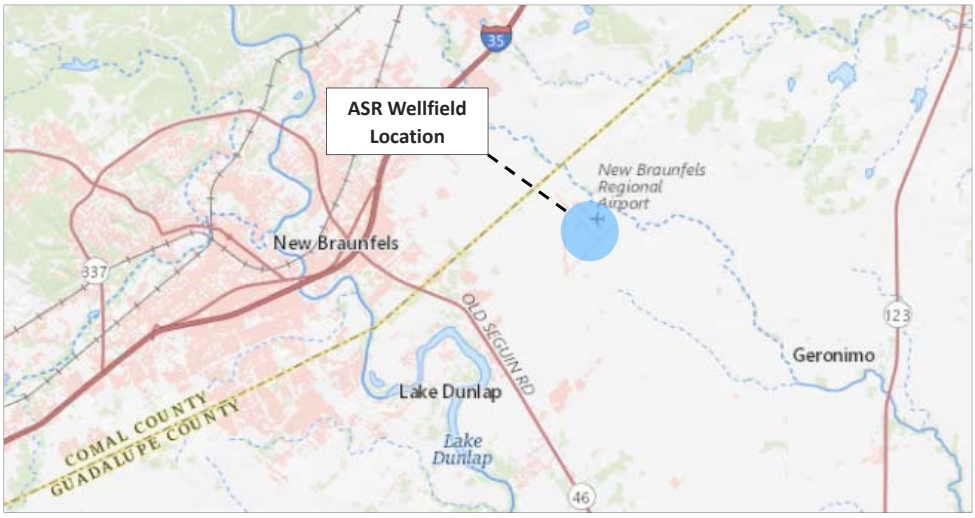
- Recommended WMS in 2016 SCTRWP
- Source and Supply:
  - Source water is blend of NBU-owned supplies, including:
    - Surface Water Rights from Guadalupe River owned by NBU
    - Stored Water Contracts from Canyon Reservoir
    - Edwards Aquifer Groundwater
    - Trinity Aquifer Groundwater
    - New supply sources as they are brought online
  - Project will increase firm supply incrementally by 10,818 acft/yr
- Project works in conjunction with other NBU water supply strategies
- Project uses excess WTP capacity and water available during wet/average periods to store water for drought

*Draft 7-26-19*



# NBU ASR Project

*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 contract negotiations to be determined by the project's sponsor at a later date.*




*Draft 7-26-19*

# NBU ASR Project

- Facilities:
  - 9 ASR wells in the Saline Zone of the Edwards Aquifer
    - Anticipated Recharge Capacity of 347 gpm per well
    - Anticipated Recovery Capacity of 694 gpm per well
  - 7,000 acft of usable storage in the aquifer + 7,000 acft buffer zone storage = TSV of 14,000 acft
  - Well Collection Pipelines and Pumps
  - Chloramine Disinfection Sized for Recovery Rates
- Uniform Delivery (Peaking Factor = 1.0)
- Decade of Need: 2020

*Draft 7-26-19*



# Environmental Considerations

- Vegetation and Land Use 0
  - Likely does not contain significant amounts of native vegetation
- Aquatic Resources 1
  - Project will require an on-site delineation of streams, ponds and wetlands
  - Well facilities can typically be sited to avoid impacts to waters of the U.S.
- Threatened, Endangered, and Species of Concern 2
  - Suitable habitat does not occur for any of the federally listed threatened or endangered species
  - Site-specific field surveys would be required to determine the quality of habitat and potential for impacts to state-listed species
  - Pre-construction surveys for active bird nests are recommended
- Cultural Considerations 2
  - 16% to 66% likelihood that the landform crossed contains significant unidentified archaeological resources
  - Structured cultural resources survey of the final design plan is recommended

**Environmental/ Cultural Assessment Rating**

0 N/A
1 Minimal concerns; precautions recommended
2 Additional studies recommended

*Draft 7-26-19*

# NBU ASR Project

| WMS Cost Summary | |
|---|---|
| Costs of Facilities* | $27,888,000 |
| Total Project Costs | $39,198,000 |
| Annual Costs** | $5,001,000 |
| Project Yield (acft/yr) | 10,818 |
| Unit Costs ( $/acft/yr) | $462 |

** Cost for ASR wells were provided by Victoria's engineer using site specific information*
***Includes amortization at 3.5% for 20-years, O&M, and Power Costs*

***Draft 7-26-19***

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# NBU Trinity Well Field Expansion

- Recommended WMS in 2016 SCTRWP
- Source and Supply:
  - Trinity Groundwater from Comal County (Comal Trinity GCD)
  - Total Expansion Firm Yield = 3,360 acft/yr
  - Total Project = 6,720 acft/yr

*Draft 7-12-19*



# NBU Trinity Well Field Expansion

*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 contract negotiations to be determined by the project's sponsor at a later date.*


*Draft 7-12-19*

# NBU Trinity Well Field Expansion

- Facilities:
  - 4 Trinity Aquifer Wells, Average Flow of 620 gpm
  - Well Collection Pipelines and Pumps
  - 1.5 MG Ground Storage Tank
  - 3.74 MGD WTP Expansion
  - Upgrade Pump Station
  - Uniform Peaking Factor = 1.0
- Decade of Need: 2020 (Envisioned for 2026)

*Draft 7-12-19*



# Environmental Considerations

- Vegetation and Land Use 0
  - Likely does not contain significant amounts of native vegetation, although fields and woody vegetation occur nearby
- Aquatic Resources 0
  - Does not contain ecologically significant stream segments as designated by TPWD, or wetlands
  - Well facilities can typically be sited to avoid impacts to waters of the U.S.
- Threatened, Endangered, and Species of Concern 2
  - Suitable habitat does not occur for any of the federally listed threatened or endangered species
  - suitable habitat is not expected to occur for most state listed species
  - Pre-construction surveys for active bird nests are recommended
- Cultural Considerations 2
  - 35% to 79% likelihood that the landform crossed contains significant unidentified archaeological resources
  - Structured cultural resources survey of the final design plan is recommended

**Environmental/ Cultural Assessment Rating**

0 N/A
1 Minimal concerns; precautions recommended
2 Additional studies recommended

# NBU Trinity Well Field Expansion

| WMS Cost Summary | |
|---|---|
| Costs of Facilities | $13,700,000 |
| Total Project Costs | $19,155,000 |
| Annual Costs* | $2,303,000 |
| Project Yield (acft/yr) | 3,360 |
| Unit Costs ( $/acft/yr) | $685 |

**Includes amortization at 3.5% for 20-years, O&M, and Power Costs*

*Draft 7-12-19*

# Victoria ASR Project

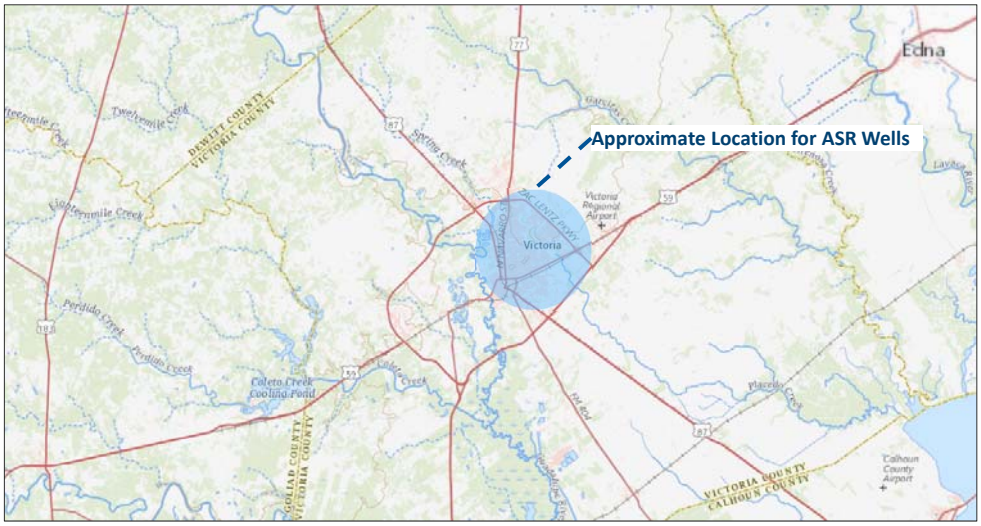
- Recommended WMS in 2016 SCTRWP
- Source and Supply:
  - Surface Water Rights owned by Victoria from the Guadalupe River
  - Total Project Firm Yield = 7,900 acft/yr
- Project uses excess WTP capacity and water available during wet/average periods to store water for drought

*Draft 7-26-19*



# Victoria ASR Project

*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 contract negotiations to be determined by the project's sponsor at a later date.*



# Victoria ASR Project

- Facilities:
  - 15 ASR wells in the Upper Goliad Formation of the Evangeline Aquifer (Gulf Coast Aquifer System)
    - Recharge Capacity of 800 gpm
    - Recovery Capacity of 1,600 gpm
  - Well Collection Pipelines and Pumps
- Uniform Delivery (PF = 1.0)
- Decade of Need: 2020

*Draft 7-26-19*



# Environmental Considerations

- Vegetation and Land Use 0
  - Much of the area would be expected to contain maintained lawns and landscape species
- Aquatic Resources 1
  - Does not contain ecologically significant stream segments as designated by TPWD
  - Well facilities can typically be sited to avoid impacts to waters of the U.S.
- Threatened, Endangered, and Species of Concern 1
  - Suitable habitat does not occur for any of the federally listed threatened or endangered species
  - Suitable habitat is not expected to occur for most state listed species
  - Pre-construction surveys for active bird nests are recommended
- Cultural Considerations 2
  - Further information about specific well locations is necessary before determining cultural considerations
  - Structured cultural resources survey of the final design plan is recommended

**Environmental/ Cultural Assessment Rating**

0 N/A
1 Minimal concerns; precautions recommended
2 Additional studies recommended

# Victoria ASR Project

| WMS Cost Summary | |
|---|---|
| Costs of Facilities * | $27,023,000 |
| Total Project Costs | $37,982,000 |
| Annual Costs ** | $3,042,000 |
| Project Yield (acft/yr) | 7,900 |
| Unit Costs ( $/acft/yr) | $385 |

** Cost for ASR wells were provided by Victoria's engineer using site specific information*
***Includes amortization at 3.5% for 20-years, O&M, and Power Costs*

***Draft 7-26-19***

# Local Groundwater

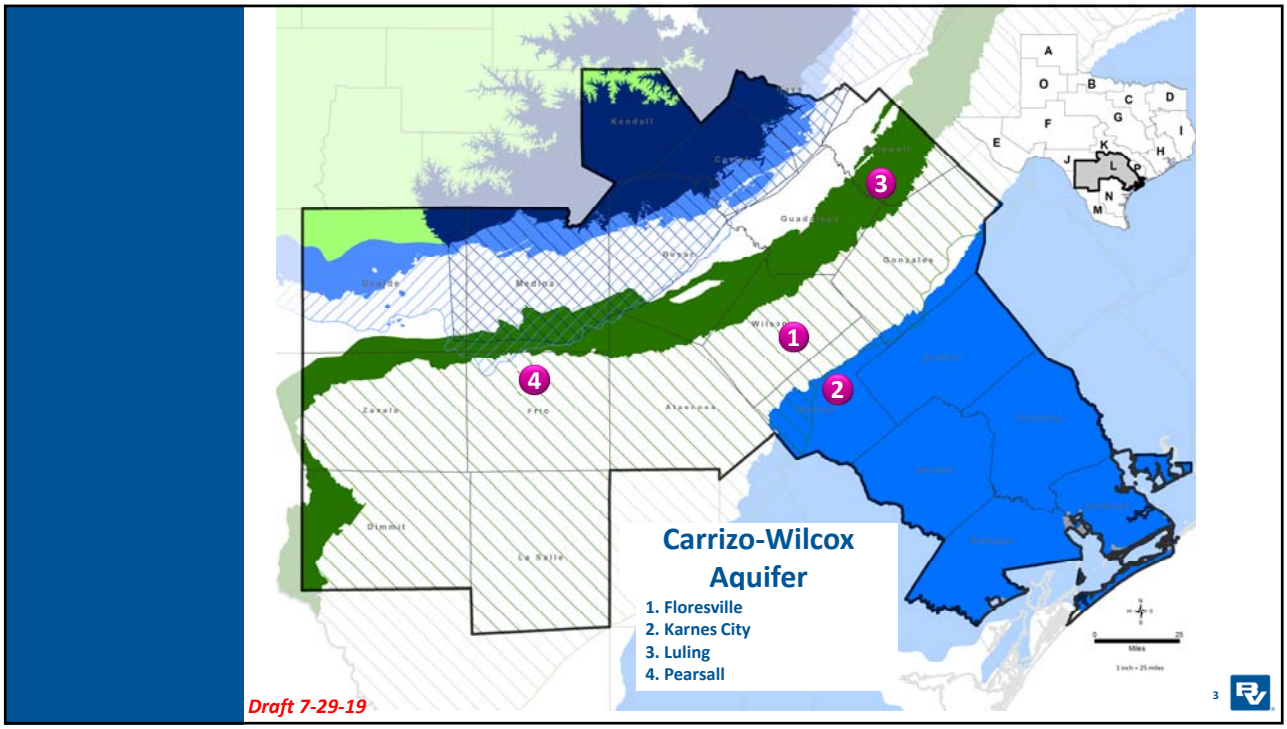
- Recommended WMS in 2016 SCTRWP
- WMS is intended to provide additional supply to WUGs that primarily rely on local groundwater sources
- Most likely WMS for these WUGs is to develop new well(s) and/or acquire additional groundwater permits
- Facilities cost estimated as the cost of new well(s) and on-site treatment (if necessary)

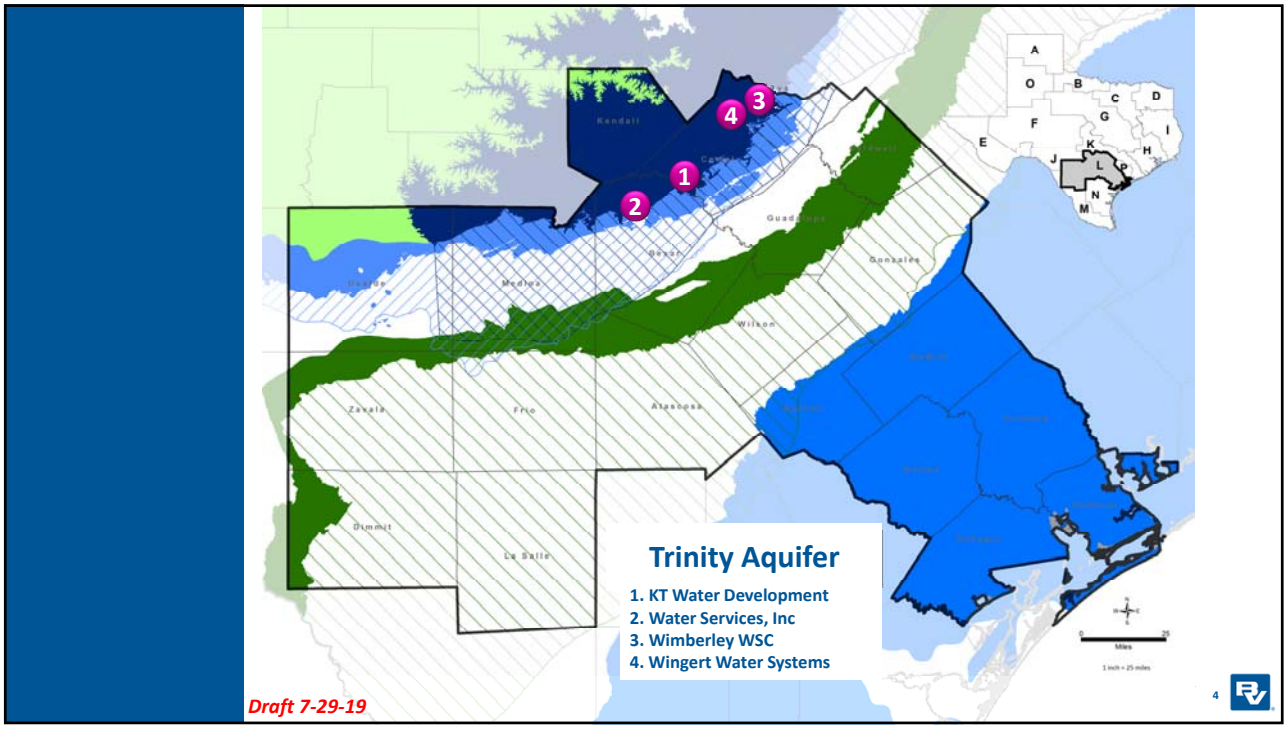
*Draft 7-29-19*

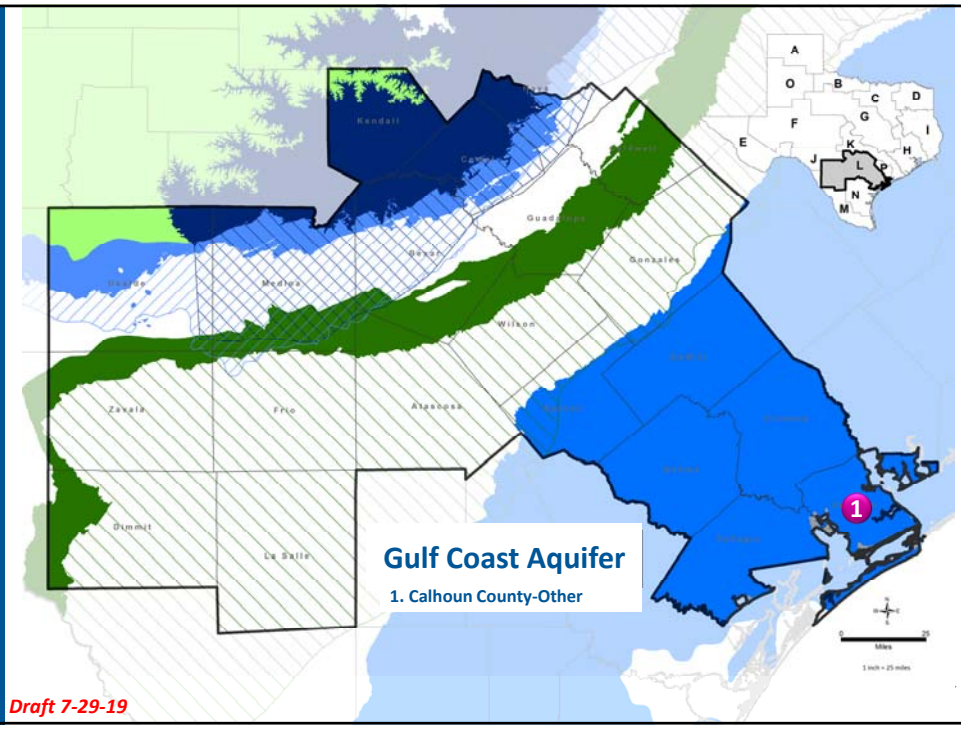


| User | County | Aquifer | Needs | | | | | | | Total Wells | Project Yield (acft/yr) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Type | 2020 | 2030 | 2040 | 2050 | 2060 | 2070 | | |
| Floresville | Wilson | Carrizo-Wilcox | Projected Needs | 553 | 151 | -245 | -608 | -961 | -1281 | | |
| | | | New Wells | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 1,656 |
| | | | Total Wells | 0 | 0 | 1 | 1 | 2 | 2 | | |
| Karnes City | Karnes | Carrizo-Wilcox | Projected Needs | -319 | -305 | -280 | -267 | -256 | -232 | | |
| | | | New Wells | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 444 |
| | | | Total Wells | 1 | 1 | 1 | 1 | 1 | 1 | | |
| Luling | Caldwell | Carrizo-Wilcox | Projected Needs | 127 | -49 | -227 | -412 | -608 | -799 | | |
| | | | New Wells | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 1,059 |
| | | | Total Wells | 0 | 1 | 1 | 2 | 2 | 3 | | |
| Pearsall | Frio | Carrizo-Wilcox | Projected Needs | -611 | -771 | -913 | -1061 | -1206 | -1340 | | |
| | | | New Wells | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 1,614 |
| | | | Total Wells | 1 | 1 | 2 | 2 | 2 | 2 | | |
| KT Water Development | Comal | Trinity | Projected Needs | -26 | -136 | -249 | -364 | -479 | -589 | | |
| | | | New Wells | 1 | 0 | 1 | 1 | 0 | 1 | 4 | 644 |
| | | | Total Wells | 1 | 1 | 2 | 3 | 3 | 4 | | |
| Water Services, Inc. | Bexar | Trinity | Projected Needs | 66 | -40 | -143 | -260 | -376 | -485 | | |
| | | | New Wells | 0 | 1 | 2 | 2 | 1 | 2 | 8 | 504 |
| | | | Total Wells | 0 | 1 | 3 | 5 | 6 | 8 | | |
| Wimberley WSC | Hays | Trinity | Projected Needs | 137 | -247 | -737 | -1351 | -2045 | -2836 | | |
| | | | New Wells | 0 | 1 | 2 | 2 | 2 | 3 | 10 | 2,960 |
| | | | Total Wells | 0 | 1 | 3 | 5 | 7 | 10 | | |
| Wingert Water Systems | Hays | Trinity | Projected Needs | -32 | -108 | -185 | -185 | -185 | -185 | | |
| | | | New Wells | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 296 |
| | | | Total Wells | 1 | 1 | 1 | 1 | 1 | 1 | | |
| County-Other, Calhoun | Calhoun | Gulf Coast System | Projected Needs | 137 | 110 | 72 | 35 | -1 | -37 | | |
| | | | New Wells | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 412 |
| | | | Total Wells | 0 | 0 | 0 | 0 | 1 | 1 | | |

*Draft 7-29-19*


Carrizo-Wilcox Aquifer
1. Floresville
2. Karnes City
3. Luling
4. Pearsall
Draft 7-29-19
3


Trinity Aquifer
1. KT Water Development
2. Water Services, Inc
3. Wimberley WSC
4. Wingert Water Systems
Draft 7-29-19
4




*Draft 7-29-19*

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| User | County | Aquifer | Total Wells | Average Capacity of Existing Wells (gpm) | Assumed Production Rate of New Wells (acft/yr) | Assumed depth (ft) |
|---|---|---|---|---|---|---|
| Floresville | Wilson | Carrizo-Wilcox | 2 | 1,026 | 827 | 1,100 |
| Karnes City | Karnes | Carrizo-Wilcox | 1 | 550 | 444 | 3,800 |
| Luling | Caldwell | Carrizo-Wilcox | 3 | 438 | 353 | 400 |
| Pearsall | Frio | Carrizo-Wilcox | 2 | 1,000 | 807 | 1,500 |
| KT Water Development | Comal | Trinity | 4 | 200 | 161 | 550 |
| Water Services, Inc. | Bexar | Trinity | 8 | 78 | 63 | 600 |
| Wimberley WSC | Hays | Trinity | 10 | 367 | 296 | 450 |
| Wingert Water Systems | Hays | Trinity | 1 | 367 | 296 | 450 |
| County-Other, Calhoun | Calhoun | Gulf Coast System | 1 | 510 | 411 | 250 |

*Draft 7-29-19*

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| User | County | Aquifer | Cost of Facilities | Total Project Costs | Annual Costs* | Project Yield (acft/yr) | Unit Cost ($/acft/yr) |
|---|---|---|---|---|---|---|---|
| Floresville | Wilson | Carrizo-Wilcox | $3,733,000 | $5,200,000 | $838,000 | 1,656 | $506 |
| Karnes City | Karnes | Carrizo-Wilcox | $2,935,000 | $4,080,000 | $502,000 | 444 | $1,131 |
| Luling | Caldwell | Carrizo-Wilcox | $2,654,000 | $3,706,000 | $644,000 | 1,059 | $608 |
| Pearsall | Frio | Carrizo-Wilcox | $4,272,000 | $5,939,000 | $895,000 | 1,614 | $555 |
| KT Water Development | Comal | Trinity | $2,336,000 | $3,269,000 | $495,000 | 644 | $769 |
| Water Services, Inc. | Bexar | Trinity | $2,645,000 | $3,721,000 | $490,000 | 504 | $972 |
| Wimberley WSC | Hays | Trinity | $7,049,000 | $9,855,000 | $1,356,000 | 2,960 | $458 |
| Wingert Water Systems | Hays | Trinity | $969,000 | $1,353,000 | $249,000 | 296 | $841 |
| County-Other, Calhoun | Calhoun | Gulf Coast System | $1,004,000 | $1,400,000 | $285,000 | 412 | $692 |

**Includes amortization at 3.5% for 20-years, O&M, and Power Costs*

*Draft 7-29-19*

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## Local Groundwater – WUGs Requiring Additional Permits

- Benton City WSC
- Oak Hills WSC
- Picosa WSC
- Poth
- Garden Ridge
- Clear Water Estates Water System
- Kendall West Utilities
- KT Water Development
- Water Services Inc
- Wimberley WSC
- Wingert Water Systems

*Draft 7-29-19*

8

17. Discussion and Appropriate Action to Authorize the Consultant to Proceed on Work for Task 5a Subtask 21 ii) Additional Water Management Strategies

18. Discussion and Appropriate Action to Authorize the San Antonio River Authority to Amend and Execute Their Regional Water Planning Contract with TWDB to Increase Authorized Funds to the Full Contract Amount

TWDB Contract No. 1548301840

Amended Budget

through 1st Approved Budget Memorandum dated 5/23/19

Task Budget

| Task | Description | Pending Funding | Amended Task Budget | Expenses To Date 6.28.19 |
|---|---|---|---|---|
| 1 | Planning Area Description | - | $ 17,408.00 | $ 1,102.63 |
| 2A | Non-Population Related Water Demand Projections | - | 13,562.00 | 13,170.83 |
| 2B | Population and Population-Related Water Demand Projections | - | 42,060.00 | 41,314.07 |
| 3 | Water Supply Analyses | - | 89,594.00 | 89,096.44 |
| 4A | Identification of Water Needs | - | 715.00 | 955.68 |
| 4B | Identification of Potentially Feasible WMS | - | 18,912.00 | 19,357.48 |
| 4C | Technical Memorandum | - | 18,777.00 | 18,333.87 |
| 5A | Evaluation of Recommendation of WMS and Associated WMS Projects | 186,194.00 | 373,405.00 | 93,530.47 |
| 5B | Water Conservation Recommendations | - | 38,405.00 | - |
| 6 | Impacts of Plan and Consistency with Protection of Resources | - | 44,941.00 | 1,987.50 |
| 7 | Drought Response Information, Activities, and Recommendations | - | 94,545.00 | 4,578.01 |
| 8 | Unique Sites and Policy Recommendations | - | 9,797.00 | - |
| 9 | Infrastructure Financing Analysis | - | 6,096.00 | - |
| 10 | Public Participation and Plan Adoption | - | 270,882.00 | 214,678.10 |
| 11 | Implementation and Comparison to the Previous Regional Water Plans | - | 21,801.00 | - |
| 12 | Prepare and Submit Prioritization of Projects | - | 8,100.00 | - |
| | Total | | $ 1,069,000.00 | $ 498,105.08 |

19. Discussion Regarding Amending the SCTRWPG Bylaws to Conform to Revision to the Open Meetings Act Regarding Public Comment

**PROTOCOLS FOR PUBLIC COMMUNICATION AT SOUTH CENTRAL TEXAS (REGION L) REGIONAL WATER PLANNING GROUP MEETINGS**

**1. Oral Comments on Issues under the South Central Texas Regional Water Planning Group (Region L) Jurisdiction**. Any person wishing to make an oral presentation at a Region L planning group meeting on any matter under Region L's jurisdiction must complete a registration form that indicates the agenda item or other topic on which they wish to comment, along with the speaker's name, address and other relevant information. Any person making an oral presentation to the Region L planning group may distribute related materials to the planning group at the meeting.

**2. Time Allocation**. The presiding officer may limit the length of time for each speaker to three (3) minutes. Speakers may not trade or donate time to other speakers without permission from the presiding officer, and repetitive testimony shall be minimized or disallowed at the discretion of the presiding officer.

**3. Time To Speak**. Citizens to be heard will be given an opportunity to speak at the beginning of the meeting prior to any actions by the Region L planning group. The presiding officer has the discretion to allow citizens to speak at another time in the meeting if it is deemed relevant to the planning group's deliberations by the presiding officer and is not disruptive to the conduct of the meeting.

**4. Rules of Decorum**. Speakers and members of the audience must avoid disruptive behavior that interferes with the orderly conduct of a public meeting. Placards, banners, and hand-held signs are not allowed in planning group meetings, and speakers and members of the audience must avoid personal affronts, profanity, booing, excessive noise, and other disruptive conduct. The presiding officer may direct that anyone who disrupts a meeting be removed from the room. Members of the planning group, if recognized by the presiding officer, may ask clarifying questions of a speaker, but no extended verbal exchange between the planning group members and the speaker will be permitted.

**5. Recording**. Any person making an audio or video recording of all or any part of a planning group meeting must do so in a manner that is not disruptive to the meeting. During a meeting, members of the public must remain in or behind the public seating area and are not permitted to record from any other area of the meeting room.



Pending Approval by the South Central Texas
Regional Water Planning Group on November 7,2019

20. Possible Agenda Items for the Next Region L Meeting

21. Public Comment