



c/o San Antonio River Authority  
P.O. Box 839980  
San Antonio, Texas 78283-9980

(210) 227-1373 Office  
(210) 302-3692 Fax  
[www.RegionLTexas.org](http://www.RegionLTexas.org)

#### EXECUTIVE COMMITTEE

Con Mims  
*Chair / River Authorities*  
Tim Andruss  
*Vice-Chair / Water Districts*  
Gary Middleton  
*Secretary / Municipalities*  
Donna Balin  
*At-Large / Environmental*  
Kevin Janak  
*At-Large/ Electric Generating/Utilities*

#### MEMBERS

Gene Camargo  
*Water Utilities*  
Rey Chavez  
*Industries*  
Alan Cockerell  
*Agriculture*  
Will Conley  
*Counties*  
Don Dietzmann  
*GMA 9*  
Art Dohmann  
*GMA 15*  
Blair Fitzsimons  
*Agriculture*  
Vic Hilderbran  
*GMA 7*  
John Kight  
*Counties*  
Russell Labus  
*Water Districts*  
Vacant  
*Industries*  
Doug McGookey  
*Small Business*  
Dan Meyer  
*GMA 10*  
Iliana Peña  
*Environmental*  
Robert Puente  
*Municipalities*  
Steve Ramsey  
*Water Utilities*  
David Roberts  
*Small Business*  
Roland Ruiz  
*Water Districts*  
Diane Savage  
*GMA 13*  
Suzanne Scott  
*River Authorities*  
Greg Sengelmann  
*Water Districts*  
Vacant  
*Agriculture*  
Thomas Taggart  
*Municipalities*  
Dianne Wassenich  
*Public*  
Bill West  
*River Authorities*

DATE: March 26, 2015

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, April 2, 2015  
9:30 a.m.  
San Antonio Water System  
Customer Service Building  
Room CR C145  
2800 US Highway 281 North  
San Antonio, Bexar County, Texas 78212

Enclosed is a copy of the posted public meeting notice and agenda packet.

Steven J. Raabe, P.E.  
SJR/cr  
Enclosure

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

TAKE NOTICE that a meeting of the South Central Texas Regional Water Planning Group as established by the Texas Water Development Board will be held on Thursday, April 2, 2015, at 9:30 a.m. at San Antonio Water System (SAWS), Customer Service Building, Room CR 145, 2800 US Highway 281 North, San Antonio, Bexar County, Texas. The following subjects will be considered for discussion and/or action at said meeting.

1. Public Comment
2. Approval of Minutes
3. Discussion and Appropriate Action Regarding Nominations to Fill Vacant Agriculture Voting Member (term expires 2016) and Industries Voting Member (term expires 2018)
4. Status of Edwards Aquifer Habitat Conservation Plan (HCP) – Nathan Pence, Executive Director EAHCP
5. Status of Guadalupe, San Antonio, Mission, and Aransas Rivers and Mission, Copano, Aransas, and San Antonio Bays Basin and Bay Stakeholder Committee (BBASC) and Expert Science Team (BBEST)
6. Chair's Report
7. Texas Water Development Board (TWDB) Communications
8. Discussion and Appropriate Action Regarding Consultants Work and Schedule
9. Discussion and Appropriate Action to Request Technical Assistance from the Texas Water Development Board (TWDB) to Complete the Socioeconomic Impact Analysis of not Meeting Certain Water Needs
10. Discussion and Appropriate Action Regarding the Adoption of the Proposed Chapter 8 Policy Recommendations and Unique Sites Language for Inclusion in the 2016 Initially Prepared Plan (IPP)
11. Discussion and Appropriate Action Regarding the Evaluation and Recommendation of Water Management Strategies (Task 4D)

12. Discussion and Appropriate Action Regarding Chapter 6 Cumulative Effects Results and Chapter 11 Comparison to the Previous Regional Water Plan
13. Discussion and Appropriate Action Regarding the Recommendations of Potentially Feasible Water Management Strategies for Inclusion into the 2016 Initially Prepared Plan (IPP)
14. Discussion and Appropriate Action Authorizing the San Antonio River Authority (SARA) to Submit the 2016 Initially Prepared Plan on Behalf of the South Central Texas Regional Water Planning Group (Region L) by May 1, 2015
15. Discussion and Appropriate Action Regarding Initially Prepared Plan (IPP) Public Hearings Schedule and Locations
  - A. Number of Public Hearings to be Held
  - B. Desired Locations of Public Hearings
16. Appropriate Action Regarding the Adoption of Guadalupe-Blanco River Authority's (GBRA) Proposed Substitution of the Lower Basin Storage 500 Acre Site Project for the Lower Basin Storage 100 Acre Site Project in the 2011 Regional Water Plan and Request the Texas Water Development Board (TWDB) to Amend the 2012 State Water Plan
17. Possible Agenda Items for the Next South Central Texas Regional Water Planning Group Meeting
18. Public Comment

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

Please visit [www.RegionLTexas.org](http://www.RegionLTexas.org) to review available chapters of the 2016 Initially Prepared Plan

## **AGENDA ITEM 1**

Public Comment



## **AGENDA ITEM 2**

Approval of Minutes

**Minutes of the  
South Central Texas Regional Water Planning Group  
November 6, 2014**

Chairman Con Mims 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.

26 of the 28 voting members, or their alternates, were present.

**Voting Members Present:**

Tim Andruss	Gary Middleton
Donna Balin	Con Mims
Gene Camargo	Robert Puente
Alan Cockrell	Iliana Pena
Will Conley	Steve Ramsey
Don Dietzmann	David Roberts
Art Dohmann	Roland Ruiz
Jeremiah Leibowitz for Blair Fitzsimmons	Dianne Savage
Vic Hilderbran	Steve Raabe for Suzanne Scott
Kevin Janak	Greg Sengelmann
Russell Labus	Thomas Taggart
Doug McGooky	Dianne Wassenich
Dan Meyer	Tommy Hill for Bill West

**Voting Members Absent**

Rey Chavez  
John Kight

**Non-Voting Members Present:**

Don McGhee, Region M Liason  
David Meeseey, Texas Water Development Board (TWDB)  
Phyllis Varnon for Ken Weidenfeller, Texas Department of Agriculture

**Non-Voting Members Absent:**

Norman Boyd, Texas Department of Parks & Wildlife  
Ronald Fieseler, Region K Liaison  
Steve Ramos, TCEQ – South Texas Watermaster Specialists  
Charles Wiedenfeld, Region J Liaison

Chairman Mims pulled Agenda Item 18 from the agenda.

**AGENDA ITEM NO. 1: REMARKS FROM TEXAS WATER DEVELOPMENT BOARD  
DIRECTOR KATHLEEN JACKSON**

Director Jackson introduced her staff and made some remarks regarding the regional and state water planning process. She also described a few funding options available for project development.

## **AGENDA ITEM NO. 2: PUBLIC COMMENT**

Chairman Mims asked for any public comment. No comments were made.

## **AGENDA ITEM NO. 3: APPROVAL OF MINUTES**

Chairman Mims asked if there were any additions or corrections to the November 6, 2015, meeting minutes. Dianne Wassenich noted one error and made a motion to approve the minutes. Robert Puente seconded the motion. The motion carried by consensus.

## **AGENDA ITEM NO. 4: ELECTION OF OFFICERS AND EXECUTIVE COMMITTEE FOR CALENDAR YEAR 2015**

Chairman Mims asked for nominations to fill the terms of officers to serve on Executive Committee for the calendar year of 2015 in accordance with the South Central Texas Regional Water Planning Group's (Region L), bylaws. Dianne Wassenich made a motion to re-elect the current Executive Committee to their same positions. Dianne's motion was seconded. The motion to re-elect the Executive Committee to their current positions passed by consensus.

## **AGENDA ITEM NO. 5: DISCUSSION AND APPROPRIATE ACTION REGARDING NOMINATIONS TO FILL VACANT AGRICULTURE VOTING MEMBER (TERM EXPIRES 2016) AND INDUSTRIES VOTING MEMBER (TERM EXPIRES 2018)**

Cole Ruiz, San Antonio River Authority, described vacancies (Agriculture and Industries interest areas) and the nomination process to fill those vacancies. Chairman Mims asked for a motion to authorize SARA, to solicit nominations to fill the vacant Region L voting member seats of Agriculture and Industries. Gary Middleton made the motion. Kevin Janak seconded the motion. The motion carried by consensus.

## **AGENDA ITEM NO. 6: STATUS OF EDWARDS AQUIFER HABITAT CONSERVATION PLAN (HCP) – NATHAN PENCE, EXECUTIVE DIRECTOR EAHCP.**

There was no update to provide.

## **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)**

Dianne Wassenich gave a brief update to the planning group regarding recent BBASC activities. She mentioned that the BBASC received updates from the contractors' studies. Dianne mentioned that the next meeting is scheduled for May 22, 2015.

## **AGENDA ITEM NO. 8: STATUS OF THE WORKGROUP'S DEVELOPMENT OF THE CHAPTER 8 POLICY RECOMMENDATIONS AND UNIQUE SITES LANGUAGE FOR INCLUSION IN THE 2016 INITIALLY PREPARED REGIONAL WATER PLAN**

### **A. Unique Stream Segment Workgroup**

Will Conley reported on the language added to the Unique Sites section of Chapter 8 of the 2016 Regional Water Plan by the Unique Stream Segment Workgroup.

### **B. Policy Workgroup.**

Dianne Wassenich updated the planning group on the Policy Workgroup's efforts to edit Chapter 8. Dianne mentioned that the Policy Workgroup is still working on establishing a clear consensus on language, but they will continue to meet until a draft is ready for the full planning group to consider.

#### **AGENDA ITEM NO. 9: CHAIR'S REPORT**

Chairman Mims provided the planning group with an update of the legislation relating to certain Unique Stream Segments. House Bill 1016 was filed by Representative Tracy King, and a search of a sponsor to file the bill's companion in the Senate was underway. Chairman Mims also reported that TWDB had approved the Guadalupe-Blanco River Authority's (GBRA) Integrated Water Power Project as an amendment to the 2012 State Water Plan.

#### **AGENDA ITEM NO. 10: TEXAS WATER DEVELOPMENT BOARD (TWDB) COMMUNICATIONS**

David Meesey briefly discussed TWDB's infrastructure and emergency interconnection information report requirement for the 2016 Regional Water Plan. The report is confidential, and requires a review and submission process that is secretive and closed to the public.

#### **AGENDA ITEM NO. 11: DISCUSSION AND APPROPRIATE ACTION DESIGNATING A WORKGROUP TO HOLD A CLOSED MEETING TO DEVELOP AND SUBMIT A CONFIDENTIAL REPORT ON THE INFRASTRUCTURE INFORMATION UTILIZED FOR THE DEVELOPMENT OF THE 2016 REGIONAL WATER PLAN TO THE TEXAS WATER DEVELOPMENT BOARD (TWDB) AS REQUIRED BY 31 TAC §357.45(D)**

Brian Perkins, HDR Engineering, reported the status of their efforts to collect the infrastructure information utilized for the development of the 2016 Regional Water Plan. Mr. Perkins recapped what Mr. Meesey went over previously; noting that the report is confidential due to information regarding emergency interconnections, and thus requires a workgroup to hold a meeting closed to the public. Gary Middleton made a motion to authorize HDR to pull together the required Infrastructure Report, and submit it to TWDB per their requirements. Thomas Taggart seconded the motion. The motion carried by consensus.

#### **AGENDA ITEM NO. 12: DISCUSSION AND APPROPRIATE ACTION DESIGNATING A POLITICAL SUBDIVISION AS ADMINISTRATOR FOR THE FIFTH CYCLE OF REGIONAL WATER PLANNING**

Chairman Mims explained that this agenda item was necessary in order to complete the following agenda item, "Discussion and Appropriate Action Authorizing Political Subdivision to Apply for Funding for the Fifth Cycle of Regional Water Planning and Post the Associated 30-Day Public Notice Prior to TWDB Board Action on the Application." Will Conley made a motion to designate the San Antonio River Authority (SARA) as the administrator for the Fifth Cycle of Regional Water Planning. Gene Camargo second the motion. The motion carried by consensus.

#### **AGENDA ITEM NO. 13: DISCUSSION AND APPROPRIATE ACTION AUTHORIZING POLITICAL SUBDIVISION TO APPLY FOR FUNDING FOR THE FIFTH CYCLE OF REGIONAL WATER PLANNING AND POST THE ASSOCIATED 30-DAY PUBLIC NOTICE PRIOR TO TWDB BOARD ACTION ON THE APPLICATION (TWDB ACTION ANTICIPATED TO TAKE PLACE APRIL 2015)**

Will Conley made a motion to authorize SARA to apply for funding for the Fifth Cycle of Regional

Water Planning and to post notice as required by TWDB. Gary Middleton seconded the motion. The motion carried by consensus.

**AGENDA ITEM NO. 14: DISCUSSION AND APPROPRIATE ACTION REGARDING CONSULTANT WORK AND SCHEDULE**

Brian Perkins, HDR Engineering, reported on the schedule for plan development highlighting upcoming Planning Group deadlines and target dates for completed tasks. May 1, 2015, is the deadline for the submission of the 2016 Initially Prepared Plan (IPP). The 2016 Regional Water Planning deadline is December 1, 2015.

Additionally, Mr. Perkins provided a status update on each chapter of the 2016 Regional Water Plan.

Mr. Perkins also provided an update on the potential issues to the planning process that HDR and the Administrator are tracking. Specifically, Mr. Perkins touched on interregional coordination as it pertains to the San Antonio Water System's (SAWS) Vista Ridge Project and the Hays County Foretar Project, provided an update on the whooping crane litigation, and mentioned that the current legislative session is underway with various bills being passed around and filed.

**AGENDA ITEM NO. 15: DISCUSSION AND APPROPRIATE ACTION REGARDING THE EVALUATION AND RECOMMENDATION OF WATER MANAGEMENT STRATEGIES (TASK 4D)**

Mr. Perkins presented technical evaluations for four potentially feasible water management strategies to the Planning Group, including Brush Management – Gonzales County, Storage Above Canyon Reservoir (ASR), Balancing Storage, and Surface Water Rights water management strategies.

Brian Perkins noted that the City of Victoria is looking at the possibility of an Aquifer Storage and Recovery (ASR) Project. The City of Victoria is currently gathering information for this effort. Steve Raabe noted that the Planning Group has some remaining funds to fully evaluate the City of Victoria ASR project once it is ready for evaluation. In order to utilize TWDB funds, the Planning Group needs to authorize SARA to amend its contract with TWDB, and subsequently SARA's contract with HDR, should the City of Victoria develop the necessary information for the project.

Tim Andruss made a motion to authorize SARA to amend its contract with TWDB, and subsequently HDR, should the City of Victoria ASR project become ready for a full technical evaluation. Thomas Taggart seconded the motion. The motion carried by consensus. Brian Perkins clarified that the evaluation should not take much Region L funds from TWDB.

**AGENDA ITEM NO. 16: DISCUSSION AND APPROPRIATE ACTION REGARDING THE RECOMMENDATIONS OF POTENTIALLY FEASIBLE WATER MANAGEMENT STRATEGIES FOR INCLUSION INTO THE 2016 INITIALLY PREPARED REGIONAL WATER PLAN**

Mr. Perkins offered a presentation on the 2016 Potentially Feasible Water Management Strategies table. Mr. Perkins provided an explanation of the recommended water management strategies, beginning with Conservation and Drought Management water management strategies for municipal water users.

Next, Mr. Perkins provided a review of all recommended water management strategies for each individual wholesale water providers including four projects for Canyon Regional Water Authority (CRWA), a project for Cibolo Valley Local Government Corporation (MAG limited and with Conversions), six projects for Guadalupe-Blanco River Authority, a project for Hays – Caldwell Public Utility Agency, a project for

Lavaca Navidad River Authority, ten projects for San Antonio Water System, two projects for Schertz-Seguin Local Government Corporation, and two projects for Texas Water Alliance.

Mr. Perkins continued providing a review of water management strategies including two projects for New Braunfels Utilities, two projects for Hays County, a project for Uvalde, three projects for Victoria, and a project for SS Water Supply Corporation.

Other recommended water management strategies included the Facilities Expansions project, Edwards Transfers, and local groundwater projects. Additionally, Mr. Perkins briefly discussed purchases from wholesale water providers.

Lastly, Mr. Perkins concluded the list of recommended water management strategies to be included in the 2016 Region L Regional Water Plan with the Direct Reuse/Recycle, Surface Water Rights, and Balancing Storage strategies.

Kevin Janak made a motion to approve the list of recommended water management strategies provided by HDR Engineering to be included in the 2016 Region L Regional Water Plan as recommended water management strategies. David Roberts seconded the motion. The motion passed by consensus.

Gene Camargo made a motion to approve the list of alternative water management strategies provided by HDR Engineering, with the exception the of Storage Above Canyon (ASR) project, to be included in the 2016 Region L Regional Water Plan as alternative strategies. The Storage Above Canyon project will be included in the other category of projects, which includes projects that received technical evaluations, but were neither recommended, nor alternative. Mr. Camargo's motion was seconded, and passed by consensus.

#### **AGENDA ITEM NO. 17: DISCUSSION AND APPROPRIATE ACTION REGARDING CHAPTER 6 CUMULATIVE EFFECTS PROCEDURES**

Brian Perkins explained the purpose and procedure involved in developing Chapter 6, the Cumulative Effects of the 2016 Regional Water Plan. Chapter 6 will include an evaluation of stream flows and estuary inflows under two scenarios: a baseline evaluation of surface water supply throughout the regional water planning area; and an evaluation under full implementation of the 2016 Regional Water Plan for Region L. The analysis will also assess environmental impacts and include a comparison to previous plans. The results of the Cumulative Effects analysis will be presented at the next meeting on April 2, 2015.

#### **AGENDA ITEM NO. 18: APPROPRIATE ACTION REGARDING THE ADOPTION OF GUADALUPE-BLANCO RIVER AUTHORITY'S PROPOSED SUBSTITUTION OF THE LOWER BASIN STORAGE 500 ACRE SITE PROJECT FOR THE LOWER BASIN STORAGE 100 ACRE SITE PROJECT IN THE 2011 REGIONAL WATER PLAN AND REQUEST THE TEXAS WATER DEVELOPMENT BOARD (TWDB) TO AMEND THE 2012 STATE WATER PLAN**

Agenda Item No. 18 was removed prior to the meeting.

#### **AGENDA ITEM NO. 19: POSSIBLE AGENDA ITEMS FOR THE NEXT SOUTH CENTRAL TEXAS REGIONAL WATER PLANNING GROUP MEETING**

Chairman Mims instructed the Planning Group to send any agenda items for the next meeting to Cole Ruiz.

**AGENDA ITEM NO. 20: PUBLIC COMMENT**

Chairman Mims asked for any public comments. There were none. Mr. Mims adjourned the meeting.

Recommended for approval.

---

GARY MIDDLETON, SECRETARY

Approved by the South Central Texas Regional Water Planning Group at a meeting held on April 2, 2015.

---

CON MIMS, CHAIR

### **AGENDA ITEM 3**

Discussion and Appropriate Action Regarding Nominations to Fill  
Vacant Agriculture Voting Member (term expires 2016) and Industries  
Voting Member (term expires 2018)





**South Central Texas Regional  
Water Planning Group  
Nomination Packets  
&  
Interview/Evaluation Schedule**

**March, 27 2015**

## 2015 Region L Vacancy Interviews and Discussion Schedule

<b>Time</b>	<b>Nominee</b>	<b>Activity</b>
9:00 AM	Leslie Kinsel	Interview
9:30 AM	Adam Yablonksi	Interview
10:00 Am	Jim Bower	Interview
10:30 AM	Don Meador	Interview
11:00 AM	Stephen Diebel	Discuss nomination materials
11:30 AM		Discussion and Recommendation of to Fill Agriculture Vacancy
11:45 PM	Glenn Lord	Discussion and Recommendation to Fill Industries Vacancy

Leslie Kinsel



c/o San Antonio River Authority  
P.O. Box 839980  
San Antonio, Texas 78283-9980  
(210) 227-1373 Office  
(210) 302-3692 Fax  
[www.RegionLTexas.org](http://www.RegionLTexas.org)

#### EXECUTIVE COMMITTEE

Con Mims  
*Chair / River Authorities*  
Tim Andruss  
*Vice-Chair / Water Districts*  
Gary Middleton  
*Secretary / Municipalities*  
Donna Balin  
*At-Large / Environmental*  
Kevin Janak  
*At-Large/ Electric Generating/Utilities*

#### MEMBERS

Gene Camargo  
*Water Utilities*  
Rey Chavez  
*Industries*  
Alan Cockerell  
*Agriculture*  
Will Conley  
*Counties*  
Don Dietzmann  
*GMA 9*  
Art Dohmann  
*GMA 15*  
Blair Fitzsimons  
*Agriculture*  
Vic Hilderbran  
*GMA 7*  
John Kight  
*Counties*  
Russell Labus  
*Water Districts*  
Vacant  
*Industries*  
Doug McGookey  
*Small Business*  
Dan Meyer  
*GMA 10*  
Iliana Peña  
*Environmental*  
Robert Puente  
*Municipalities*  
Steve Ramsey  
*Water Utilities*  
David Roberts  
*Small Business*  
Roland Ruiz  
*Water Districts*  
Diane Savage  
*GMA 13*  
Suzanne Scott  
*River Authorities*  
Greg Sengelmann  
*Water Districts*  
Vacant  
*Agriculture*  
Thomas Taggart  
*Municipalities*  
Dianne Wassenich  
*Public*  
Bill West  
*River Authorities*

#### Region L - Interview Questions

April 23, 2014

1. Why do you want to be a member of the South Central Texas Regional Water Planning Group?
2. What experience with (agricultural, counties, industries, public, river authorities, small business, water districts, water utilities) would you bring as a member of Region L?
3. Has anyone encouraged you to seek, or are you seeking, a position on Region L to promote any course of action or represent any special interests?
4. We attempt to reach decisions based on consensus, where those who disagree with a decision can choose to live with it for the good of the region. Are you able to work in that type of environment?  
  
Follow up, if necessary, to determine how he/she would react to a decision that adversely, but not seriously, affects his/her interest category but is deemed by most of the planning group to be best for the region.
5. Region L meets quarterly, usually in San Antonio, but sometimes in other parts of the planning region. Do you have time to devote to the meetings?
6. Do you have any questions for us?

If approved, you will be filling a position that will expire in 2016.

**SOUTH CENTRAL TEXAS REGIONAL WATER PLANNING GROUP**

**Nomination for Interest Group (check one):**

- ☒ **Agriculture**, ☐ **Counties**, ☐ **Electric Generating Utilities**,  
☐ **Environmental**, ☐ **Industries**, ☐ **Municipalities**, ☐ **River Authority**, ☐ **Water Districts**

**NOMINATOR**

**NAME:** Blair C. Fitzsimons

**ADDRESS:** P.O. Box 6152, San Antonio, Texas 78209

**PHONE:** 210-826-0074 **FAX:** 210-828-5091 **EMAIL:** bfitzsimons@txaglandtrust.org

**OCCUPATION** Chief Executive Officer - Texas Agricultural Land Trust

**NOMINEE**

**NAME:** Leslie Kinsel

**ADDRESS:** 2904 E FM 469

**PHONE:** (830) 378-5856 **FAX:** **EMAIL:** kinsel4@gmail.com

**INTEREST AREA:**

**COUNTY:** La Salle

**OCCUPATION:** Ranching and Real Estate

**PLEASE GIVE A BRIEF DESCRIPTION OF THE NOMINEE'S EXPERIENCE THAT WOULD QUALIFY HIM/HER FOR THE POSITION:**

Family ranching business for 25 years. Work with horses, cattle, hunting operations. Manage legal, bookkeeping, insurance and tax matters.

**PLEASE LIST ANY PERTINENT AFFILIATIONS:**

Chair, Legislative and Tax Committee, Texas Southwestern Cattle Raisers Assn.

Former Director, Nueces River Authority

**DATE SUBMITTED:** February 23, 2015

**PLEASE ATTACH ADDITIONAL INFORMATION IF DESIRED**

Nominations must be received by **5:00 p.m., Friday, March 13, 2015** addressed to Con Mims, Chair, South Central Texas RWPG, c/o San Antonio River Authority, Attn: Cole Ruiz, P.O. 839980, San Antonio, Texas 78283-9980: Faxed to (210) 302-3692 or email to [cruiz@sara-tx.org](mailto:cruiz@sara-tx.org)

Adam Yablonski



c/o San Antonio River Authority  
P.O. Box 839980  
San Antonio, Texas 78283-9980  
(210) 227-1373 Office  
(210) 302-3692 Fax  
[www.RegionLTexas.org](http://www.RegionLTexas.org)

#### EXECUTIVE COMMITTEE

Con Mims  
*Chair / River Authorities*  
Tim Andruss  
*Vice-Chair / Water Districts*  
Gary Middleton  
*Secretary / Municipalities*  
Donna Balin  
*At-Large / Environmental*  
Kevin Janak  
*At-Large/ Electric Generating/Utilities*

#### MEMBERS

Gene Camargo  
*Water Utilities*  
Rey Chavez  
*Industries*  
Alan Cockerell  
*Agriculture*  
Will Conley  
*Counties*  
Don Dietzmann  
*GMA 9*  
Art Dohmann  
*GMA 15*  
Blair Fitzsimons  
*Agriculture*  
Vic Hilderbran  
*GMA 7*  
John Kight  
*Counties*  
Russell Labus  
*Water Districts*  
Vacant  
*Industries*  
Doug McGookey  
*Small Business*  
Dan Meyer  
*GMA 10*  
Iliana Peña  
*Environmental*  
Robert Puente  
*Municipalities*  
Steve Ramsey  
*Water Utilities*  
David Roberts  
*Small Business*  
Roland Ruiz  
*Water Districts*  
Diane Savage  
*GMA 13*  
Suzanne Scott  
*River Authorities*  
Greg Sengelmann  
*Water Districts*  
Vacant  
*Agriculture*  
Thomas Taggart  
*Municipalities*  
Dianne Wassenich  
*Public*  
Bill West  
*River Authorities*

#### Region L - Interview Questions

April 23, 2014

1. Why do you want to be a member of the South Central Texas Regional Water Planning Group?
2. What experience with (agricultural, counties, industries, public, river authorities, small business, water districts, water utilities) would you bring as a member of Region L?
3. Has anyone encouraged you to seek, or are you seeking, a position on Region L to promote any course of action or represent any special interests?
4. We attempt to reach decisions based on consensus, where those who disagree with a decision can choose to live with it for the good of the region. Are you able to work in that type of environment?  
  
Follow up, if necessary, to determine how he/she would react to a decision that adversely, but not seriously, affects his/her interest category but is deemed by most of the planning group to be best for the region.
5. Region L meets quarterly, usually in San Antonio, but sometimes in other parts of the planning region. Do you have time to devote to the meetings?
6. Do you have any questions for us?

If approved, you will be filling a position that will expire in 2016.

SOUTH CENTRAL TEXAS REGIONAL WATER PLANNING GROUP

Nomination for Interest Group (check one):

- ☒ Agriculture, ☐ Counties, ☐ Electric Generating Utilities,  
☐ Environmental, ☐ Industries, ☐ Municipalities, ☐ River Authority, ☐ Water Districts

**NOMINATOR**

NAME: MEDINA COUNTY FARM BUREAU  
ADDRESS: 2916 AVE E HONDO, TEXAS 78861  
PHONE: 830-426-3349 FAX: 830-426-5223 EMAIL: phoyen@txfb-ins.com  
OCCUPATION FARM/RANCH ORGANIZATION

**NOMINEE**

NAME: Adam Yablonski  
ADDRESS: PO Box 251 D'Hanis, TX 78850  
PHONE: 210-854-6536 FAX: 830-363-7491 EMAIL: adam.yablonski@gmail.com  
INTEREST AREA: Agriculture  
COUNTY: Medina  
OCCUPATION: Farmer/Rancher

**PLEASE GIVE A BRIEF DESCRIPTION OF THE NOMINEE'S EXPERIENCE THAT WOULD QUALIFY HIM/HER FOR THE POSITION:**

Adam is an irrigated farmer and rancher. He served on the EAA board of directors from 2008 to 2014, sitting on the Finance, Permits and Enforcement, and Aquifer Management and Planning Committees (chairman of AMP 2010-2014). He served as an alternate representing Agriculture from 2008 to 2012 during the Edwards RIP process, and served on various related committees.

**PLEASE LIST ANY PERTINENT AFFILIATIONS:**

Adam currently serves on the board of the Medina County Farm Bureau. He is currently a participant in the Texas Farm Bureau Agricultural Leadership Program (AgLead XII). He serves as an alternate representing Agriculture on the Edwards Aquifer Habitat Conservation Plan Stakeholder Committee and on the SAWS ASR Advisory Group.

DATE SUBMITTED: 3/11/15

**PLEASE ATTACH ADDITIONAL INFORMATION IF DESIRED**

Nominations must be received by 5:00 p.m., Friday, March 13, 2015 addressed to Con Mims, Chair, South Central Texas RWPG, c/o San Antonio River Authority, Attn: Cole Ruiz, P.O. 839980, San Antonio, Texas 78283-9980: Faxed to (210) 302-3692 or email to [cruiz@sara-tx.org](mailto:cruiz@sara-tx.org)



**SOUTH CENTRAL TEXAS REGIONAL WATER PLANNING GROUP**

**Nomination for Interest Group (check one):**

- ☒ Agriculture, ☐ Counties, ☐ Electric Generating Utilities,  
☐ Environmental, ☐ Industries, ☐ Municipalities, ☐ River Authority, ☐ Water Districts

**NAME:** Tyson Broad

**ADDRESS:** PO Box 1931. Austin. Tx 78767

**PHONE:** 325.248.3137 **FAX:**  **EMAIL:** tysonbroad@gmail.com

**OCCUPATION:** Research Associate Lone Star Chapter Sierra Club

**NAME:** Adam Yablonski

**ADDRESS:** PO Box 251 D'Hanis. Tx 78850

**PHONE:** 210.854.6536 **FAX:**  **EMAIL:**

adam.yablonski@gmail.com **INTEREST AREA:** Agriculture

**COUNTY:** Medina

**OCCUPATION:** Farmer/Rancher

**PLEASE GIVE A BRIEF DESCRIPTION OF THE NOMINEE'S EXPERIENCE THAT WOULD QUALIFY HIM/HER FOR THE POSITION:**

Adam Yablonski runs an irrigated crop production and ranching operation on a family farm in Medina County. He holds a Bachelor of Science degree in biology from Washington and Lee University, and a certificate in ecological horticulture from the University of California Santa Cruz. He was elected to the board of the Edwards Aquifer Authority from 2008 to 2014, where he served as chairman of the Aquifer Management and Planning Committee from 2010 to 2014, and also on the Finance/Administrative Committee and Permits/Enforcement Committee. He served as an alternate representing agriculture to the Steering Committee of the Edwards Aquifer Recovery Implementation Program from 2008 to 2012, where he sat on several committees, including those responsible for VISPO, ASR, and the Regional Water Conservation Program. He continues to serve as an alternate on the Stakeholder Committee of the Edwards Aquifer Habitat Conservation Program, and serves on the board of the Medina County Farm Bureau.

**PLEASE LIST ANY PERTINENT AFFILIATIONS:**

Adam currently serves on the board of the Medina County Farm Bureau. He is currently a participant in the Texas Farm Bureau Agricultural Leadership Program (AgLead XII). He serves as an alternate representing Agriculture on the Edwards Aquifer Habitat Conservation Plan Stakeholder Committee and on the SAWS ASR Advisory Group.

**DATE SUBMITTED:** 3.12.2015

***PLEASE ATTACH ADDITIONAL INFORMATION IF DESIRED***

Nominations must be received by **5:00 p.m., Friday, March 13, 2015** addressed to Con Mims, Chair, South Central Texas RWPG, c/o San Antonio River Authority, Attn: Cole Ruiz, P.O. 839980, San Antonio, Texas 78283-9980: Faxed to (210) 302-3692 or email to [cruiz@sara-tx.org](mailto:cruiz@sara-tx.org)

**From:** [Rader Gilleland](#)  
**To:** [Cole Ruiz](#)  
**Cc:** [Adam Yablonski \(adam.yablonski@gmail.com\)](#); [Rader Gilleland](#); [cmims@nueces-ra.org](#)  
**Subject:** Region L Agriculture Nomination 2.27.15  
**Date:** Friday, February 27, 2015 10:35:52 AM  
**Attachments:** [Region L Agriculture Nomination 2.27.15.pdf](#)

---

Mr. Ruiz.

I would like to nominate Adam Yablonski for the open seat that represents the Agricultural Industry on the Region L Water Planning Group. Adam is an active Farmer/Rancher in Medina County. Adam has extensive knowledge and experience concerning our water resources in the region.

Thank you,

Rader Gilleland

830-591-8760 cell

SOUTH CENTRAL TEXAS REGIONAL WATER PLANNING GROUP

Nomination for Interest Group (check one):

- ☒ Agriculture, ☐ Counties, ☐ Electric Generating Utilities,  
☐ Environmental, ☐ Industries, ☐ Municipalities, ☐ River Authority, ☐ Water Districts

NOMINATOR

NAME: Rader Gilleland  
ADDRESS: 567 Sage Ln  
PHONE: 830-591-8760 FAX: 210-587-6565 EMAIL: radera@americanlumber.net  
OCCUPATION: Farmer/Rancher

NOMINEE

NAME: Adam Yablonski  
ADDRESS: PO Box 251 D'Hanis, TX 78850  
PHONE: 210-854-6536 FAX: 830-363-7491 EMAIL: adam.yablonski@gmail.com  
INTEREST AREA: Agriculture  
COUNTY: Medina  
OCCUPATION: Farmer/Rancher

PLEASE GIVE A BRIEF DESCRIPTION OF THE NOMINEE'S EXPERIENCE THAT WOULD QUALIFY HIM/HER FOR THE POSITION:

Adam is an irrigated farmer and rancher. He served on the EAA board of directors from 2008 to 2014, sitting on the Finance, Permits and Enforcement, and Aquifer Management and Planning Committees (chairman of AMP 2010-2014). He served as an alternate representing Agriculture from 2008 to 2012 during the Edwards RIP process, and served on various related committees.

PLEASE LIST ANY PERTINENT AFFILIATIONS:

Adam currently serves on the board of the Medina County Farm Bureau. He is currently a participant in the Texas Farm Bureau Agricultural Leadership Program (AgLead XII). He serves as an alternate representing Agriculture on the Edwards Aquifer Habitat Conservation Plan Stakeholder Committee, and on the SAWS ASR Advisory Committee.

DATE SUBMITTED: 2/27/15

PLEASE ATTACH ADDITIONAL INFORMATION IF DESIRED

Nominations must be received by **5:00 p.m., Friday, March 13, 2015** addressed to Con Mims, Chair, South Central Texas RWPG, c/o San Antonio River Authority, Attn: Cole Ruiz, P.O. 839980, San Antonio, Texas 78283-9980: Faxed to (210) 302-3692 or email to [cruiz@sara-tx.org](mailto:cruiz@sara-tx.org)

**From:** [Con Mims](#)  
**To:** ["Luana Buckner"](#)  
**Cc:** ["Adam Yablonski"](#); [Cole Ruiz](#)  
**Subject:** RE: Adam Yablonski  
**Date:** Tuesday, February 24, 2015 3:01:25 PM

---

Luana:

Great to hear from you. Thank you for your recommendation of Adam. I am forwarding this correspondence to Region L's Administrator for reference during the nominations process.

Adam - please be sure someone actually completes a nominations form and sends it to Mr. Ruiz by the deadline. We must have that to consider a nominee. Feel free to contact Mr. Ruiz if you need any assistance.

Con

-----Original Message-----

From: Luana Buckner [<mailto:h2olu@sbcglobal.net>]  
Sent: Tuesday, February 24, 2015 1:24 PM  
To: Con Mims  
Cc: Adam Yablonski  
Subject: Adam Yablonski

Dear Chairman Mims,

I would like to recommend Adam Yablonski's appointment as the agriculture representative on the Regional L Planing Group. Adam is actively engaged in irrigated agriculture.

His farming operations include advanced conservation measures such as drip irrigation.

As you are aware, Adam was an active participant in the HCP planning process including development of the VISPO program.

He is a dedicated public servant as demonstrated by his years of service representing ag and rural interests on the Edwards Aquifer Authority board of directors.

If you have any questions or need additional information, please do not hesitate to contact me at 210-844-4512.

Thank you,  
Luana Buckner

Sent from my iPad=

**Velma R. Danielson  
1041 Phantom Rider Trail  
Spring Branch, Texas 78070**

March 12, 2015

Mr. Con Mims  
Chairman – South Central Texas Regional Water Planning Group  
c/o San Antonio River Authority  
ATTN: Cole Ruiz  
P.O. Box 839980  
San Antonio, TX 78283-9980

Dear Chairman Mims:

I am writing this letter to you and the members of the South Central Texas Regional Water Planning Group (Region L) to express my support for Adam Yablonski to serve as an agricultural representative on the Region L planning group.

Adam served on the Edwards Aquifer Authority (EAA) Board of Directors during my tenure as General Manager of that organization from August 2007 – March 2010. During that time period, Adam and I also worked together on the Edwards Aquifer Recovery Implementation Plan (EARIP) Steering Committee. In both of these examples, I always found Adam to be a constructive, attentive, informed and thoughtful participant. He consistently contributed important comments and insights into the impacts of various Edwards Aquifer management issues or decisions on agriculture. He also helped both groups to craft solutions on issues that resulted in positive developments to move the discussions forward and to reach consensus. As an example, Adam was instrumental in developing the Voluntary Irrigation Suspension Program Option element of the Edwards Aquifer Habitat Conservation Plan. While I know that Adam has represented agricultural interests in both examples noted above, I also believe he is keenly aware of the need to balance the various interests throughout the region, and is committed to finding solutions dedicated to sharing our water resources. I know he will be just as effective serving on the Region L planning group.

I was extremely fortunate to work for Adam at the EAA and also to work with him on the EARIP Steering Committee, and I respectfully request your consideration and selection of Adam Yablonski to serve on the Region L planning group.

If you have any questions, please contact me at [velma.danielson@gmail.com](mailto:velma.danielson@gmail.com), or at (210) 854-9374 (mobile no.).

Sincerely,

  
Velma R. Danielson



**RUSSELL W. BOENING**  
President

**DAVE EDMISTON**  
Vice President

**ROBERT GORDON**  
Secretary-Treasurer

**ROBERT GORDON**  
Dalhart

**DAN B. SMITH**  
Lockney

**MICHAEL WHITE**  
Vernon

**BEN F. WIBLE**  
Sherman

**MARK R. CHAMBLEE**  
Tyler

**VAL STEPHENS**  
Lamesa

**DAVE EDMISTON**  
Brady

**NEIL F. WALTER**  
Oglesby

**LARRY W. JOINER**  
Huntington

**RONNIE MUENNINK**  
Hondo

**BOB REED**  
Bay City

**ZACHARY X. YANTA**  
Runge

**DALE MURDEN**  
Harlingen

March 5, 2015

Mr. Con Mims, Chair  
South Central Texas Planning Region (Region L)  
Nueces River Authority  
200 E. Nopal, Suite 206  
Uvalde, Texas 78802

Dear Chairman Mims:

Texas Farm Bureau supports the appointment of Adam Yablonski to the Region L Water Planning Group representing agriculture replacing Milton Stolte.

As a farmer in Medina County, Adam will represent agriculture well. He has extensive experience in water policy having served on the Edwards Aquifer Authority Board, as an alternate on the Stakeholder Committee of the Edwards Aquifer Habitat Conservation Plan (EAHCP) and on the EAHCP [Voluntary Irrigation Suspension Program Option](#) subcommittee.

Mr. Yablonski is thoughtful, well spoken, and has been a dedicated member of the committees or boards on which he is serving or has served.

Thank you for your consideration of our interest in the appointment of Adam Yablonski to the Region L Water Planning Group.

Sincerely,

Gene Richardson  
Associate Director,  
Commodities and Regulatory Activities

Jim Bower





c/o San Antonio River Authority  
P.O. Box 839980  
San Antonio, Texas 78283-9980  
(210) 227-1373 Office  
(210) 302-3692 Fax  
[www.RegionLTexas.org](http://www.RegionLTexas.org)

#### EXECUTIVE COMMITTEE

Con Mims  
*Chair / River Authorities*  
Tim Andruss  
*Vice-Chair / Water Districts*  
Gary Middleton  
*Secretary / Municipalities*  
Donna Balin  
*At-Large / Environmental*  
Kevin Janak  
*At-Large/ Electric Generating/Utilities*

#### MEMBERS

Gene Camargo  
*Water Utilities*  
Rey Chavez  
*Industries*  
Alan Cockerell  
*Agriculture*  
Will Conley  
*Counties*  
Don Dietzmann  
*GMA 9*  
Art Dohmann  
*GMA 15*  
Blair Fitzsimons  
*Agriculture*  
Vic Hilderbran  
*GMA 7*  
John Kight  
*Counties*  
Russell Labus  
*Water Districts*  
Vacant  
*Industries*  
Doug McGookey  
*Small Business*  
Dan Meyer  
*GMA 10*  
Iliana Peña  
*Environmental*  
Robert Puente  
*Municipalities*  
Steve Ramsey  
*Water Utilities*  
David Roberts  
*Small Business*  
Roland Ruiz  
*Water Districts*  
Diane Savage  
*GMA 13*  
Suzanne Scott  
*River Authorities*  
Greg Sengelmann  
*Water Districts*  
Vacant  
*Agriculture*  
Thomas Taggart  
*Municipalities*  
Dianne Wassenich  
*Public*  
Bill West  
*River Authorities*

#### Region L - Interview Questions

April 23, 2014

1. Why do you want to be a member of the South Central Texas Regional Water Planning Group?
2. What experience with (agricultural, counties, industries, public, river authorities, small business, water districts, water utilities) would you bring as a member of Region L?
3. Has anyone encouraged you to seek, or are you seeking, a position on Region L to promote any course of action or represent any special interests?
4. We attempt to reach decisions based on consensus, where those who disagree with a decision can choose to live with it for the good of the region. Are you able to work in that type of environment?  
  
Follow up, if necessary, to determine how he/she would react to a decision that adversely, but not seriously, affects his/her interest category but is deemed by most of the planning group to be best for the region.
5. Region L meets quarterly, usually in San Antonio, but sometimes in other parts of the planning region. Do you have time to devote to the meetings?
6. Do you have any questions for us?

If approved, you will be filling a position that will expire in 2016.

By Electronic Mail

P. O. Box 1393  
San Marcos, TX 78667-1393  
March 13, 2015

Mr. Con Mims, Chair  
South Central Texas RWPG  
c/o San Antonio River Authority (Attn: Cole Ruiz)  
P. O. Box 8399980  
San Antonio, Texas 78283-9980

Dear Chairman Mims:

I am pleased to nominate Jim Bower to serve on Region L representing Agriculture. I attach his resume, the nomination form, and three additional support letters for his nomination.

I met Jim almost ten years ago when the long Edwards Aquifer RIP process began, and worked with him as a fellow stakeholder then and now that the RIP has become the Habitat Conservation Plan. He was active in many workgroups and subcommittees during that process, demonstrating his ability to work hard, be prepared for meetings, and think on his feet. I believe he would be a good addition at Region L. He knows water issues and understands the importance of water to agriculture.

Jim understands agriculture from the ground up, having spent his career in an agricultural business, and then ranching. He enjoyed several decades of ranching, often saying these were the best years of his life. He still owns a ranch in Wilson County. I know he would be a well informed agricultural representative to serve on the Region L group.

Sincerely,

A handwritten signature in cursive script that reads "Dianne H. Wassenich". The signature is fluid and elegant, with a long horizontal flourish extending to the right.

Dianne H. Wassenich

SOUTH CENTRAL TEXAS REGIONAL WATER PLANNING GROUP

Nomination for Interest Group (check one):

- ☐ Agriculture, ☐ Counties, ☐ Electric Generating Utilities,  
☐ Environmental, ☐ Industries, ☐ Municipalities, ☐ River Authority, ☐ Water Districts

NOMINATOR

NAME: Dianne Wassenich  
ADDRESS: 11 Tanglewood, San Marcos Tx 78666  
PHONE: 512-787-6392 FAX: \_\_\_\_\_ EMAIL: Wassenich@  
OCCUPATION Program Mgr. San Marcos River grandecom.net  
Foundation

NOMINEE

NAME: Jim Bower  
ADDRESS: 8947 Garden Ridge, Dr. Garden Ridge Tx  
PHONE: 210-846-5095 FAX: \_\_\_\_\_ EMAIL: jimbmail 78266  
@satx.rr.com  
INTEREST AREA: Agriculture  
COUNTY: Comal  
OCCUPATION: retired

PLEASE GIVE A BRIEF DESCRIPTION OF THE NOMINEE'S EXPERIENCE THAT WOULD QUALIFY HIM/HER FOR THE POSITION:

see attached

PLEASE LIST ANY PERTINENT AFFILIATIONS:

- chairman of Garden Ridge Water Commission
- Steering committee of Edwards Aquifer HCP
- Committee member writing BCD bill for Comal Cty.

DATE SUBMITTED: 3/12/15

PLEASE ATTACH ADDITIONAL INFORMATION IF DESIRED

Nominations must be received by 5:00 p.m., Friday, March 13, 2015 addressed to Con Mims, Chair, South Central Texas RWPG, c/o San Antonio River Authority, Attn: Cole Ruiz, P.O. 839980, San Antonio, Texas 78283-9980: Faxed to (210) 302-3692 or email to [cruiz@sara-tx.org](mailto:cruiz@sara-tx.org)

## **Jim Bower**

### Experience

Co-owner of company selling fertilizer and chemicals and providing application advice to farmers; 60 branches in five western states. Primary crops were vegetables, fruits, cotton, grapes, corn, wheat, potatoes, nuts and rye grass seed.

Raised F-1 (Braford) heifers for 24 years and Hereford bulls for six years. Bought unimproved land in Goliad and Wilson counties and set up rotational grazing system. Established two 60-day breeding periods per year. Great majority of F-1 heifers were sold (bred to Angus bulls) private treaty to repeat customers. Multiple winner of Champion pen of heifers at South Texas Association sales (Beeville). Class Champion Heifer pen (F-1) at Houston Livestock Show.

### Pertinent Affiliations

Current Chairman of Garden Ridge Water Commission (10 years)

Member of group that wrote the bill to establish a Ground Water Conservation District for Comal County. Bill is now at the legislature

Steering Committee of EARIP

Twice president of South Texas Hereford Association

Co-originator and member of group representing seven states bringing class action lawsuit against IBP/Tyson in 1996 for violation of the Packers and Stockyards Act in practices that resulted in captive supply inventories allowing the packers to control the market and seriously inhibit cash pricing.



February 24, 2015

By Electronic Mail

Ms. Dianne Wassenich  
San Marcos River  
222 W. San Antonio Street  
San Marcos, Texas

Dear Dianne:

This letter is written in support of Jim Bower's application to serve on Region L representing Agriculture. For the reasons set out below, Jim would be an outstanding addition to Region L and has my unqualified support.

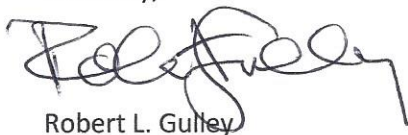
As you know, Jim was an active participant in the Edwards Aquifer Recovery Implementation Program. He has also served as the Chair on the Water Commission of the City of Garden Ridge and was involved in the stakeholder group attempting to create a groundwater district for Comal County. Through this experience, he developed a strong knowledge of water, water planning, and water issues. In the EARIP, Jim's abiding trait in these efforts was his willingness to spend the time necessary to understand the issues and come prepared to actively participate in every meeting. He is one of those rare individuals who sees the big picture and understand all sides of an issue. In the EARIP, he tirelessly devoted many hours serving on committees and work groups.

Jim has a deep and longstanding appreciation of agriculture and ranching activities and the importance of water to those activities. For many years, Jim has ranched in south Texas. Prior to his retirement, his agribusiness involved him closely for a number of years with the agricultural and ranching communities in the west and northwest.

I have worked with Jim for almost eight years and spent many hours talking with him about water and water issues. He is knowledgeable, experienced, and fair-minded and would be an asset to the Region L planning process.

Please feel free to call me if you need additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert L. Gulley", with a stylized flourish at the end.

Robert L. Gulley

Colette Barron Bradsby, Attorney  
2628 W. 49<sup>th</sup> Street  
Austin, Texas 78731  
March 10, 2015

Dianne Wassenich  
San Marcos River Foundation  
222 W. San Antonio Street  
San Marcos, Texas 78666

Dear Ms. Wassenich:

I am pleased to support the nomination of Jim Bower to serve as a member representing agricultural interests on the South Central Texas Regional Water Planning Group. As an attorney with Texas Parks and Wildlife Department, I have worked with Jim since 2007 on water quantity and quality issues associated with the Edwards Aquifer, the San Marcos and Comal Springs, and the array of rare species dependent upon these vital water sources. Jim and I were participants in the Edwards Aquifer Implementation Program (EARIP), a voluntary stakeholder program with the unenviable task of uniting parties with diverse and competing interests around a plan to protect both the water supplies and endangered species of the greater Edwards Aquifer region. The use of well-informed work groups (representing diverse parties) to study issues and make recommendations to a governing steering committee was critical to the success of the EARIP in achieving a consensus based habitat conservation plan. Jim served on work groups related to water conservation, science committee qualifications and membership, agricultural irrigation, and public outreach. I always enjoyed being on a work group with Jim; he came well educated on each issue, ready with a succinct opinion that distilled the problem down to its critical core, and with an open mind and respect for all other opinions.

As a long time member and current chair of the Garden Ridge Water Commission, an EARIP participant, and an active player in the effort to form a Comal County Water Conservation District, Jim has earned his stripes in Texas water policy. When you add in Jim's decades of active farming and ranching and agribusiness ownership, you get someone uniquely qualified and suited to fairly represent agricultural interests in the regional water planning process.

Please feel free to contact me with any questions or to provide my contact information to the planning group members. I can be reached at (512) 389-8899 or at [Colette.barron@tpwd.texas.gov](mailto:Colette.barron@tpwd.texas.gov).

Sincerely,



Colette Barron Bradsby



## NATIONAL WILDLIFE FEDERATION

SOUTH CENTRAL REGIONAL CENTER

44 East Avenue, Suite 200

Austin, Texas 78701

512.476.9805

FAX 512.476.9810

[www.nwf.org](http://www.nwf.org)

March 6, 2015

Mr. Con Mims

Chair, South Central Texas Regional Water Planning Group

Re: Nomination of Jim Bower

Dear Con:

I am writing, on behalf of the National Wildlife Federation, in support of the nomination of Jim Bower to represent agricultural interests on the South Central Texas (Region L) Regional Water Planning Group. I've had the privilege of observing Jim's interest in, and knowledge of, water issues as part of the Edwards Aquifer Recovery Implementation Program (EARIP). I have no doubt that Jim would represent agricultural interests very effectively on the Region L Planning Group.

Jim's knowledge of water issues runs deep, having served the City of Garden Ridge as Chair of its Water Commission for many years, participated actively in a stakeholder effort to create a groundwater district for Comal County, and played a key role in the EARIP. Although Jim and I did not always see things exactly the same way during the EARIP process, I found that he was always willing to listen and to explore ways to serve the greater good. I also found that he consistently put in the time to come prepared to meetings, which were frequent, and to participate actively and effectively.

During the EARIP process, I also got to know Jim on a personal level. One thing I learned quickly is that he has an abiding love for the land and for agriculture. Jim has longstanding experience with ranching and with agribusiness. He has run his own ranching operation for many years, including serving as President of South Texas Hereford Association, and previously had a business supplying fertilizer and agricultural chemicals to farming operations. I have great respect for Jim and recommend him highly for this position.

Sincerely,

Myron J. Hess

Manager, Texas Water Programs/Counsel

National Wildlife Federation

44 East Avenue, Suite 200

Austin, TX 78701

Ph: (512) 610-7754

Email: [hess@nwf.org](mailto:hess@nwf.org)

Don Meador





c/o San Antonio River Authority  
P.O. Box 839980  
San Antonio, Texas 78283-9980  
(210) 227-1373 Office  
(210) 302-3692 Fax  
[www.RegionLTexas.org](http://www.RegionLTexas.org)

#### EXECUTIVE COMMITTEE

Con Mims  
*Chair / River Authorities*  
Tim Andruss  
*Vice-Chair / Water Districts*  
Gary Middleton  
*Secretary / Municipalities*  
Donna Balin  
*At-Large / Environmental*  
Kevin Janak  
*At-Large/ Electric Generating/Utilities*

#### MEMBERS

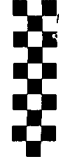
Gene Camargo  
*Water Utilities*  
Rey Chavez  
*Industries*  
Alan Cockerell  
*Agriculture*  
Will Conley  
*Counties*  
Don Dietzmann  
*GMA 9*  
Art Dohmann  
*GMA 15*  
Blair Fitzsimons  
*Agriculture*  
Vic Hilderbran  
*GMA 7*  
John Kight  
*Counties*  
Russell Labus  
*Water Districts*  
Vacant  
*Industries*  
Doug McGookey  
*Small Business*  
Dan Meyer  
*GMA 10*  
Iliana Peña  
*Environmental*  
Robert Puente  
*Municipalities*  
Steve Ramsey  
*Water Utilities*  
David Roberts  
*Small Business*  
Roland Ruiz  
*Water Districts*  
Diane Savage  
*GMA 13*  
Suzanne Scott  
*River Authorities*  
Greg Sengelmann  
*Water Districts*  
Vacant  
*Agriculture*  
Thomas Taggart  
*Municipalities*  
Dianne Wassenich  
*Public*  
Bill West  
*River Authorities*

#### Region L - Interview Questions

April 23, 2014

1. Why do you want to be a member of the South Central Texas Regional Water Planning Group?
2. What experience with (agricultural, counties, industries, public, river authorities, small business, water districts, water utilities) would you bring as a member of Region L?
3. Has anyone encouraged you to seek, or are you seeking, a position on Region L to promote any course of action or represent any special interests?
4. We attempt to reach decisions based on consensus, where those who disagree with a decision can choose to live with it for the good of the region. Are you able to work in that type of environment?  
  
Follow up, if necessary, to determine how he/she would react to a decision that adversely, but not seriously, affects his/her interest category but is deemed by most of the planning group to be best for the region.
5. Region L meets quarterly, usually in San Antonio, but sometimes in other parts of the planning region. Do you have time to devote to the meetings?
6. Do you have any questions for us?

If approved, you will be filling a position that will expire in 2016.



SBL nomination\_form  
SOUTH CENTRAL TEXAS REGIONAL WATER PLANNING GROUP

Nomination for Interest Group (check one):

☒ Agriculture, ☐ Counties, ☐ Electric Generating Utilities,  
☐ Environmental, ☐ Industries, ☐ Municipalities, ☐ River Authority, ☐ Water Districts

NOMINATOR

NAME: WILL CONLEY

ADDRESS: P.O. BOX 2085 WIMBERLEY, TX

PHONE: 512-847-3159 FAX: 512-847-7352 EMAIL: will.conley@co.hays.tx.us

OCCUPATION COUNTY COMMISSIONER

NOMINEE

NAME: Don B. Meador

ADDRESS: 1100 Lime Kiln Road, San Marcos, TX 78666

PHONE: 512 757 2714 FAX: 512 396 8425 EMAIL: don@dreamcatcherranch.net

INTEREST AREA: Water Resource, Cattle Genetics, Local Politics

COUNTY: Hays

OCCUPATION: Rancher, Registered Angus Breeder

PLEASE GIVE A BRIEF DESCRIPTION OF THE NOMINEE'S EXPERIENCE THAT WOULD  
QUALIFY HIM/HER FOR THE POSITION:

EAA Permitted Irrigator, VISPO Participant, Former Procter and Gamble Manager  
and Registered Professional Engineer, Vice-Chair City of Coppel Planning and Zoning  
Commission, BS & MS in Industrial Engineering and Management,  
Roots in Irrigated Cotton Farming,

PLEASE LIST ANY PERTINENT AFFILIATIONS:

GBRA Director, Republican Party Precinct Chairman, Past President Hays County Farm  
Bureau,  
Past Director Texas Angus Association, Past Vice Chair Hays County Watershed,  
Guadalupe Basin Coalition

DATE SUBMITTED: 3/12/15

PLEASE ATTACH ADDITIONAL INFORMATION IF DESIRED

Nominations must be received by 5:00 p.m., Friday, March 13, 2015  
addressed to Con Mims, Chair, South Central Texas RWPG, c/o San Antonio River  
Authority,  
Attn: Cole Ruiz, P.O. 839980, San Antonio, Texas 78283-9980: Faxed to (210) 302-3692  
or email to cruiz@sara-tx.org

Stephen Diebel

SOUTH CENTRAL TEXAS REGIONAL WATER PLANNING GROUP

Nomination for Interest Group (check one):

- ☒ Agriculture, ☐ Counties, ☐ Electric Generating Utilities,  
☐ Environmental, ☐ Industries, ☐ Municipalities, ☐ River Authority, ☐ Water Districts

NOMINATOR

NAME: De Witt County Soil and Water Conservation District  
ADDRESS: 1133 N. Esplanade, Cuero, TX 77954  
PHONE: (361) 275-5293 x3 FAX: \_\_\_\_\_ EMAIL: dewittcounty@swcd.texas.gov  
OCCUPATION: SWCD, subdivision of state government

.....

NOMINEE

NAME: Stephen Diebel  
ADDRESS: 4011 Salem Rd, Victoria, TX 77904  
PHONE: (361) 550-0829 FAX: \_\_\_\_\_ EMAIL: diebelcattle@gmail.com  
INTEREST AREA: Agriculture  
COUNTY: Victoria  
OCCUPATION: Rancher

PLEASE GIVE A BRIEF DESCRIPTION OF THE NOMINEE'S EXPERIENCE THAT WOULD QUALIFY HIM/HER FOR THE POSITION:

(See attachment)

PLEASE LIST ANY PERTINENT AFFILIATIONS:

(See attachment)

DATE SUBMITTED: \_\_\_\_\_

PLEASE ATTACH ADDITIONAL INFORMATION IF DESIRED

Nominations must be received by 5:00 p.m., Friday, March 13, 2015 addressed to Con Mims, Chair, South Central Texas RWPG, c/o San Antonio River Authority, Attn: Cole Ruiz, P.O. 839980, San Antonio, Texas 78283-9980: Faxed to (210) 302-3692 or email to [ruiz@sara-tx.org](mailto:ruiz@sara-tx.org)

**Please give a brief description of the nominee's experience that would qualify him/her for the position:**

Mr. Diebel currently serves on the advisory council for the Victoria County Groundwater Conservation District. In addition, he is also the Chairman of the Victoria Soil and Water Conservation District (SWCD). One of the main challenges that landowners and agricultural producers face in Victoria and the surrounding counties is the encroachment of huisache on grassland prairies. The Victoria SWCD has recently partnered with the U.S. Geological Survey (USGS) to begin a study that will evaluate the effects of huisache removal on the hydrologic cycle, and how brush management could possibly affect groundwater recharge and/or the surface water supply.

**Please list any pertinent affiliations:**

Victoria Soil and Water Conservation District, Chairman  
Victoria County Groundwater Conservation District, Advisory Council  
Texas Grazing Lands Coalition, Vice Chair  
Coastal Prairie Coalition of Grazing Lands Conservation Initiative, Chairman  
Texas and Southwestern Cattle Raisers Association, Board of Directors  
Victoria County Farm Bureau Board, Past Director  
Gulf Coast Association of Soil and Water Conservation Districts, Past Chairman

Glenn Lord

**SOUTH CENTRAL TEXAS REGIONAL WATER PLANNING GROUP**

**Nomination for Interest Group (check one):**

- ☐ Agriculture, ☐ Counties, ☐ Electric Generating Utilities,  
☐ Environmental, ☒ Industries, ☐ Municipalities, ☐ River Authority, ☐ Water Districts

**NOMINATOR**

**NAME:** Bill West

**ADDRESS:** 933 East Court Street Sequin, Texas 78155

**PHONE:** 830-378-5822

**FAX:** 830-379-9718

**EMAIL:** \_\_\_\_\_

**OCCUPATION** General Manager, GBRA

**NOMINEE**

**NAME:** Glenn Lord

**ADDRESS:** 118 Dewberry Lake Jackson, Texas 77566

**PHONE:** 979-238-4749

**FAX:** 979-238-9293

**EMAIL:** MGLord@dow.com

**INTEREST AREA:** Industries

**COUNTY:** Colhoun

**OCCUPATION:** Global Technology Leader, Water / Wastewater / Innovation, Dow Chemical

**PLEASE GIVE A BRIEF DESCRIPTION OF THE NOMINEE'S EXPERIENCE THAT WOULD QUALIFY HIM/HER FOR THE POSITION:**

See attached CV. 31 years experience with Dow Chemical, 21.5 years experience in Texas, 10 years in water / wastewater as part of Dow's Environmental Technology Center.

**PLEASE LIST ANY PERTINENT AFFILIATIONS:**

Hold similar position on Region H planning board, Director on TWCA Industry Panel, member of EAHCP Stakeholder committee.

**DATE SUBMITTED:** March 13, 2015

***PLEASE ATTACH ADDITIONAL INFORMATION IF DESIRED***

Nominations must be received by **5:00 p.m., Friday, March 13, 2015** addressed to Con Mims, Chair, South Central Texas RWPG, c/o San Antonio River Authority, Attn: Cole Ruiz, P.O. 839980, San Antonio, Texas 78283-9980: Faxed to (210) 302-3692 or email to [cruiz@sara-tx.org](mailto:cruiz@sara-tx.org)





**The Dow Chemical Company**  
2301 N. Brazosport Blvd.  
Freeport, Texas 77541-3257

December 3, 2014

Con Mims, Chairman  
Region L – South Central Texas Water Planning Group  
c/o San Antonio River Authority  
P.O. Box 839980  
San Antonio, Texas 78238-9980

Re: Submittal of Resignation from the Region L Water Planning Group and  
Recommendation of Glenn Lord to fill the vacated position

Chairman Mims:

I have had the privilege of serving with you, and the members on the Region L planning group for the past several years, and at this time I would like to announce my resignation from the group. I have recently retired from The Dow Chemical Company and feel it is appropriate to step down at this time and allow my replacement the benefit of participating in the completion of the current planning cycle.

I would also like to strongly endorse Glenn Lord as my replacement. While not a member of the Region L WPG, Glenn has nonetheless, been extremely involved in the water space with respect to Texas involving multiple water basins and will and will bring an insightful perspective.

Thank you for your continued service as Chair of the group. I value my time spent working with the other members and appreciate the work that we have done together.

I wish you continue success.

Sincerely,

A handwritten signature in black ink, appearing to read "Gená Leathers".

Gená Leathers



**From:** [Lord, Glenn \(MG\)](#)  
**To:** [Cole Ruiz](#)  
**Cc:** [Lord, Glenn \(MG\)](#)  
**Subject:** Nomination form for Glenn Lord as Industries representative of South Central Texas Regional Water Planning Group  
**Date:** Friday, March 13, 2015 12:27:32 PM  
**Attachments:** [image001.gif](#)  
[Lord Region L nomination form.pdf](#)  
[Glenn Lord Curcvit.pdf](#)  
[Gena Leathers recommendation note.pdf](#)

---

March 13, 2015

Con Mims  
Chair, South Central Texas Regional Water Planning Group  
c/o San Antonio River Authority Attn: Cole Ruiz  
PO Box 839980  
San Antonio, Texas 78238-9980

Re: Nomination of Glenn Lord as a member of the Region L Planning Group

Chairman Mims,

Please accept the enclosed nomination form and supporting documentation as my nomination for the vacant Industries member of the Region L Planning Group.

I am hopeful that my application will be favorably received and I look forward to being able to work with the planning group members. I believe that my 30 years of industry experience, over 21 years in Texas, will allow me to make a solid contribution to this group.

Should you have any questions regarding this information or anything else related to my nomination please do not hesitate to contact me at the numbers below.

Sincerely,

*M. Glenn Lord*

**Glenn Lord**  
Environmental Technology Center

**The Dow Chemical Company**  
2301 N Brazosport Blvd, Freeport, Tx, USA  
phone: 979-238-4749 | email: MGLord@dow.com



## **CURRICULUM VITAE – Glenn Lord**

**Glenn Lord**

**Global Technology Leader for Water, Wastewater, Landfill and Innovation**

**Environmental Technology Center**

**The Dow Chemical Company**

**2301 N. Brazosport Blvd**

**Freeport, Texas**

**77541**

**Phone – 979-238-4749 (work)**

**979-235-9524 (cell)**

**E-mail – MGLord@Dow.com**

---

**Experience:**           **31 years of Process Technology Development, Scale-up and Project Development**  
                             **21.5 years at Dow Chemical's Freeport, Texas facility**  
                             **13 years in Environmental Operations**

**Education:**           **Masters of Chemical Engineering**  
                             **BSc. in Chemistry, *Magna Cum Lauda***

**University:**           **McMaster University, Hamilton, Ontario, Canada**

---

### **Industry Experience**

- **Global Business Leadership**
- **Process Research across multiple technologies including Environmental Operations**
- **Global Technology Leadership**
- **Technology Evaluation/Licensing**
- **Supervisor Responsibility for Global Technology Teams**
- **Technology Development and Implementation**

## **Detail Experience Description**

***Current role – Sept 30, 2014***

***Global Technology Leader for Water, Wastewater, Landfill and Innovation, Environmental Technology Center***

Currently lead a group of 17 professionals, technologists and contractors responsible for the technical support globally for Dow Chemical in the areas of water treatment, wastewater treatment and landfill management. Includes the support of existing assets along with the development and implementation of innovative technologies in these areas.

***March, 2007 – Aug, 2014***

***Innovation Group Leader, Environmental Technology Center***

Responsible for technology development, innovation and implementation for Environmental Technologies globally within Dow Chemical. Responsible for technology areas such as wastewater treatment, water treatment/purification and thermal waste treatment. Includes project execution from conceptualization to implementation and then technical support/optimization after commercialization.

***March, 2001 – March, 2007***

***R&D Leader – Environmental Operations Business***

Responsible for research program for technology development for Global Environmental Operations. Includes project areas in Process Optimization, Technology Development and Capital Project execution. Experience in project areas across multiple business and technology areas. Accountable for EH&S performance, budget performance, project development, and personnel leadership of research group from 4 locations. Leader of Environmental Technology Leadership Group – accountable for environmental technology development for the Dow Chemical Company.

***Jan 1998 – March, 2001***

***Technical Leader – Propylene Oxides Process Research***

Responsible for research program in support of technology development of Propylene Oxide process. Responsible for development and coordination of research studies at laboratory, pilot plant and full commercial scale.

***August 1993 - Jan 1998***

***Technical Leader – EDC/VCM and Chlorinated Organics Process Research***

Leadership role in process development and technology implementation for EDC/VCM and Chlorinated Organics business. Direct accountability for research program in Texas, supervising project effort in lab, pilot plant and plant support areas. Included examination of external licensor technologies as well as internal technology development. Member of Global Technology Leadership Team and Intellectual Asset Management Teams.

***April 1985 - Aug 1993***

***Process Research – Western Canada Division, Ft. Sask.***

Process research support for EDC/VCM technology. Primary focus on process optimization of plant operation. Included research at lab, pilot plant and plant level.

***April 1984 – April 1985***

***Process Research – Western Canada Division, Ft. Sask.***

Process research support for EO/EG technology. Primary focus on process optimization of plant operation. Included research at lab, pilot plant and plant level.

## **AGENDA ITEM 4**

Status of Edwards Aquifer Habitat Conservation Plan (HCP) – Nathan Pence, Executive Director EAHCP

## **AGENDA ITEM 5**

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

## **AGENDA ITEM 6**

Chair's Report

## **AGENDA ITEM 7**

Texas Water Development Board (TWDB) Communications

## **AGENDA ITEM 8**

Discussion and Appropriate Action Regarding Consultants Work and  
Schedule



## 2016 South Central Texas Regional Water Plan Proposed Workplan for Development

		2014							2015								
Tasks	Description	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Task 1	Planning Area Description																
Task 2a	Non-Pop. Based Demand Projections																
Task 2b	Population & Demand Projections																
Task 3	Water Supply Analyses																
EAHCP	Implementation																
TAP	Whooping Crane Lawsuit																
Task 4	Water Management Strategies																
Task 4a	Needs Assessment																
Task 4b	ID Potentially Feasible WMSs																
Task 4b.1	WMS Verification																
Task 4c	Technical Memorandum																
Task 4d	WMS Technical Evaluations								★								
Task 5	Conservation Recommendations																
Task 6	Long-term Resource Protection																
Task 6.1	Cumulative Effects of RWP								★								
Task 7	Drought Response Information																
Task 8	Policies & Recmdtns / Unique Sites								★								
Task 9	Infrastructure Funding																
Task 10	Plan Adoption								★							★	
Task 11	Implement. & Compare to Prv RWPs																
Task 12a	Prioritization of 2011 WMSs																
Task 12b	Prioritization of 2016 WMSs															★	



IPP Deadline:  
May 1, 2015

RWP Deadline:  
December 1, 2015

### Legend:



SCTRWPG Action



TWDB Action



Scheduled SCTRWPG Meeting



Probable SCTRWPG Meeting

# **Potential Issues For The 2016 SCTRWP**

**April 2, 2015**

- 1) Carrizo Aquifer Workgroup (Status: Recommendation Approved)
  - a) Multiple Potentially Feasible Projects Exceed MAG
  - b) TWDB will not allow for over-allocation in the 2016 RWP
- 2) Importing Groundwater from Other Regions (Status: Technical Evaluation Refined per Hays County and Region K)
- 3) Meeting Needs of Formosa (Status: Con Mims has discussed with LNRA)
  - a) Coordination with Regions P and N; Technical Evaluation
- 4) Implementation of TCEQ Estuary Environmental Flow Standards (Status: No documentation from TCEQ; Proceed based on comments with TCEQ)
- 5) Population and/or Water Demand Projections Revisions (Status: Finished)
- 6) Eagle-Ford Shale Demands – Direct, Indirect, and Induced (Status: Finished)
- 7) Whooping Crane Litigation (Status: TAP's appeal to 5th Circuit Denied, Option to Appeal to Supreme Court – March)
- 8) Meeting Steam-Electric Needs in Victoria County (Status: WMS Evaluation Presented)
- 9) Inter-Regional Coordination (e.g. SAWS Vista Ridge & Hays County Forestar) (Status: No Conflict with Region G)
- 10) Legislation (Status: Legislative Session Ended; Responding to legislation adopted in 2013; New Session Underway)

Regional Water Planning Contract Document References			2017 Regional Water Plan Chapter, Associated TAC Sections, and Content			Status / Notes
TWDB Contract Reimbursement Accounting Number ('TXWise')	Exhibit A - Contract SOW Task	Exhibit C - General Guidelines for Regional Water Plan Development	Regional Water Plan Chapter Number	Primary TAC Section	General Content	
9	1	1	1	§357.30	Description of the Regional Water Planning Area	Distributed for Review on 12/5/2014
1	2A	2	2	§357.31	Projected Non-Municipal Water Demands	Distributed for Review on 12/5/2014
2	2B			§357.31	Projected Population and Municipal Water Demands	Distributed for Review on 12/5/2014
3	3	3	3	§357.32	Water Supply Analysis	Distributed for Review on 12/5/2014
4	4A	4	4	§357.33	Identification of Water Needs	Distributed for Review on 12/5/2014
5	4B	5	5	§357.34	Identification of Potentially Feasible Water Management Strategies (WMSs)	Currently in development. First draft ready for HDR internal review.
7	4D			§357.34; §357.35	Evaluations of Potentially Feasible WMSs and Recommended WMSs and Alternative WMSs	WMS write-ups being drafted and distributed to project sponsors for review
10	5			§357.34	Conservation Recommendations [as subchapter]	In development. Similar to Chapter 6 in 2011 Plan.
11	6	6	6	§357.40	Impacts of Regional Water Plan	Being presented.
				§357.41	Consistency with Protection of Water Resources, Agricultural Resources, and Natural Resources	Being presented.
12	7	7	7	§357.42	Drought Response Information, Activities, and Recommendations	In development.
13	8	8	8	§357.43	Policy Recommendations & Unique Sites	Being drafted and revised by Workgroup
14	9	9	9	§357.44	Infrastructure Financing Analysis	<i>To be completed after IPP</i>
15	11	11	11	§357.45	Implementation and Comparison to the Previous Regional Water Plan	In development.
8	10	10	10	§357.21; §357.50	Public Participation and Plan Adoption	<i>To be completed after IPP</i>
6	4C	12	N/A	contract	Technical Memorandum	Submitted to TWDB on 7/28/2014

## **AGENDA ITEM 9**

Discussion and Appropriate Action to Request Technical Assistance from the Texas Water Development Board (TWDB) to Complete the Socioeconomic Impact Analysis of not Meeting Certain Water Needs

## **AGENDA ITEM 10**

Discussion and Appropriate Action Regarding the Adoption of the  
Proposed Chapter 8 Policy Recommendations and Unique Sites  
Language for Inclusion in the 2016 Initially Prepared Plan (IPP)

## **Chapter 8**

### **Policy Recommendations & Unique Sites**

#### **[31 TAC §357.43]**

### **8.1 Agricultural Water**

**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 Chapter 6 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.

**Agricultural Water Conservation Programs:** The SCTRWPG recommends adequately funding the agricultural water conservation programs provided by the TWDB.

**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**

**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.

**Collaboration between Regional Water 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

**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 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.”*

**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.

**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.

**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.

**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.

**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.

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

## **8.4 Surface Water**

**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.

**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.

**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**

**Conservation Planning Guidelines:** 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.

**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 SCTRWPWG 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 SCTRWPWG members to optimize future conservation efforts. The SCTRWPWG 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**

**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.

**Brackish Groundwater and Seawater Desalination:** The SCTRWPWG 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 SCTRWPWG that such rescheduled implementation is consistent with the 2016 South Central Texas Regional Water Plan.

**Codification of Seawater Desalination:** The SCTRWPWG 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 SCTRWPWG 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.

**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.

**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.

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

**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.

**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.

**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**

**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.”*

**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.

**Ecologically Unique Stream Segments and Unique Reservoir Sites:**

**A. 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  , along with a letter from Texas Parks & Wildlife Department summarizing their review of the recommendation package.

**B. 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 2002 (Table \_ and Figure\_). 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.

**Instream Flows and Bays and Estuaries:** The SCTRWPG is appreciative of legislative action in the form of Senate Bill 3 (SB3, 80<sup>th</sup> Texas Legislature) that established and funded an environmental flows process integrating best-available science and diverse regional stakeholder input into the process for selection of appropriate instream flow and freshwater inflow goals on a stream-by-stream and estuary-by-estuary basis. The appropriate balance of environmental and human needs during severe drought has very significant effects on the firm yield and associated



cost of potential water supply projects. The 2016 regional water plans are the first to be prepared using environmental flow standards adopted pursuant to the SB3 process.

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

**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.

**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**

**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.

**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.

**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.

**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.

**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.

**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**

**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.

**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.

**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**

**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.

**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.

**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.

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

**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.

**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.

## **AGENDA ITEM 11**

Discussion and Appropriate Action Regarding the Evaluation and Recommendation of Water Management Strategies (Task 4D)

# Victoria Water Management Strategies<sup>1</sup>

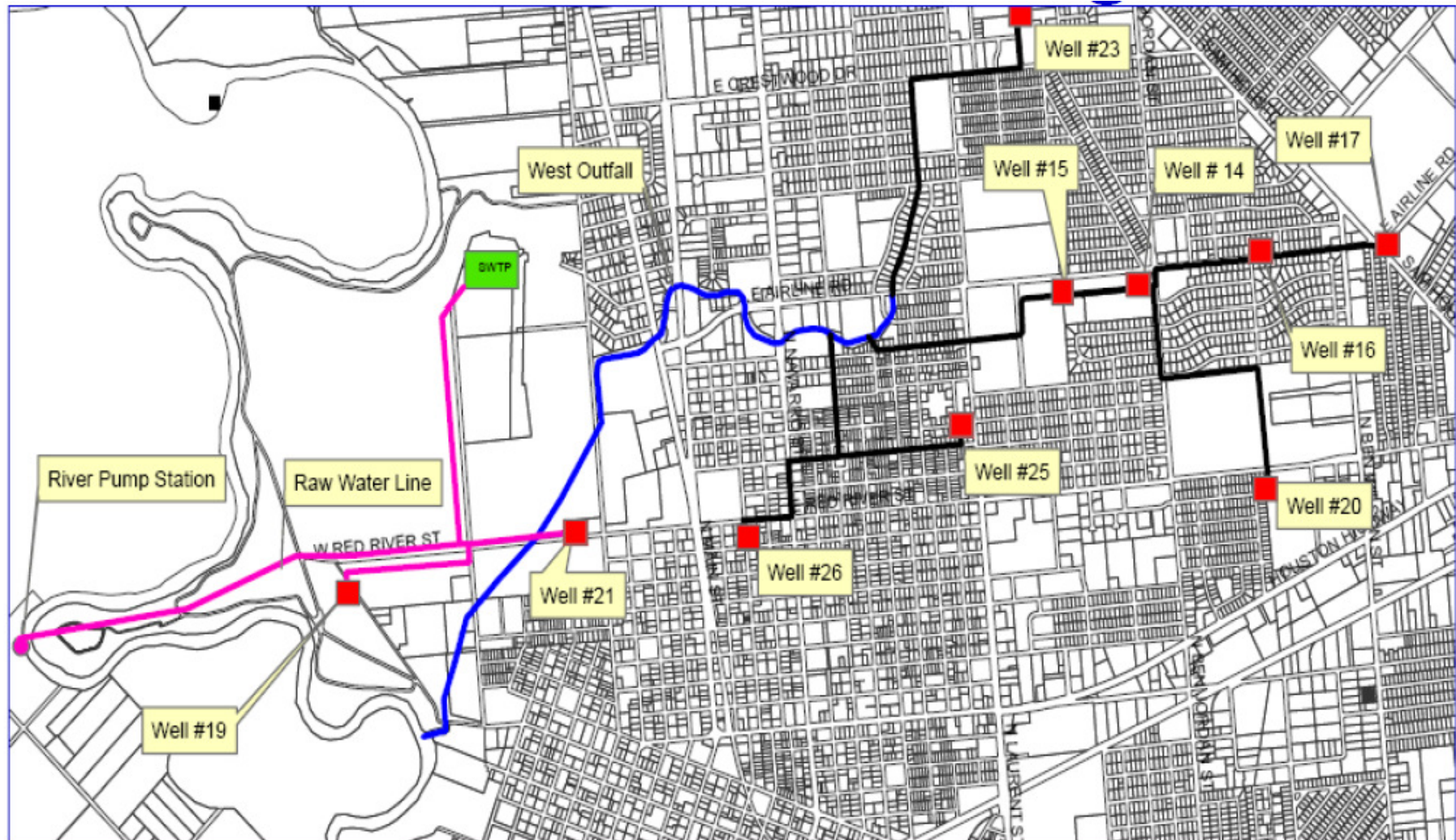
- **Surface Water Rights** – Continued acquisition of existing rights from willing sellers and amendments to facilitate use.
- **Groundwater Exchange** – Potential expansion of existing conjunctive use program involving surface water rights and permitted wells.
- **Aquifer Storage & Recovery (ASR)** – Development of an ASR project to firm up interruptible surface water rights and meet seasonal peaking needs.
- **Balancing Storage** – Development of additional off-channel storage and/or new ASR to meet seasonal peaking needs and help firm up interruptible surface water rights.

<sup>1</sup> In addition to Conservation & Drought Management

# Surface Water Rights

<b>CA#/P#</b>	<b>Old Name</b>	<b>Priority Date</b>	<b>Annual Diversion (acft/yr)</b>	<b>Maximum Diversion (cfs)</b>
3844	Schmidt	8/16/1918	608	9.8
3858	Murphy	6/27/1951	1,000	4.44
3860	Lipscomb	8/15/1951	260	8.91
3862	Big Rack	12/12/1951	262.7	12.62
3606	O'Connor Trust	7/10/1978	4,676	13.4
4117	???	4/2/1984	200	1.67
5466	Victoria	5/28/1993	20,000	150
		<b>Sums</b>	<b>27,006.7</b>	<b>200.84</b>

# Groundwater Exchange





# Groundwater Exchange

Well #	Capacity (gpm)	Capacity (cfs)	Capacity (acft/yr)	Victoria County GCD Authorized Production (acft/yr)
14	1,560	3.48	2,516	825
15	2,100	4.68	3,387	1,158
16	1,557	3.47	2,511	1,344
17	1,529	3.41	2,466	285
19	500	1.11	807	664
20	1,538	3.43	2,481	623
21	2,090	4.66	3,371	639
23	1,830	4.08	2,952	333
25	1,705	3.80	2,750	1,264
26	2,380	5.30	3,839	1,408
City Park	560	1.25	903	???
<b>Sums</b>	<b>17,349</b>	<b>38.66</b>	<b>27,984</b>	<b>8,544</b>

# Aquifer Storage & Recovery (ASR)

## Water Source:

- ~27,000 acft/yr surface water rights (priorities 1918-1993) with maximum diversion rate of ~201 cfs

## Key Objectives:

- Seasonal storage to meet peak demands
- Long-term storage to increase reliability during drought
- Deferring additional water treatment capacity
- Emergency storage for use during flood events
- Disinfection byproduct reduction

# Victoria Area ASR Feasibility Study

- Participants – City of Victoria, Victoria County GCD, Port of Victoria, GBRA, LNRA, & TWDB
- Technical Consultants – NEI, ARCADIS-US, ASR Systems, & INTERA
- Seven ASR options examined for meeting key objectives.
- Results summarized in a report completed in late 2014.

# Victoria ASR

City above Upper Goliad formation of the Evangeline Aquifer, which is suitable for ASR.



Phased project potentially including:

- 10 new ASR wells
- Retrofit 6 existing wells
- Storage zone and Chicot Aquifer monitoring wells

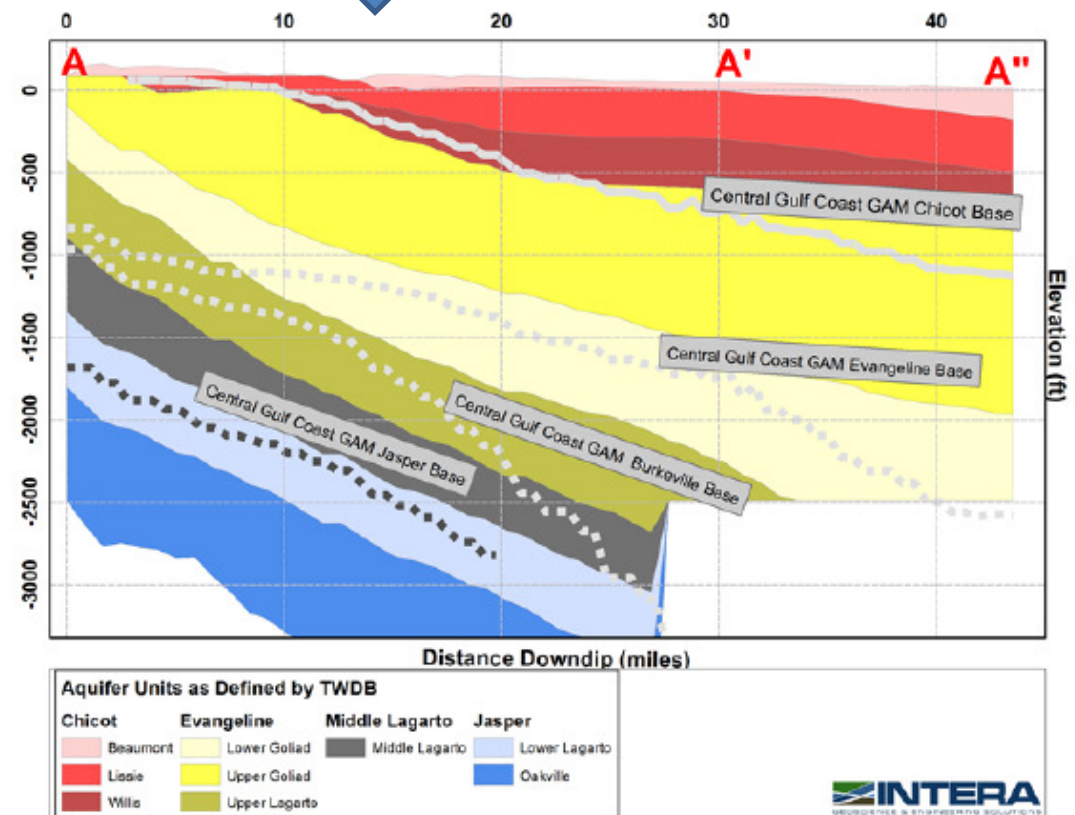


Figure 6.3: Profile of Geological Units and Aquifers from the TWDB Study (Young and others, 2010) and of Aquifers from the SWAP Study (Strom and others, 2003) that comprise the Gulf Coast Aquifer System along Cross Section A-A'

# Victoria ASR Costs & Permitting

## Costs

- Capital = \$14.5M
- Project = \$21.1M
- Annual = \$1.5M
- Unit = \$192/acft/yr  
(Yield = ~7,900 acft/yr)

## Permitting

- TCEQ – Amend surface water rights and obtain Class V injection permit
- VCGCD – Obtain drilling and production permits

# Balancing Storage

New site or sites presently undetermined, but development of additional off-channel and/or aquifer balancing storage is an ongoing pursuit of the City of Victoria. Such pursuit is generally consistent with the Balancing Storage water management strategy recommended by Region L.

## ***Direct Recycled Water Programs***

- Supply and Availability:
  - For Non-Potable Uses Only
    - Irrigation of Parks and Golf Courses
    - Industrial Cooling and Processes
  - Limited by WWTP Production (Typically 50-65% of Total Demand)
  - Limited by Customers Within Economical Distance from WWTPs
- Potential WUGs Identified in 2016 SCTRWP:
  - City of San Marcos\*
  - City of New Braunfels\*
  - City of Kyle\*
  - **SAWS**
  - **SARA**
  - **CCMA**



**DRAFT (Updated 4-2-2015)**

1

## ***Direct Recycled Water Programs***

- Type 1 – Public or food crops generally can come in contact with reuse water.
- Type 2 – Public or food crops cannot come in contact with reuse water.

<b><i>Scenario #</i></b>	<b><i>Treatment</i></b>	<b><i>Distribution</i></b>
1	Existing WWTP <b><u>is achieving treatment that meets the Type 1 effluent requirements.</u></b> Treatment upgrade includes only the addition of chlorine for distribution.	Treated wastewater is supplied to demand location(s) from central WWTP by addition of piping and pump station.
2	Existing WWTP <b><u>is nearly achieving treatment that meets the Type 1 effluent requirements.</u></b> Treatment upgrade includes tertiary treatment and chlorine.	Treated wastewater is supplied to demand location(s) from central WWTP by addition of piping and pump station.

**DRAFT (Updated 4-2-2015)**

2

## ***Direct Recycled Water Programs***

- Potential Environmental Issues

Implementation Measures	Development of additional wastewater treatment plant facilities, distribution pipelines, and pump stations.
Environmental Water Needs / Instream Flows	Potential low impacts on instream flows due to decreased effluent/return flows; possible increased water quality.
Bays and Estuaries	Potential low negative impact due to reduced freshwater inflow and nutrient loading.
Localized Fish and Wildlife Habitat	Variable impacts depending on changes in volume of effluent return flows; in the case of substantially reduced stream flows, potential high negative impact to fish and wildlife habitat.
Cultural Resources	None anticipated.
Threatened and Endangered Species	None anticipated with recommended WMSs.

DRAFT (Updated 4-2-2015)

3

## ***Direct Recycled Water Programs***

- Facilities:
  - Potential Upgrades to existing WWTPs
  - Dedicated Recycle Distribution System
    - Pump Stations
    - Transmission Pipelines (Purple Pipe)
    - Storage Tanks
  - Distribution Systems May Need to be Sized for Peak Demands for Short Durations (Irrigation)

- Cost:

### ***Short-Term (Debt Service Period)\****

Scenario	Capacity (MGD)			
	0.5	1	5	10
1	\$1,047	\$770	\$564	\$502
2	\$2,144	\$1,440	\$775	\$631

\* Cost in \$/acft/yr

### ***Long-Term (Beyond Debt Service Period)\****

Scenario	Maximum Capacity (MGD)			
	0.5	1	5	10
1	\$191	\$163	\$110	\$96
2	\$837	\$545	\$230	\$167

\* Cost in \$/acft/yr

DRAFT (Updated 4-2-2015)

4



***City of San Marcos***

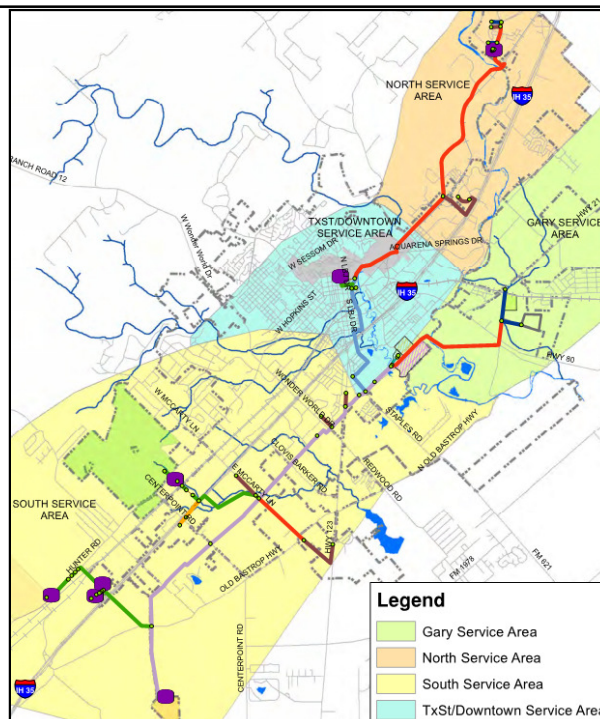
- Existing Recycled Water Program:
  - Existing users include a power generating plant and a cement manufacturing plant (224 acft)
  - Reclaimed water pump station located at the San Marcos WWTP
  - No additional treatment needed (Existing = Type 1)
  - 18-inch pipeline that extends approximately 8.5 miles
- Potential Demand estimated to be ~2,100 acft/yr
- Project costs are approximately \$22.1 million
- Unit Cost = \$869/acft/yr
- Goal to be 0 discharge by 2070**

**DRAFT (Updated 4-2-2015)**

5

***City of San  
Marcos***

**DRAFT**  
**(Updated 4-2-2015)**



6

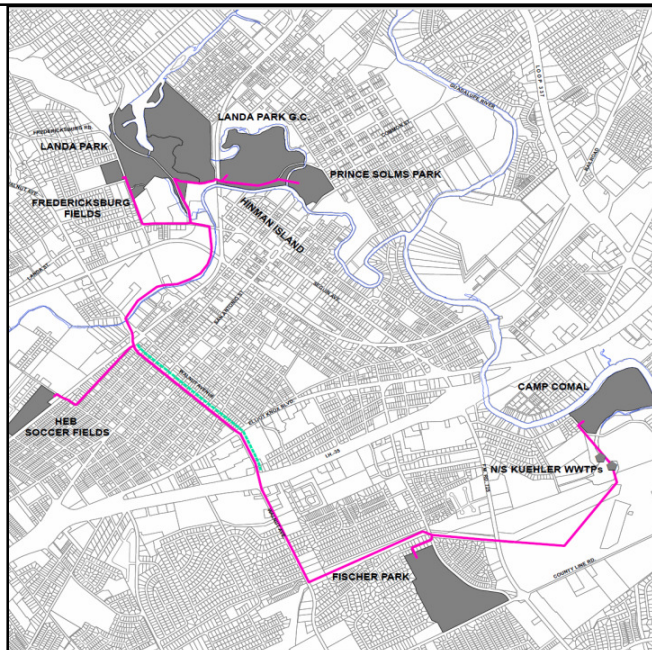
## ***New Braunfels Utilities***

- Existing Recycled Water Program:
  - Sundance Park (up to 2 MG/month)
  - 10-inch pipeline extends approximately 0.75 miles
  - Recycled water from Gruene WWTP
- Approximately 173 acres of potential irrigated parkland
- Proposed expanded system to rely on South Kuehler WWTP
- Potential Demand estimated to be 906 acft/yr
- Potential reduction in potable water use for irrigation
- Project costs are approximately \$5.2 million
- Unit Cost = \$481/acft/yr
- **Goal to be 0 discharge by 2070**

DRAFT (Updated 4-2-2015)

7

## ***New Braunfels Utilities***



DRAFT  
(Updated 4-2-2015)

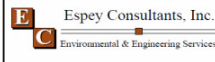


FIGURE 9  
ALTERNATIVE 1  
SOUTH TRIB.-WALNUT AVE.

8

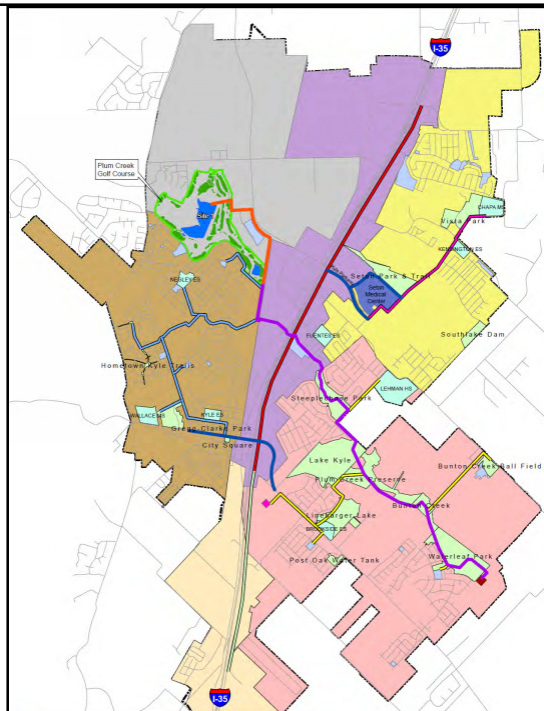
## City of Kyle

- Recycled water currently in use
  - Plum Creek Golf Course (privately owned)
- Parks are presently maintained without supplemental irrigation
- Average wastewater flows are projected to exceed 4 MGD by 2035
- Additional treatment required for Type 1 standards
- Potential Demand estimated to exceed 1,325 acft/yr
- Project costs are approximately \$11.2 million
- Unit Cost = \$710/acft/yr
- **Goal to be 0 discharge by 2070**

DRAFT (Updated 4-2-2015)

9

## City of Kyle



DRAFT (Updated 4-2-2015)

10

### ***Additional Recycle Expansions***

- **SAWS:**
  - Recycle expansion of 40,000 acft/yr (in lieu of 15,000 acft/yr expansion)
  - Direct Reuse Pipeline of 50,000 acft/yr to delivery water to CPS
- **SARA: Future (2070) net discharges to stream will be 4,355 acft/yr for stream maintenance. All other reuse will be consumed.**
- **CCMA: Future (2070) reuse will be 90% of WWTP influent**

DRAFT (Updated 4-2-2015)

11

### **Summary of Recycle WMS**

Entity	Capacity (acft)	Project Costs	Annual Costs	Unit Costs (\$/acft)
CCMA	27,270	\$163,595,239	\$13,689,540	\$502
Kyle	4,368	\$37,074,649	\$3,102,382	\$710
New Braunfels	11,709	\$67,279,580	\$5,629,910	\$481
San Marcos	8,341	\$86,664,302	\$7,252,011	\$869
SARA	6,075	\$108,897,000	\$9,112,000	\$1,500
SAWS	40,000	\$170,830,000	\$18,316,000	\$458

DRAFT (Updated 4-2-2015)

12

# ***Facilities Expansions***

- **Expansions of major components of existing infrastructure (facilities) so WUGs can continue to provide a safe and reliable water supply to their customers during the planning period.**
- **WUGs:**
  - **Atascosa Rural WSC:** Interconnect with Benton City WSC and East Medina
  - **City of Helotes:** Integrating System with SAWS
  - **Gonzales County WSC:** Interconnects with Texas Water Alliance and SSLGC. Building additional well to utilize yield from Carrizo Aquifer (March 2015)
  - **Springs Hill WSC:** Agreement to utilize Seguin's 90% completed elevated storage tank. Emergency Interconnect with Schertz- Seguin pipeline
  - **Yancey WSC:** WTP Expansion for Groundwater. Looking to purchase new well site.
  - **SAWS:** Water Resource Integration Pipeline. Medina Lake Optimization (Membrane Improvements at WTP). **Direct Reuse Pipeline from Dos Rios to CPS.**
  - **Port O' Connor:** WTP Improvements. Distribution System Improvements. Groundwater Treatment. 3 GST's and associated Booster/ Feed Pumps.
  - **CCMA:** WWTP Expansion
  - **GBRA: Western Canyon WTP Expansion**
  - **Hays County: Transmission Facilities to move new supplies from southern Hays County to the Wimberley/Woodcreek Area.**

# Facilities Expansions

<i>WUG</i>	<i>Description</i>	<i>Total Capacity of Facilities Expansion (acft/yr)</i>	<i>Project Cost</i>	<i>Annual Cost</i>
Atascosa Rural WSC	(4) 12-in. dia. transmission pipeline connection	11,372	\$80,855,000	\$7,559,000
Hays County	18 mile, 26 in Diameter transmission pipeline	15,314	\$52,174,000	\$6,535,000
City of Helotes	12-in. dia. transmission pipeline connection. 8-in. dia Sewer line.	2,843	\$3,597,000	\$300,000
GBRA	5 MGD WTP Expansion and Pump Stations	5,600	\$13,528,000	\$678,000
Gonzales County WSC	(2) 12-in. dia. transmission pipeline connection	5,686	\$19,562,000	\$861,000
Springs Hill WSC	Expansion of Lake Placid WTP capacity from 1 MGD to 2MGD	1,120	\$2,542,000	\$806,000
SAWS	Water Integration Pipeline 60" diameter pipeline, 48" diameter Pipeline, storage Tanks, Pumps, Delivery Point Facilities.	84,000	\$205,000,000	Phased
SAWS	Medina Lake Optimization,	N/A	\$4,100,000	\$343,085
SAWS	Direct Pipeline from Dos Rios WWTP to Calaveras Lake (CPS)	50,000	\$30,000,000	\$2,500,000
Port O' Connor	Treatment Expansion for two wells and distribution system improvements.	672	\$21,534,000	Phased
CCMA	WWTP Expansion (3.8 MGD), New Mid-Cibola WWTP (0.5 MGD). Distribution Facilities.	4,816	\$23,316,500	\$4,400,000

**DRAFT**  
**(Updated 4-2-2015)**

## **AGENDA ITEM 12**

Discussion and Appropriate Action Regarding Chapter 6 Cumulative Effects Results and Chapter 11 Comparison of the Previous Regional Water Plan

# **2016 South Central Texas Regional Water Plan Initially Prepared Plan**

## **Cumulative Effects & Environmental Assessments of Regional Water Plan Implementation**

*April 2, 2015*

1

### **Cumulative Effects of the 2016 Plan (Chapter 6)**

- Describe the Potential Impacts of the Regional Water Plan and How the Plan is Consistent with Long-term Protection of Water Resources, Agricultural Resources, and Natural Resources
- Hydrologic Assessments
  - Reporting of Groundwater Levels Based on Full Use of the MAGs
  - Evaluation of Surface Water Flows at 7 Locations Throughout the Region
- Environmental Assessment

**DRAFT (4-2-15)**

2



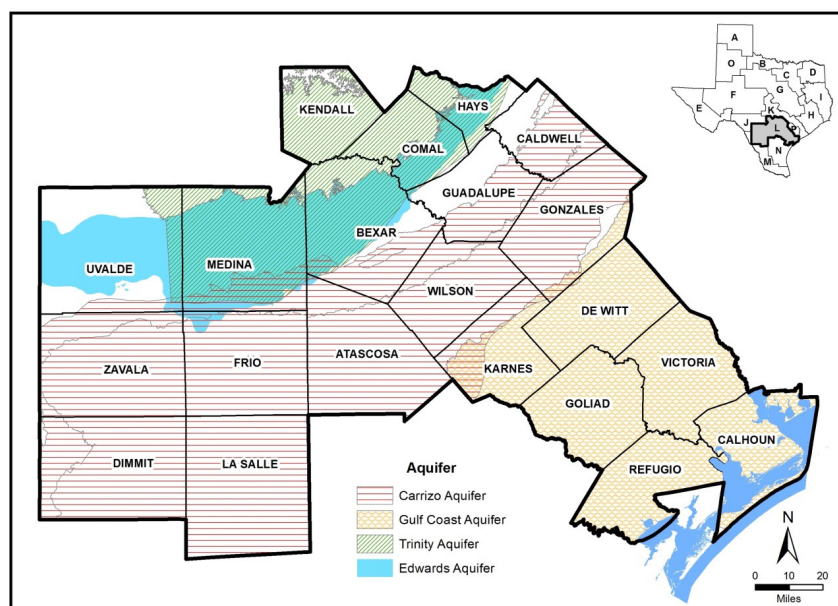
## Cumulative Effects of the 2016 Plan (Chapter 6)

- Evaluate Streamflows and Estuary Inflows for 2 Scenarios
  1. Baseline (SCTRWP Surface Water Supply Evaluation)
    - Edwards Springflows with EAHCP Implementation
    - Effluent Consistent with 2011 Reported Discharges, Adjusted for Current Levels of Reuse
    - Water Rights at Full Authorized Consumptive Levels
  2. With RWP Implementation
    - Edwards Springflows with EAHCP Implementation
    - Effluent Consistent with Projected Discharge Levels, Adjusted for Planned Level of Reuse
    - Water Rights at Full Authorized Consumptive Levels
    - Effects of Implementation of All Recommended WMS through 2070

DRAFT (4-2-15)

3

## Cumulative Effects of the 2016 Plan (Chapter 6)



DRAFT (4-2-15)

## Cumulative Effects of the 2016 Plan (Chapter 6)

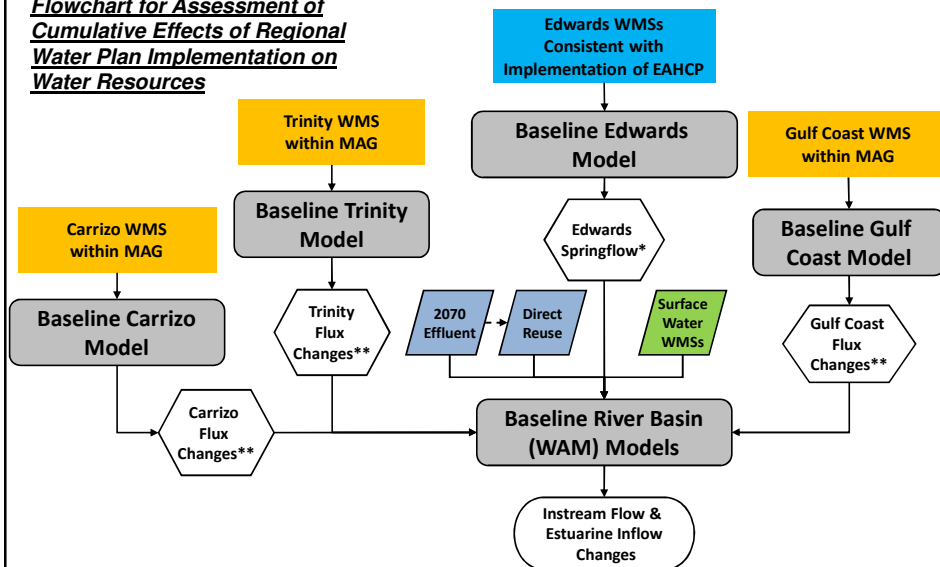
### Guadalupe – San Antonio River Basin

- 1) Guadalupe River above Comal River @ New Braunfels
- 2) San Marcos River @ Luling
- 3) Guadalupe River @ Victoria
- 4) San Antonio River near Falls City
- 5) San Antonio River @ Goliad
- 6) Guadalupe River @ Saltwater Barrier near Tivoli
- 7) Guadalupe Estuary



## Cumulative Effects of the 2016 Plan (Chapter 6)

### Flowchart for Assessment of Cumulative Effects of Regional Water Plan Implementation on Water Resources

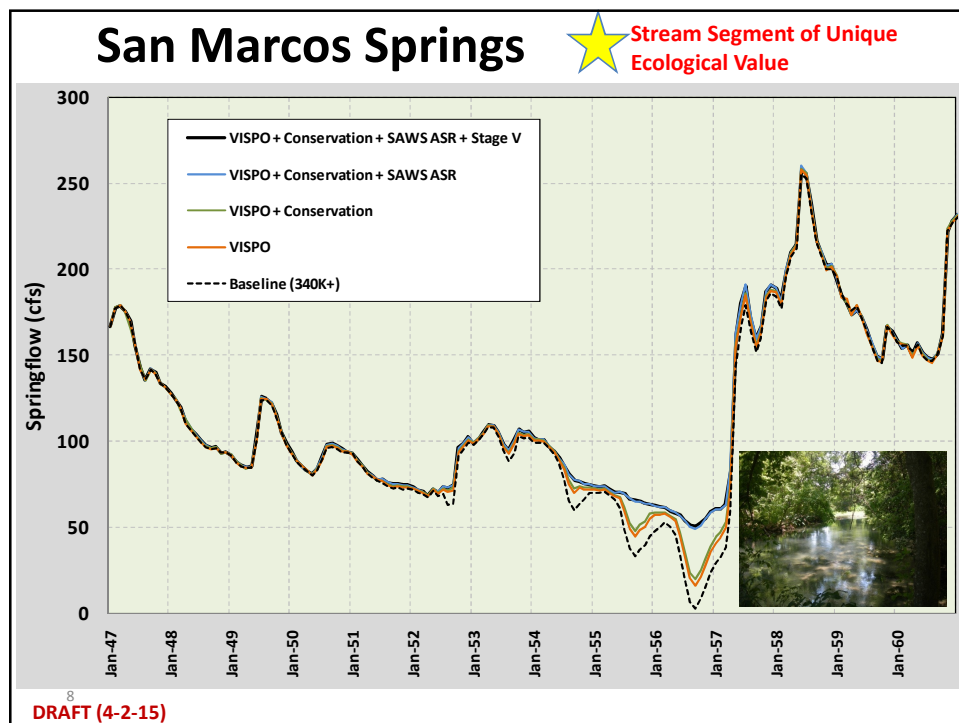
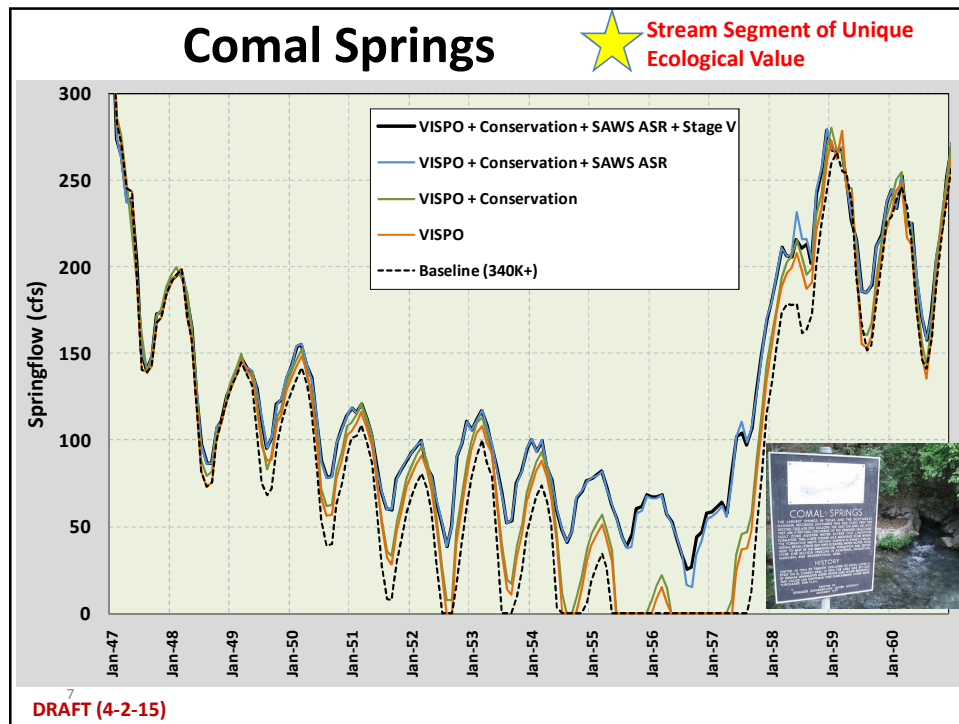


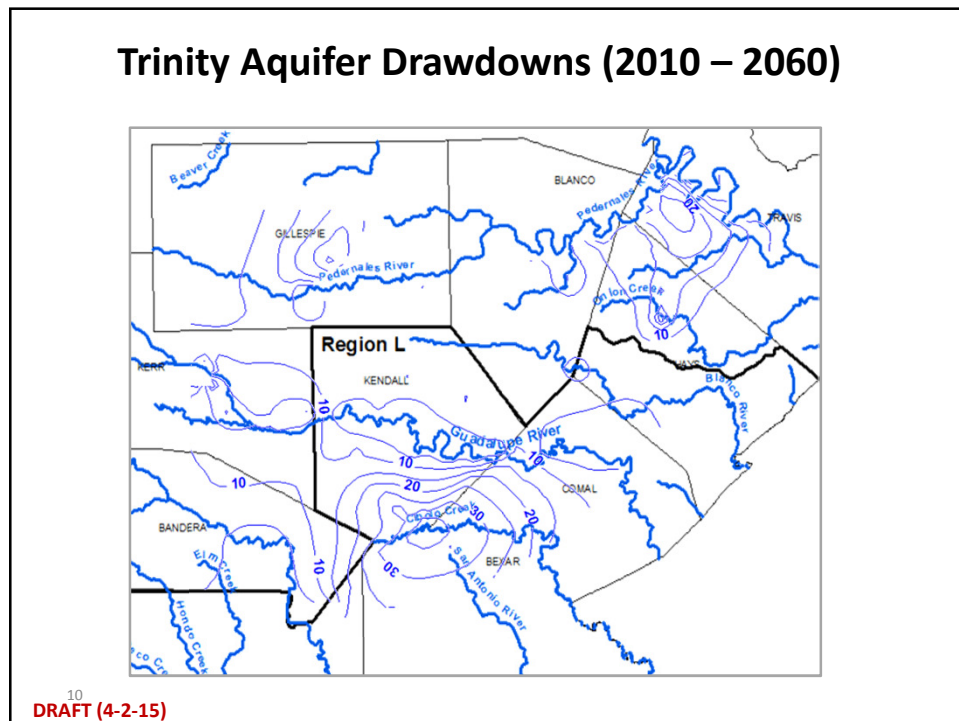
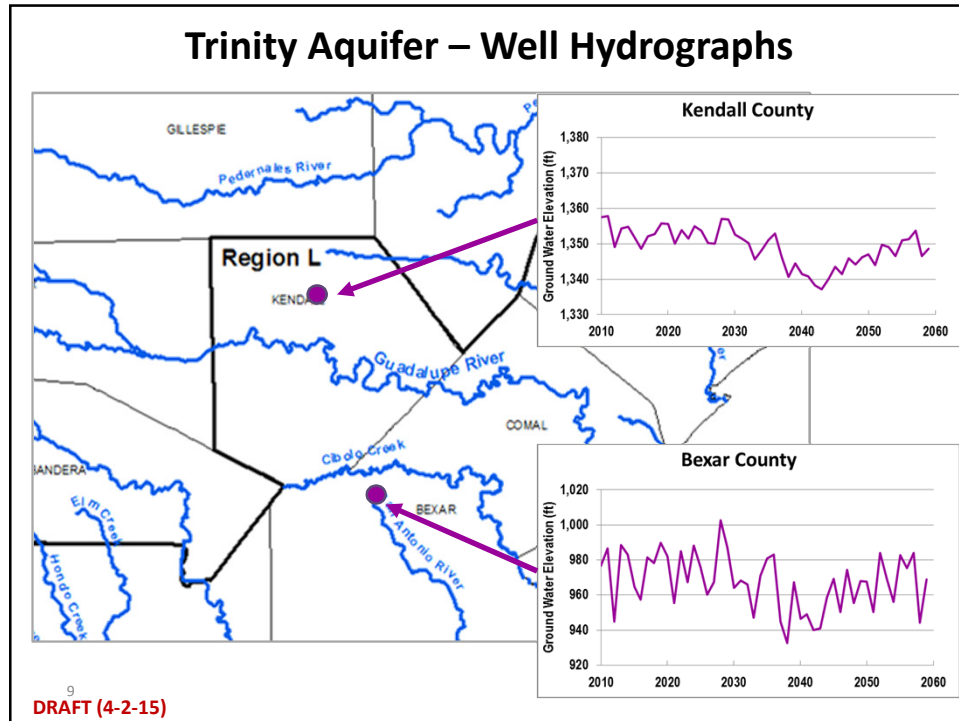
\* Springflows Consistent with Full EAHCP Implementation

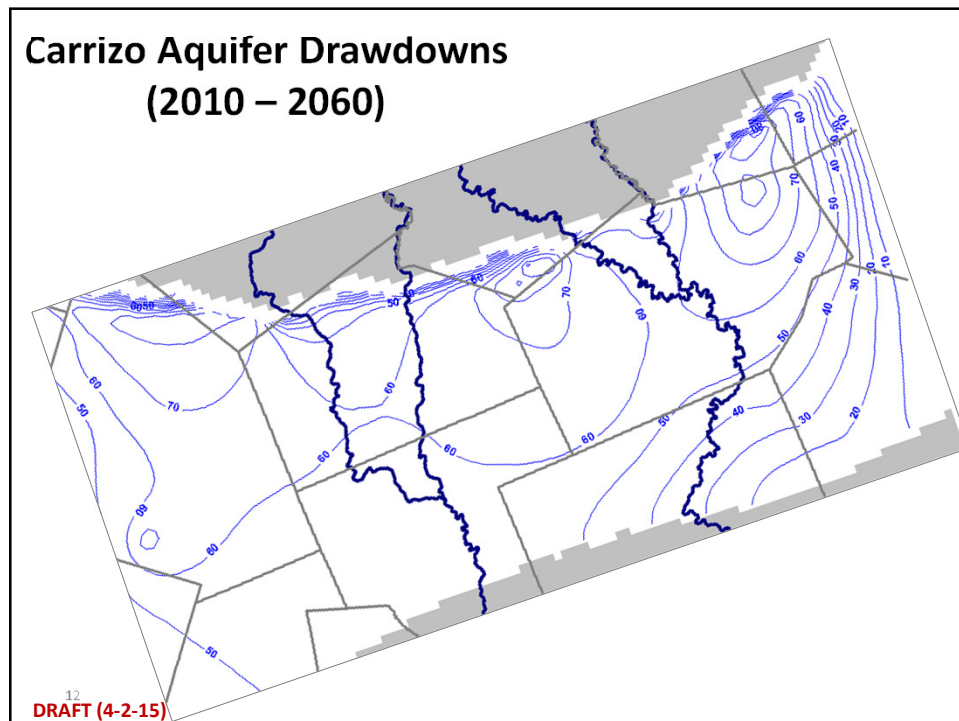
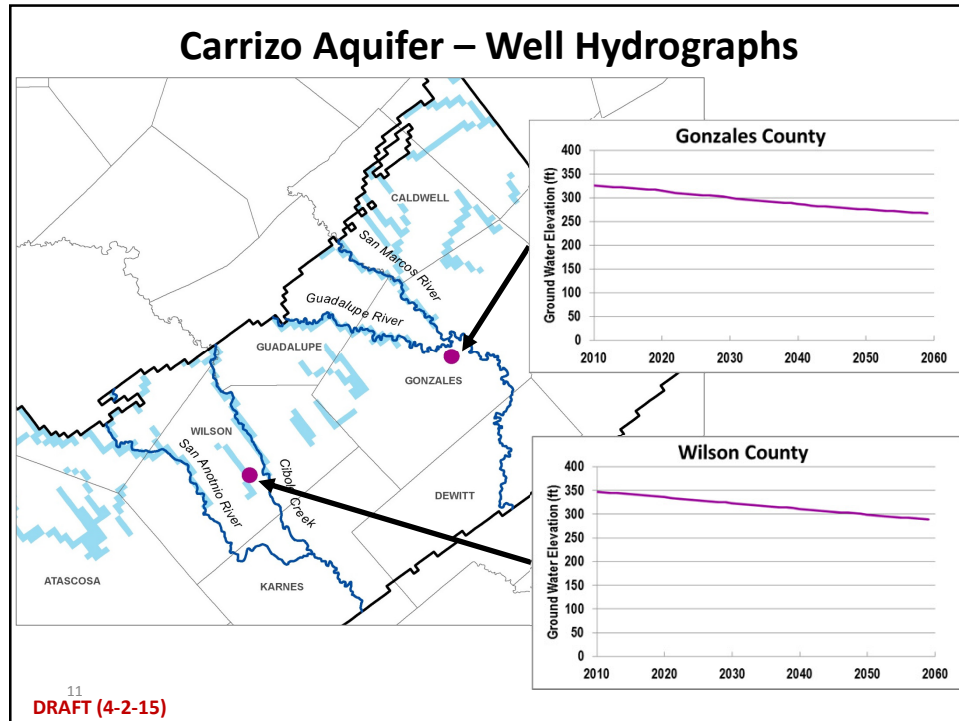
\*\* Flux Changes at Full MAG Pumpage Levels

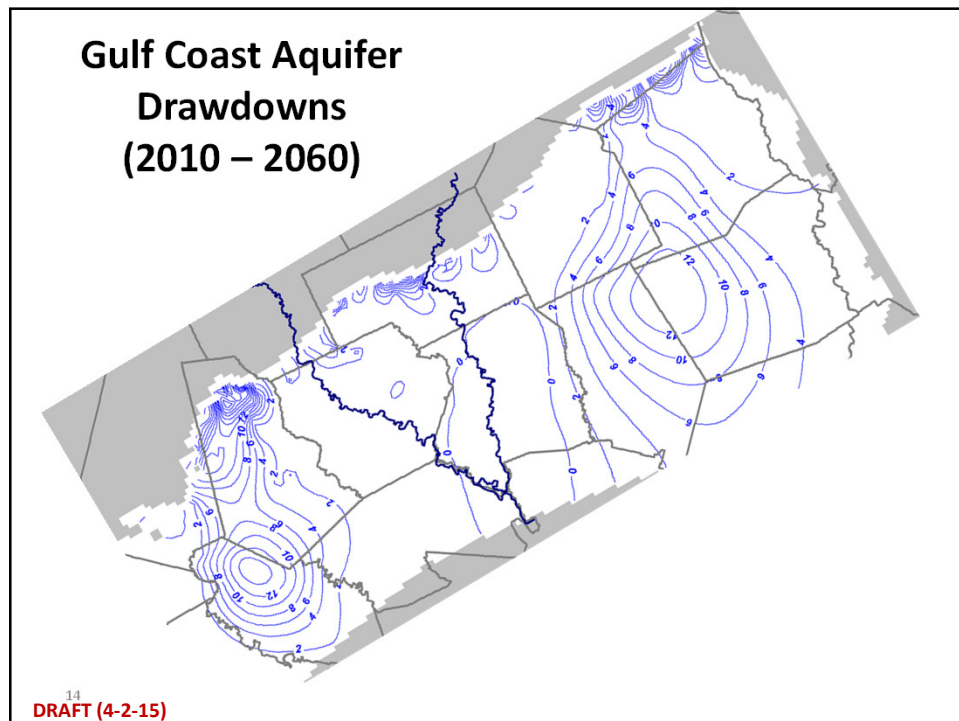
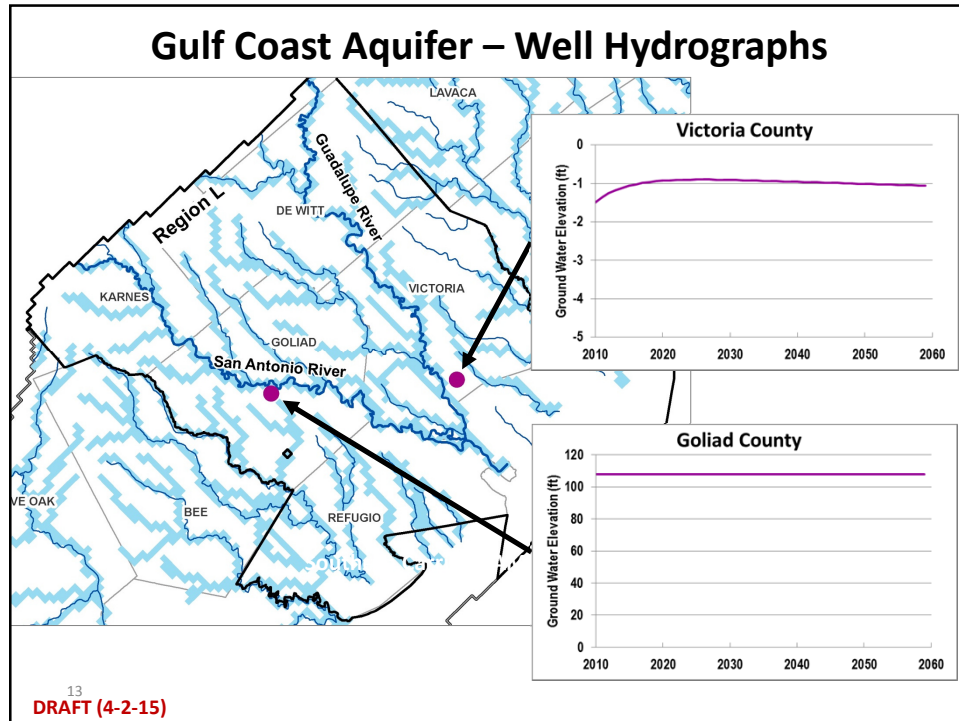
2016 South Central Texas  
Initially Prepared Plan

DRAFT (4-2-15)





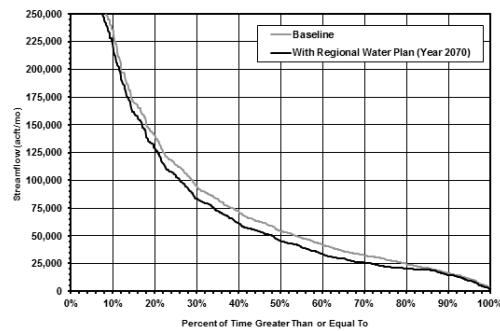
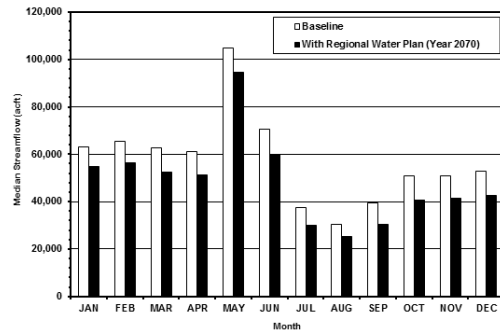






## Cumulative Effects of SCTRWP

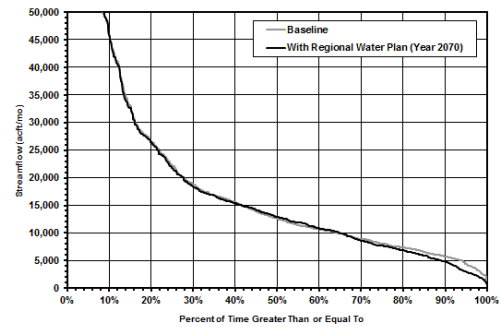
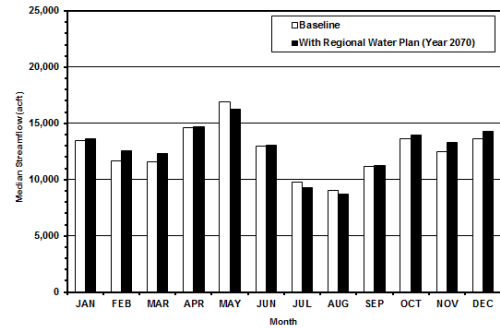
### Guadalupe River @ Victoria



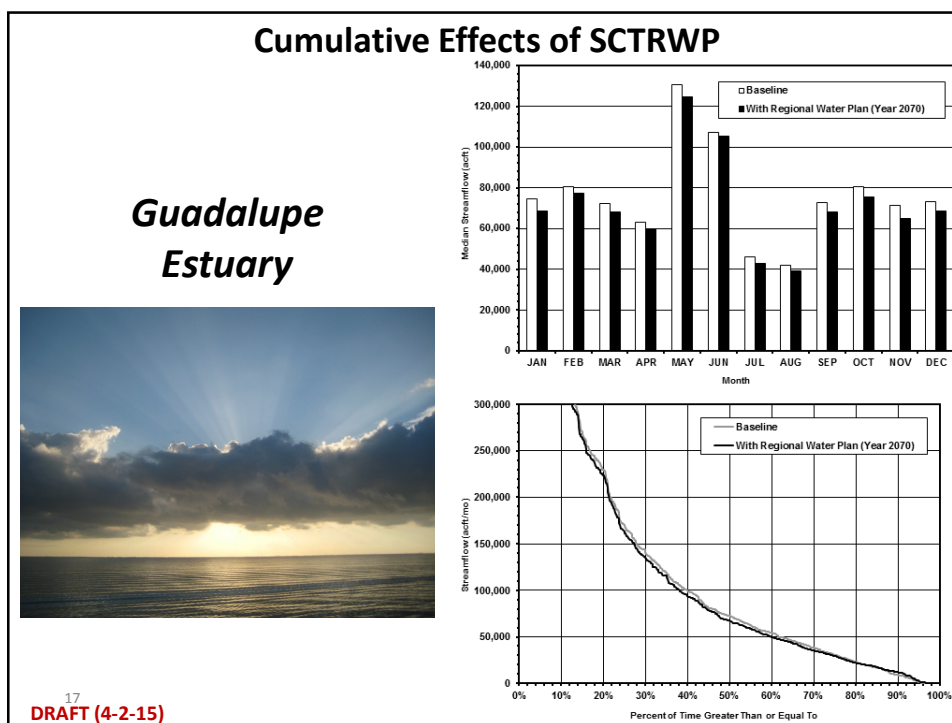
15  
DRAFT (4-2-15)

## Cumulative Effects of SCTRWP

### San Antonio River @ Falls City



16  
DRAFT (4-2-15)

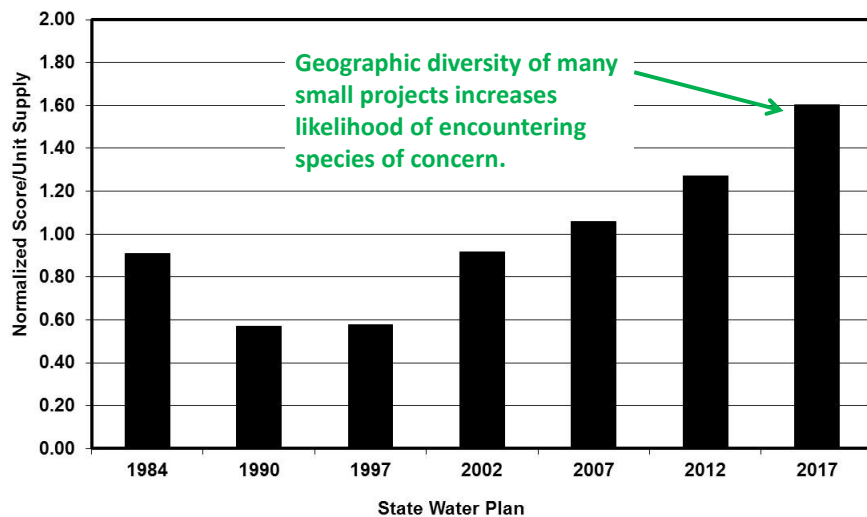


## Environmental Assessment

- Comparison of the 2016 Regional Water Plan with Past State Water Plans in Terms of Cumulative Potential Impacts Associated with Implementation & Long-term Operations of Recommended Water Management Strategies
- Matrix-Based Approach Considering the Following:
  - Endangered & Threatened Species
  - Vegetation & Wildlife Habitats
  - Water Quality & Aquatic Habitats
  - Cultural Resources

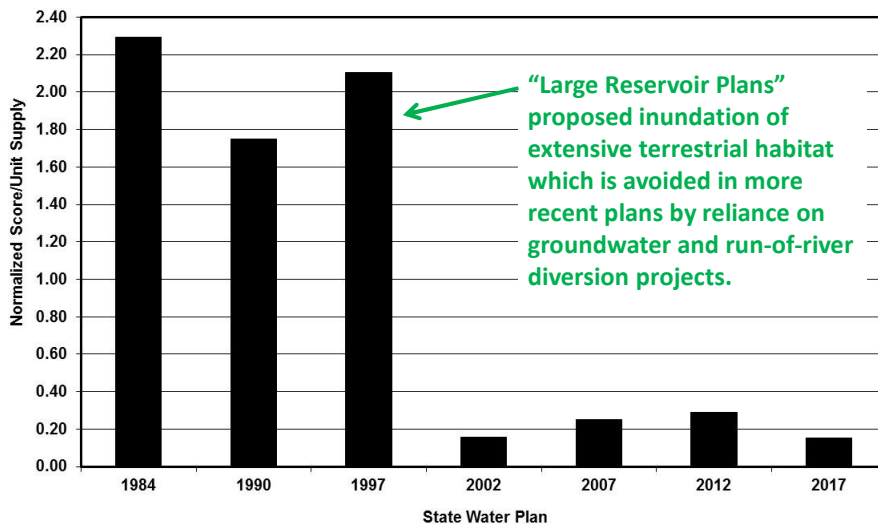


### Cumulative Potential Impact Scores for Endangered & Threatened Species



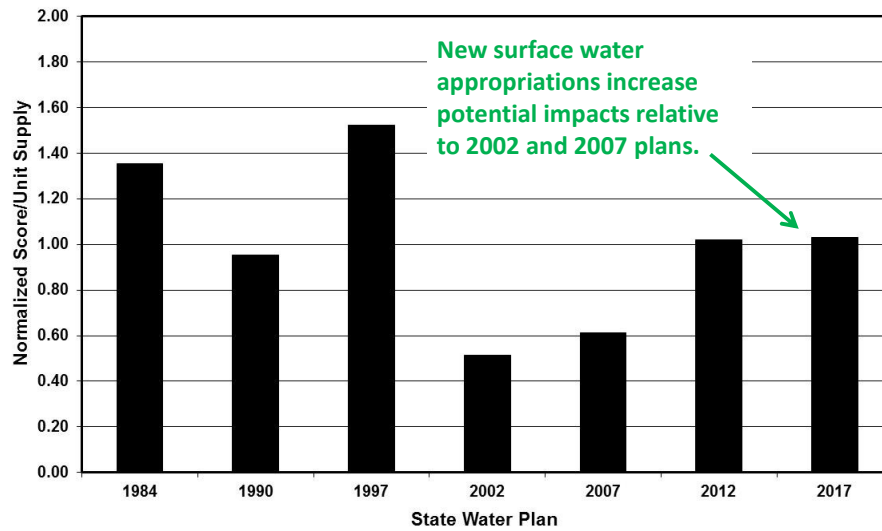
19

### Cumulative Potential Impact Scores for Vegetation & Wildlife Habitats



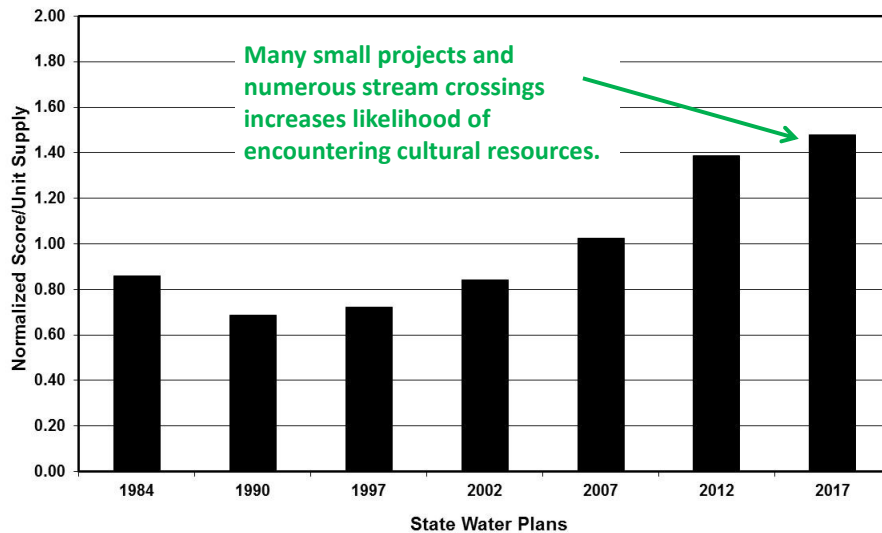
20

### Cumulative Potential Impact Scores for Water Quality & Aquatic Habitats

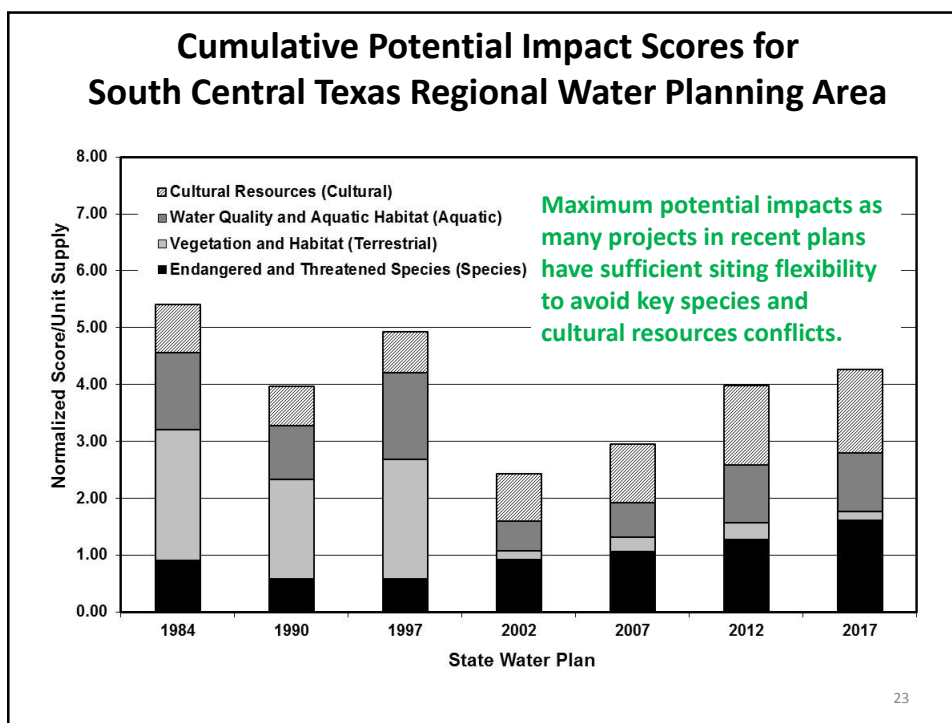


21

### Cumulative Potential Impact Scores for Cultural Resources



22



### Potential Effects on Stream Segments Recommended for Designation as Having Unique Ecological Value

- Nueces, Frio, and Sabinal Rivers - No recommended water management strategies affect the segments recommended for designation.
- San Marcos River – Implementation of the EAHCP is expected to enhance biological and hydrologic functions as well as water quality and protection of endangered species.
- Comal River – Implementation of the EAHCP is expected to enhance biological and hydrologic functions as well as water quality and protection of endangered species.

### **Selected Environmental **Concerns** of Initially Prepared 2016 Region L Plan**

- 1) Reductions in instream flows and freshwater inflows to bays & estuaries associated with surface water supply and direct consumptive reuse projects.
- 2) Projects located in stream segments identified by TPWD as ecologically significant.
- 3) Effects on small springs associated with groundwater development.
- 4) Intake siting, brine disposal, and effects on marine species and habitat associated with seawater desalination projects.

<sup>25</sup>  
**DRAFT (4-2-15)**

### **Selected Environmental **Benefits** of Initially Prepared 2016 Region L Plan**

- 1) Emphasis on Conservation, Drought Management, groundwater development, and use of existing surface water rights avoids or delays projects with greater impacts.
- 2) Implementation of the Edwards Aquifer Habitat Conservation Plan and development of non-Edwards supplies contribute to springflow maintenance and endangered species protection.
- 3) Plan avoids impacts associated with development of new mainstem reservoirs.
- 4) Long-term reliance on seawater desalination perceived to have fewer associated impacts than development of new (fresh) surface water supplies.

<sup>26</sup>  
**DRAFT (4-2-15)**

# Discussion

DRAFT (4-2-15)

27

## **AGENDA ITEM 13**

Discussion and Appropriate Action Regarding the  
Recommendations of Potentially Feasible Water Management  
Strategies for Inclusion into the 2016 Initially Prepared Plan (IPP)

2016 SCTRWP Potentially Feasible Water Management Strategies

	Water Management Strategy	YR 2070 Supply (acft/yr)	Unit Cost (\$/acft/yr)	Sponsor	Notes
Recommended Water Management Strategies	Conservation	Varies	Varies	All Municipal Users	
	Drought Management	Varies	Varies	Municipal Users	Those with Needs in YR 2020
	CRWA Wells Ranch - Phase 2 - MAG-Limited	7,829*	\$800	CRWA	Limited to 7,658 acft/yr in YR 2030
	Brackish Wilcox Groundwater for CRWA - MAG-Limited	3,839	\$2,619	CRWA	
	CRWA Siesta Project	5,042	\$1,186	CRWA	
	Edwards Transfers, Carrizo Transfers, or Trinity	300	TBD	CRWA	
	Carrizo Aquifer (Wilson Co) - MAG-Limited	0	N/A	CVLGC	
	Carrizo Aquifer (Wilson Co) w/ Conversions	10,000	\$1,834+	CVLGC	
	GBRA Mid-Basin Project (ASR)	50,000	\$1,637	GBRA	
	GBRA Lower Basin Storage (500 acre site)	51,800	\$140	GBRA	
	GBRA Lower Basin New Appropriation	42,000	\$591	GBRA	
	Integrated Water-Power Project	100,000	\$2,393	GBRA	
	Victoria County Steam-Electric Project	29,100	\$1,225	GBRA	
	Western Canyon WTP Expansion	N/A	N/A	GBRA	Up to 5,600 acft/yr of Capacity
	Hays/Caldwell PUA Project - Phase I & II - MAG-Limited	21,833	\$1,926	HCPUA	
	Lavaca Off-Channel Reservoir	16,963	\$867	LNRA	6,963 acft/yr for Region N
	Brackish Wilcox Groundwater for SAWS - MAG-Limited	5,622	\$1,289	SAWS	
	Expanded Local Carrizo - MAG-Limited	5,419	\$700	SAWS	
	Vista Ridge Consortium - MAG-Limited	34,894	\$2,177	SAWS	
	Expanded Brackish Project - MAG-Limited	0	N/A	SAWS	
	SAWS Seawater Desalination	84,023	\$2,713	SAWS	75 MGD of Potable Supply
	Advanced Meter Infrastructure for SAWS	5,598	\$216	SAWS	Supply in terms of Saved Water (Leaks)
	SAWS Conservation Goals	2,792	TBD	SAWS	Varies from 2,792 acft/yr to 15,974 acft/yr
	Long-term Drought Management for SAWS	68,190	\$342	SAWS	
	SAWS Direct Reuse	40,000	\$458	SAWS	
	Water Resources Integration Pipeline	N/A	N/A	SAWS	
	Dos Rios WWTP - CPS Pipeline	50,000	N/A	SAWS	Direct Recycle Pipeline to Lake Braunig
	Expansion Carrizo Aquifer (Guadalupe County)	5,720	\$1,070	SSLGC	
	Brackish Wilcox (Gonz Co) - MAG-Limited	1,392*	\$5,032	SSLGC	Limited to 0 acft/yr in YR 2030
	TWA Carrizo Project - MAG-Limited	15,000*	\$2,490	TWA	Limited to 14,680 acft/yr in YR 2030
	TWA Trinity Project	5,000	\$613	TWA	
	New Braunfels ASR + WTP Expansion	8,300	\$462	NBU	
	New Braunfels Trinity	1,090	\$634	NBU	
	Direct Reuse/Recycle	11,709	\$481	NBU	Zero discharge by 2070
	Hays Forestar Project - MAG-Limited	12,356	\$1,942	Hays County	
	Wimberley/Woodcreek Project	N/A	N/A	Hays County	Potential Upsizing for Region K (4,000 acft/yr)
	Uvalde ASR - MAG-Limited	1,155	\$2,803	Uvalde	
	Victoria ASR	7,900	\$192	Victoria	
	Victoria Groundwater-Surface Water Exchange	8,544	\$0	Victoria	Based on current Victoria County GCD permits
	Brackish Wilcox for SS WSC - MAG-Limited	0	N/A	SS WSC	
	Facilities Expansions	N/A	N/A	Municipal Users	Atascosa Rural WSC, Helotes, Gonzales Co WSC, Springs Hill WSC, Yancey WSC, Port O'Connor, and CCMA
					Sabinal, Uvalde, Castroville, East Medina SUD, Hondo, La Coste, Natalia, Yancey WSC, Medina Co Other, Alamo Heights, Atascosa Rural WSC, Converse, Kirby, Leon Valley, SAWS, Shavano Park, Windcrest, CRWA, and Lytle
	Edwards Transfers	11,772	Varies	Municipal Users	Cotulla (YR 2050 Needs), La Salle Co Other (YR 2050 Needs), Floresville, Pearsall, Polonia WSC, and Sunko WSC
	Local GW (Carrizo)	2,812	Varies	Municipal Users	
	Local GW (Wilcox)	2,023	Varies	Crystal Clear WSC	
	Local GW (Gulf Coast)	151	Varies	Municipal Users	Kenedy
	Local GW (Trinity)	9,298	Varies	Municipal Users	Boerne, Garden Ridge, Crystal Clear WSC, and Mountain City
	Local GW (BS Edwards - Brackish)	392	Varies	County Line SUD	
	Local GW (Leona Gravel)	869	Varies	Municipal Users	Castroville, East Medina Co WSC, La Coste, Natalia, and Yancey WSC
	Local Carrizo Conversion (Irrigation)	819	Varies	Municipal Users	Benton City, Polonia WSC, Pearsall, and SS WSC
	Local Carrizo Conversion (Mining)	456	Varies	Municipal Users	Cotulla and La Salle Co Other (YR 2050 Needs)
	Local Yegua-Jackson Conversion (Mining)	249	Varies	Karnes City	336 acft/yr in YR 2020
	Purchase from CRWA	N/A	Varies	8 Municipal Users	Moves water from CRWA to 8 WUGs
	Purchase from CVLGC	N/A	Varies	2 Municipal Users	Moves water from CVLGC to 2 WUGs
	Purchase from GBRA	N/A	Varies	10 Mun/Ind/SE Users	Moves water from GBRA to 10 WUGs
	Purchase from HCPUA	N/A	Varies	3 Mun Users + 1 WWP	Moves water from HCPUA to 3 WUGs & CRWA
	Purchase from LNRA	10,000	Varies	Calhoun Co Ind (Formosa)	New Supply Developed by the Lavaca Off-Channel WMS
	Purchase from SAWS	N/A	Varies	7 Mun/Ind Users	Moves water from SAWS to 7 WUGs
	Purchase from SSLGC	N/A	Varies	4 Municipal Users	Moves water from SSLGC to 4 WUGs
	Purchase from TWA	N/A	Varies	4 Municipal Users	Moves water from TWA to 4 WUGs
	Direct Reuse/Recycle	27,270	\$502	CCMA	Recycle 90% of WWTP Influent
	Direct Reuse/Recycle	4,368	\$710	Kyle	Zero discharge by 2070
	Direct Reuse/Recycle	8,341	\$869	San Marcos	Zero discharge by 2070
	Direct Reuse/Recycle	6,075	\$1,500	San Antonio River Authority	
	Surface WRs	N/A	N/A	Municipal Users	
	Balancing Storage	N/A	N/A	Municipal Users	
Alternative Water Management Strategies	CRWA Wells Ranch - Phase 2 - Envisioned	10,629	TBD	CRWA	
	Brackish Wilcox Groundwater for CRWA - Envisioned	14,700	\$2,197	CRWA	
	Carrizo Aquifer (Wilson Co) - Envisioned	10,000	\$1,834	CVLGC	
	Luling ASR	4,277	\$1,086	GBRA	
	MBWSP - Carrizo Groundwater (Option 0)	15,000	\$1,665	GBRA	
	MBWSP - Surface Water w/ Off-Channel Reservoir (Option 2A)	25,000	\$2,561	GBRA	
	MBWSP - Conjunctive Use w/ ASR (Option 3A)	42,000	\$1,836	GBRA	
	Hays Forestar Project - Envisioned	45,000	\$1,331	Hays County	
	Hays/Caldwell PUA Project - Phase I & II - Envisioned	35,690	\$1,664	HCPUA	
	HCPUA/TWA/GBRA Shared Facilities Project	86,513	\$1,736	Multiple	
	HCPUA/TWA Joint	40,690	\$1,885	Multiple	
	Brackish Wilcox Groundwater for SAWS - Envisioned	33,600	\$988	SAWS	
	Expanded Local Carrizo - Envisioned	30,000	\$553	SAWS	
	Vista Ridge Consortium - Envisioned	50,000	\$1,976	SAWS	
	Expanded Brackish Project - Envisioned	50,000	\$2,041	SAWS	
	Brackish Wilcox for SS WSC - Envisioned	1,120	\$2,554	SS WSC	
	Brackish Wilcox (Gonz Co) - Envisioned	5,000	\$2,124	SSLGC	
	TWA Carrizo Project - Envisioned	15,000	\$2,440	TWA	
	Uvalde ASR - Envisioned	4,000	\$1,629	Uvalde	
Other	Storage Above Canyon (ASR)	504	\$11,875	GBRA	
	Brush Management in Gonzales Co - 10% Participation	1,370	\$1,209	TBD	
	Brush Management in Gonzales Co - 30% Participation	4,631	\$937	TBD	
	Brush Management in Gonzales Co - 50% Participation	6,925	\$1,015	TBD	

**1/20/2015 DRAFT**

<b>Cibolo Valley Local Government Corporation (CVLGC)</b>						
<b>CVLGC Projected Demands (acft/yr):</b>						
<b>Water Purchaser</b>	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
Cibolo	0	2,116	3,441	4,740	5,196	5,196
Schertz	0	0	0	0	2,235	4,804
<b>Total Demand</b>	<b>0</b>	<b>2,116</b>	<b>3,441</b>	<b>4,740</b>	<b>7,431</b>	<b>10,000</b>
<b>CVLGC Supply:</b>						
<b>Source</b>	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b>Total Supply</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>CVLGC Projected Needs:</b>						
	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b>Total System Management Supplies/(Needs)</b>	<b>0</b>	<b>(2,116)</b>	<b>(3,441)</b>	<b>(4,740)</b>	<b>(7,431)</b>	<b>(10,000)</b>
<b>CVLGC Water Management Strategies (WMS) with Estimated Firm Yield (acft/yr):</b>						
	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b>Recommended WMS</b>						
Conservation <sup>2</sup>						
Carrizo Aquifer (Wilson Co)	0	0	0	0	0	0
w/ Transfers	10,000	10,000	10,000	10,000	10,000	10,000
<b>Total Recommended WMS</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>
<b>Management Supplies with Recommended WMS<sup>4</sup></b>	<b>10,000</b>	<b>7,884</b>	<b>6,559</b>	<b>5,260</b>	<b>2,569</b>	<b>0</b>
<b>Alternative WMS<sup>4</sup></b>						
<sup>2</sup> Assigned by Water User Group (WUG) based on Municipal Conservation WMS recommended by SCTRWPWG. <sup>3</sup> 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. SCTRWPWG 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. SCTRWPWG 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, SCTRWPWG may amend this Plan to adjust groundwater supply numbers that are affected by the new MAG amount. <sup>4</sup> Management Supplies and Alternative WMS are included in the event that Recommended WMS are not fully developed.						
				6066	7368	
				870	2172	



<b>Canyon Regional Water Authority (CRWA)</b>						
<b>CRWA Projected Demands (acft/yr):</b>						
<b>Lake Dunlap/Wells Ranch Group Current Demand</b>	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
San Antonio Water System	6,800	6,800	6,800	6,800	6,800	6,800
City of Cibolo	2,550	2,550	2,550	2,550	2,550	2,550
East Central WSC	1,900	1,900	1,900	1,900	1,900	1,900
Green Valley SUD	2,500	2,500	2,500	2,500	2,500	2,500
City of La Vernia	400	400	400	400	400	400
City of Marion	200	200	200	200	200	200
Springs Hills WSC	2,025	2,025	2,025	2,025	2,025	2,025
Crystal Clear WSC	800	1,540	1,540	1,540	1,540	1,540
Converse	0	0	0	0	0	0
<b>Total Current Demand</b>	<b>17,175</b>	<b>17,915</b>	<b>17,915</b>	<b>17,915</b>	<b>17,915</b>	<b>17,915</b>
<b>Lake Dunlap/Wells Ranch Group Potential Future Demand</b>	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
San Antonio Water System	0	0	0	0	0	0
City of Cibolo	1,781	1,781	1,781	1,781	1,781	1,781
East Central WSC		500	500	500	500	500
Green Valley SUD	3,490	4,490	4,490	8,490	8,490	13,490
City of La Vernia	0	25	81	133	184	229
City of Marion	0	0	0	0	0	0
Crystal Clear WSC	800	1,540	1,540	1,540	1,540	1,540
Converse	903	1,111	1,297	1,272	1,265	1,264
<b>Total Future Demand</b>	<b>6,974</b>	<b>9,447</b>	<b>9,689</b>	<b>13,716</b>	<b>13,760</b>	<b>18,804</b>
<b>Lake Dunlap/Wells Ranch Group Total Demand</b>	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
San Antonio Water System	6,800	6,800	6,800	6,800	6,800	6,800
City of Cibolo	4,331	4,331	4,331	4,331	4,331	4,331
East Central WSC	1,900	2,400	2,400	2,400	2,400	2,400
Green Valley SUD	5,990	6,990	6,990	10,990	10,990	15,990
City of La Vernia	400	425	481	533	584	629
City of Marion	200	200	200	200	200	200
Springs Hills WSC	2,025	2,025	2,025	2,025	2,025	2,025
Crystal Clear WSC	1,600	3,080	3,080	3,080	3,080	3,080
Converse	903	1,111	1,297	1,272	1,265	1,264
<b>Total Demand</b>	<b>24,149</b>	<b>27,362</b>	<b>27,604</b>	<b>31,631</b>	<b>31,675</b>	<b>36,719</b>
<b>CRWA Supply:</b>						
	<b>Year (acft)</b>					
<b>Source</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
GBRA - Lake Dunlap	10,575	10,575	10,575	10,575	10,575	10,575
Wells Ranch Phase I	5,200	5,200	5,200	5,200	5,200	5,200
Purchase from Springs Hill						
Run-of-River Water Rights	490	490	490	490	490	490
<b>Total Supply</b>	<b>16,265</b>	<b>16,265</b>	<b>16,265</b>	<b>16,265</b>	<b>16,265</b>	<b>16,265</b>
<b>CRWA Projected Needs:</b>						
	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b>Total System Management Supplies/(Needs)</b>	<b>(7,884)</b>	<b>(11,097)</b>	<b>(11,339)</b>	<b>(15,366)</b>	<b>(15,410)</b>	<b>(20,454)</b>
<b>CRWA Water Management Strategies (WMS) with Estimated Firm Yield (acft/yr):</b>						
	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b>Recommended WMS</b>						
Conservation <sup>1</sup>						
CRWA Wells Ranch - Phase 2 <sup>3</sup>	7,829	7,658	7,829	7,829	7,829	7,829
Hays/Caldwell PUA <sup>3</sup>	2,182	2,634	1,634	3,744	3,744	3,744
Brackish Wilcox Groundwater for CRWA <sup>3</sup>		1,112	2,791	3,323	3,839	3,839
CRWA Siesta Project		5,042	5,042	5,042	5,042	5,042
<b>Total Recommended WMS</b>	<b>10,011</b>	<b>16,446</b>	<b>17,295</b>	<b>19,938</b>	<b>20,454</b>	<b>20,454</b>
<b>Management Supplies with Recommended WMS<sup>2</sup></b>	<b>2,127</b>	<b>5,349</b>	<b>5,956</b>	<b>4,572</b>	<b>5,044</b>	<b>0</b>
<b>Alternative WMS<sup>2</sup></b>						
CRWA Wells Ranch - Phase 2 <sup>3</sup>	10,629	10,629	10,629	10,629	10,629	10,629
Hays/Caldwell PUA <sup>3</sup>	8,025	8,025	8,025	8,025	8,025	8,025
Brackish Wilcox Groundwater for CRWA <sup>3</sup>		14,700	14,700	14,700	14,700	14,700
HCPUA/TWA Joint	9,569	9,569	9,569	9,569	9,569	9,569

<b>CRWA Projected Demands (acft/yr):</b>						
<b>Hays Caldwell Area Current Demand</b>	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
County Line SUD	1,308	1,308	1,308	1,308	1,308	1,308
Crystal Clear WSC	500	500	500	500	500	500
Martindale	190	190	190	190	190	190
Maxwell WSC	900	900	900	900	900	900
<b>Total Current Demand</b>	<b>2,898</b>	<b>2,898</b>	<b>2,898</b>	<b>2,898</b>	<b>2,898</b>	<b>2,898</b>
<b>Hays Caldwell Area Future Demand</b>	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
County Line SUD	0	0	0	0	180	392
Crystal Clear WSC	0	0	0	0	0	0
Martindale	0	31	66	102	140	177
Maxwell WSC	0	0	0	0	0	0
<b>Total Future Demand</b>	<b>0</b>	<b>31</b>	<b>66</b>	<b>102</b>	<b>320</b>	<b>569</b>
<b>Hays Caldwell Area Total Demand</b>	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
County Line SUD	1,308	1,308	1,308	1,308	1,488	1,700
Crystal Clear WSC	500	500	500	500	500	500
Martindale	190	221	256	292	330	367
Maxwell WSC	900	900	900	900	900	900
<b>Total Demand</b>	<b>2,898</b>	<b>2,929</b>	<b>2,964</b>	<b>3,000</b>	<b>3,218</b>	<b>3,467</b>
<b>CRWA Supply:</b>						
<b>Source</b>	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
GBRA - Hays/Caldwell	2,038	2,038	2,038	2,038	2,038	2,038
Water Right Leases	540	540	540	540	540	540
<b>Total Supply</b>	<b>2,578</b>	<b>2,578</b>	<b>2,578</b>	<b>2,578</b>	<b>2,578</b>	<b>2,578</b>
<b>CRWA Projected Needs:</b>						
	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b>Total System Management Supplies/(Needs)</b>	<b>(320)</b>	<b>(351)</b>	<b>(386)</b>	<b>(422)</b>	<b>(640)</b>	<b>(889)</b>
<b>CRWA Water Management Strategies (WMS) with Estimated Firm Yield (acft/yr):</b>						
	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b><u>Recommended WMS</u></b>						
Conservation <sup>1</sup>						
Hays/Caldwell PUA <sup>3</sup>	1,000	2,000	3,000	3,000	3,000	3,000
<b>Total Recommended WMS</b>	<b>1,000</b>	<b>2,000</b>	<b>3,000</b>	<b>3,000</b>	<b>3,000</b>	<b>3,000</b>
<b>Management Supplies with Recommended WMS<sup>2</sup></b>	<b>680</b>	<b>1,649</b>	<b>2,614</b>	<b>2,578</b>	<b>2,360</b>	<b>2,111</b>
<b><u>Alternative WMS<sup>2</sup></u></b>						
HCPUA/TWA Joint	1,000	2,000	3,000	3,000	3,000	3,000
<b>TOTAL HC PUA Supply</b>	<b>3,182</b>	<b>4,634</b>	<b>4,634</b>	<b>6,744</b>	<b>6,744</b>	<b>6,744</b>
<sup>1</sup> Assigned by Water User Group (WUG) based on Municipal Conservation WMS recommended by SCTRWPG.						
<sup>2</sup> Management Supplies and Alternative WMS are included in the event that Recommended WMS are not fully developed.						
<sup>3</sup> 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.						

# 1/28/2015 DRAFT

<b>Guadalupe-Blanco River Authority (GBRA)</b>						
<b>GBRA Projected Demands (acft/yr):</b>						
	<b>Year (acft)</b>					
<b>Water Purchaser</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b>Municipal (Canyon Reservoir)</b>						
<b><u>Upper Basin - At or Above Canyon Reservoir</u></b>						
Canyon Lake WSC	6,000	6,000	6,000	6,000	6,000	6,000
City of Blanco (through Canyon Lake WSC)	600	600	600	600	600	600
HH Ranch Properties	250	250	250	250	250	250
Domestic Contracts	10	10	10	10	10	10
Canyon Lake WSC (formerly Rebecca Creek MUD)	130	130	130	130	130	130
Kendall County Rural	0	0	0	0	0	0
Kerr County MOU		2,000	2,000	2,000	2,000	2,000
Upstream Diversion Contracts	155	155	155	155	155	155
WW Sports	1	1	1	1	1	1
Yacht Club	10	10	10	10	10	10
SJWTX - Bulverde (Western Canyon)	400	400	400	400	400	400
SJWTX - Park Village (Western Canyon)	322	322	322	322	322	322
City of Boerne (Western Canyon)	3,611	3,611	3,948	4,906	5,895	6,869
City of Fair Oaks Ranch (Western Canyon)	1,850	1,850	1,850	1,850	1,850	1,850
Cordillera Ranch (Western Canyon)	1,000	1,000	1,000	1,000	1,000	1,000
DH Invest.-Johnson Ranch (Western Canyon)	400	400	400	400	400	400
Lerin Hills (Western Canyon)	750	750	750	750	750	750
Kendall & Tapatio (Western Canyon)	750	750	750	750	750	750
Comal Trace (Western Canyon)	100	100	100	100	100	100
SAWS (Western Canyon)	2,017	2,017				
<b>Western Canyon Sub-Total</b>	<b>11,200</b>	<b>11,200</b>	<b>9,520</b>	<b>10,478</b>	<b>11,467</b>	<b>12,441</b>
<b>Total Upper Basin Municipal (Canyon Reservoir)</b>	<b>18,356</b>	<b>20,356</b>	<b>18,676</b>	<b>19,634</b>	<b>20,623</b>	<b>21,597</b>
<b><u>Mid Basin - Below Canyon Dam to Above Victoria</u></b>						
CRWA - Guadalupe River Basin Customers	4,000	4,000	4,000	4,000	4,000	4,000
CRWA - Cibolo	1,350	1,350	1,350	1,350	1,350	1,350
CRWA - East Central SUD	1,400	1,400	1,400	1,400	1,400	1,400
CRWA - Green Valley SUD	1,800	1,800	1,800	1,800	1,800	1,800
CRWA - Marion	100	100	100	100	100	100
CRWA - Springs Hill WSC	1,925	1,925	1,925	1,925	1,925	1,925
<b>CRWA Dunlap Current Contract Subtotal</b>	<b>10,575</b>	<b>10,575</b>	<b>10,575</b>	<b>10,575</b>	<b>10,575</b>	<b>10,575</b>
CRWA Dunlap Future Contract	0	0	0	0	0	0
Comal County Rural	0	0	0	0	0	0
New Braunfels Utilities	9,720	10,072	10,921	11,789	12,668	13,519
Crystal Clear WSC	800	800	800	800	800	800
City of Seguin	1,000	1,000	1,000	1,000	1,000	1,000
Dittmar, Gary	5	5	5	5	5	5
Dittmar, Ray	5	5	5	5	5	5
Gonzales County WSC	700	700	700	700	700	700
Green Valley SUD	1,000	1,000	1,000	1,000	1,000	1,000
Springs Hill WSC	2,500	2,500	2,500	2,500	2,500	2,500
Canyon Regional Water Authority (H/C WTP)	2,038	2,038	2,038	2,038	2,038	2,038
Wimberley & Wimberley WSC	0	0	410	1,020	1,712	2,502
Hays County Rural				1,169	6,714	12,872
City of Niederwald (San Marcos WTP)	62	81	105	134	166	203
City of Buda (San Marcos WTP)	1,680	1,680	1,680	1,680	1,680	1,680
City of Kyle (San Marcos WTP)	5,443	5,443	5,443	5,443	5,443	5,443
Sunfield MUD (San Marcos WTP)	3,136	3,136	3,136	3,136	3,136	3,136
Plum Creek WC/Monarch (San Marcos WTP)	560	560	560	560	560	560
City of San Marcos (San Marcos WTP)	10,000	10,000	10,000	10,000	10,000	10,000
Goforth WSC (San Marcos WTP)	1,050	1,050	1,050	1,050	1,050	1,143
<b>San Marcos WTP Sub-Total</b>	<b>21,931</b>	<b>21,950</b>	<b>21,974</b>	<b>22,003</b>	<b>22,035</b>	<b>22,165</b>
<b>Total Mid Basin Municipal (Canyon Reservoir)</b>	<b>50,274</b>	<b>50,645</b>	<b>51,928</b>	<b>54,604</b>	<b>61,752</b>	<b>69,681</b>

# 1/28/2015 DRAFT

<b><u>Lower Basin - At or Below Victoria</u></b>						
City of Victoria (pursuant to Canyon Amendment)	1,240	1,240	1,240	1,240	1,240	1,240
<b>Total Lower Basin Municipal (Canyon Reservoir)</b>	<b>1,240</b>	<b>1,240</b>	<b>1,240</b>	<b>1,240</b>	<b>1,240</b>	<b>1,240</b>
<b><u>Industrial/Steam-Electric (Canyon Reservoir)</u></b>						
<b><u>Mid Basin - Below Canyon Dam to Above Victoria</u></b>						
Acme Brick	25	25	25	25	25	25
CMC Steel	700	700	700	700	700	700
Guadalupe County	2	2	2	2	2	2
Temple Inland (St. Gyp)	258	258	258	258	258	258
Guadalupe County Manufacturing	0	0	0	163	494	854
Comal Fair	1	1	1	1	1	1
Comal Road Department	3	3	3	3	3	3
Comal County Manufacturing	4,130	4,881	5,612	6,239	7,120	8,074
GPP (Panda Energy)	6,840	6,840	6,840	6,840	6,840	6,840
Hays Energy LP	2,464	2,464	2,464	2,464	2,464	2,464
<b>Total Mid Basin Industrial/SE (Canyon Reservoir)</b>	<b>14,423</b>	<b>15,174</b>	<b>15,905</b>	<b>16,695</b>	<b>17,907</b>	<b>19,221</b>
<b><u>Lower Basin - At or Below Victoria</u></b>						
Coletto Creek	6,000	6,000	6,000	6,000	6,000	6,000
Dow/UCC	100	100	100	100	100	100
<b>Total Lower Basin Industrial/SE (Canyon Reservoir)</b>	<b>6,100</b>	<b>6,100</b>	<b>6,100</b>	<b>6,100</b>	<b>6,100</b>	<b>6,100</b>
<b><u>Irrigation (Canyon Reservoir)</u></b>						
<b>Irrigation Contracts (Upper Basin)</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>
<b>Irrigation Contracts (Mid-Basin)</b>	<b>342</b>	<b>342</b>	<b>342</b>	<b>342</b>	<b>342</b>	<b>342</b>
<b>Canyon Reservoir Total</b>	<b>90,985</b>	<b>94,107</b>	<b>94,441</b>	<b>98,865</b>	<b>108,214</b>	<b>118,431</b>
<b><u>Mid-Basin Municipal (San Marcos Run-of-River)</u></b>						
Lockhart	1,120	1,120	1,120	1,484	1,947	2,402
Luling	1,680	1,680	1,680	1,680	1,684	1,875
<b>Mid-Basin Municipal (San Marcos Run-of-River) Total</b>	<b>2,800</b>	<b>2,800</b>	<b>2,800</b>	<b>3,164</b>	<b>3,631</b>	<b>4,277</b>
<b><u>Lower Basin Municipal (Run-of-River, Firm)</u></b>						
Calhoun County Rural WSC	1,500	1,500	1,500	1,500	1,500	1,500
Port Lavaca	4,480	4,480	4,480	4,480	4,480	4,480
Port O'Conner MUD	1,120	1,120	1,120	1,120	1,120	1,120
Victoria County Rural	0	0	0	0	0	0
<b>Total Lower Basin Municipal (Run-of-River, Firm)</b>	<b>7,100</b>	<b>7,100</b>	<b>7,100</b>	<b>7,100</b>	<b>7,100</b>	<b>7,100</b>
<b><u>Lower Basin Industrial/SE (Run-of-River, Firm)</u></b>						
INEOS	3,300	3,300	3,300	3,300	3,300	3,300
Seadrift Coke	1,000	1,000	1,000	1,000	1,000	1,000
Dow/UCC	20,000	20,000	20,000	20,000	20,000	20,000
Calhoun County Industry (Lavaca-Guadalupe)	0	0	0	2,456	7,288	11,469
Calhoun County Industry (Colorado-Lavaca)	10,000	10,000	10,000	10,000	10,000	10,000
Victoria County Industry	3,215	6,053	8,878	11,403	14,243	17,289
Victoria County Steam-Electric	4,506	29,778	37,178	53,599	70,696	70,696
<b>Total Lower Basin Industrial/SE (Run-of-River, Firm)</b>	<b>42,021</b>	<b>70,131</b>	<b>80,356</b>	<b>101,758</b>	<b>126,527</b>	<b>133,754</b>
<b><u>Lower Basin Industrial/SE (Run-of-River, Interruptible)</u></b>						
Calhoun & Victoria Counties	0	0	0	0	0	0
<b>Total Lower Basin Industrial/SE (Run-of-River, Interruptible)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b><u>Lower Basin Irrigation (Run-of-River, Interruptible)</u></b>						
<b>Irrigation Agreements</b>	<b>13,472</b>	<b>11,935</b>	<b>10,894</b>	<b>10,148</b>	<b>9,453</b>	<b>8,726</b>
<b>Lower Basin (Run-of-River, Firm) Total</b>	<b>49,121</b>	<b>77,231</b>	<b>87,456</b>	<b>108,858</b>	<b>133,627</b>	<b>140,854</b>
<b>Lower Basin (Run-of-River, Interruptible) Total</b>	<b>13,472</b>	<b>11,935</b>	<b>10,894</b>	<b>10,148</b>	<b>9,453</b>	<b>8,726</b>
<b>Total Demand</b>	<b>156,378</b>	<b>186,073</b>	<b>195,591</b>	<b>221,035</b>	<b>254,925</b>	<b>272,288</b>
<b>Total Upper Basin Demand</b>	<b>18,606</b>	<b>20,606</b>	<b>18,926</b>	<b>19,884</b>	<b>20,873</b>	<b>21,847</b>
<b>Total Mid-Basin Demand</b>	<b>67,839</b>	<b>68,961</b>	<b>70,975</b>	<b>74,805</b>	<b>83,632</b>	<b>93,521</b>
<b>Total Lower Basin Demand</b>	<b>69,933</b>	<b>96,506</b>	<b>105,690</b>	<b>126,346</b>	<b>150,420</b>	<b>156,920</b>
<b>Total Demand</b>	<b>156,378</b>	<b>186,073</b>	<b>195,591</b>	<b>221,035</b>	<b>254,925</b>	<b>272,288</b>

# 1/28/2015 DRAFT

<b>GBRA Existing Supplies (acft/yr):</b>						
	<b>Year (acft)</b>					
<b>Source</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
Canyon Reservoir (Firm, Daily Basis)	89,100	88,960	88,820	88,680	88,540	88,400
San Marcos Run-of-River Rights (Interruptible)	4,422	4,422	4,422	4,422	4,422	4,422
San Marcos Run-of-River Rights (Firm)	0	0	0	0	0	0
Lower Basin Run-of-River Rights (Interruptible, Daily Basis)	131,288	131,288	131,288	131,288	131,288	131,288
Lower Basin Run-of-River Rights (Firm, Daily Basis)	44,213	44,213	44,213	44,213	44,213	44,213
<b>Total Supply (Firm)</b>	<b>133,313</b>	<b>133,173</b>	<b>133,033</b>	<b>132,893</b>	<b>132,753</b>	<b>132,613</b>
<b>GBRA Projected Management Supplies or Needs (acft/yr):</b>						
	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
Canyon Reservoir Firm Mgmt. Supplies / (Needs)	(1,885)	(5,147)	(5,621)	(10,185)	(19,674)	(30,031)
San Marcos Run-of-River Firm Mgmt. Supplies / (Needs)	(2,800)	(2,800)	(2,800)	(3,164)	(3,631)	(4,277)
Lower Basin Run-of-River Firm Mgmt. Supplies / (Needs)	(4,908)	(33,018)	(43,243)	(64,645)	(89,414)	(96,641)
<b>Total System Management Supplies / (Needs)</b>	<b>(9,593)</b>	<b>(40,965)</b>	<b>(51,664)</b>	<b>(77,994)</b>	<b>(112,719)</b>	<b>(130,949)</b>
<b>GBRA Water Management Strategies (WMS) with Estimated Firm Yield (acft/yr):</b>						
	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b>Recommended WMS</b>						
Conservation <sup>1</sup>						
MBWSP - Surface Water w/ ASR (Option 3C)	50,000	50,000	50,000	50,000	50,000	50,000
Wimberley/Woodcreek Project <sup>2</sup>						
Western Canyon WTP Expansion						
Integrated Water-Power Project (Upper & Mid Basin)					50,000	50,000
GBRA Lower Basin Storage (500 acre Site)	51,800	51,800	51,800	51,800	51,800	51,800
GBRA New Appropriation (Lower Basin)				42,000	42,000	42,000
Victoria County Steam-Electric Project				29,100	29,100	29,100
Integrated Water-Power Project (Lower Basin)	50,000	50,000	50,000	50,000	50,000	50,000
<b>Upper &amp; Mid-Basin Management Supplies w/Recommended WMS</b>	<b>45,315</b>	<b>42,053</b>	<b>41,579</b>	<b>36,651</b>	<b>26,695</b>	<b>15,692</b>
<b>Lower Basin Firm Management Supplies w/Recommended WMS</b>	<b>96,892</b>	<b>68,782</b>	<b>58,557</b>	<b>108,255</b>	<b>133,486</b>	<b>126,259</b>
<b>Alternative WMS</b>						
Luling ASR		4,277	4,277	4,277	4,277	4,277
MBWSP - Carrizo Groundwater (Option 0)		15,000	15,000	15,000	15,000	15,000
MBWSP - Surface Water w/ Off-Channel Reservoir (Option 2A)		25,000	25,000	25,000	25,000	25,000
MBWSP - Conjunctive Use w/ ASR (Option 3A)		42,000	42,000	42,000	42,000	42,000
HCPUA/TWA/GBRA Shared Facilities Project		86,513	86,513	86,513	86,513	86,513
Storage Above Canyon Reservoir (ASR)		504	504	504	504	504
<b>WMS Needing Further Study Prior to Implementation</b>						
Brush Management		TBD	TBD	TBD	TBD	TBD
<sup>1</sup> Assigned by Water User Group (WUG) based on Municipal Conservation WMS recommended by the SCTRWP.						
<sup>2</sup> Project is a Facilities Expansion WMS including transmission facilities for treated water from the San Marcos area to Wimberley.						

**12/2/2014 DRAFT**

<b>Hays-Caldwell Public Utility Agency (HCPUA)</b>						
<b>HCPUA Projected Demands (acft/yr):</b>						
	<b>Year (acft)</b>					
<b>Water Purchaser</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
CRWA (Lake Dunlap System)	2,182	2,634	1,634	3,744	3,744	3,744
CRWA (Hays Caldwell System)	1,000	2,000	3,000	3,000	3,000	3,000
Buda	0	667	1,690	2,974	4,033	4,426
Kyle	0	1,348	2,801	2,787	2,776	2,772
San Marcos	0	0	0	1,965	4,576	7,891
<b>Total Demand</b>	<b>3,182</b>	<b>6,649</b>	<b>9,125</b>	<b>14,470</b>	<b>18,129</b>	<b>21,833</b>
<b>HCPUA Supply:</b>						
	<b>Year (acft)</b>					
<b>Source</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b>Total Supply</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>HCPUA Projected Needs:</b>						
	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b>Total System Management Supplies/(Needs)</b>	<b>(3,182)</b>	<b>(6,649)</b>	<b>(9,125)</b>	<b>(14,470)</b>	<b>(18,129)</b>	<b>(21,833)</b>
<b>HCPUA Water Management Strategies (WMS) with Estimated Firm Yield (acft/yr):</b>						
	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b>Recommended WMS</b>						
Conservation <sup>2</sup>						
Phase 1 <sup>1</sup>	10,300	15,000	15,000	15,000	15,000	15,000
Phase 2 - Carrizo/Wilcox <sup>3</sup>				6,831	6,833	6,833
<b>Total Recommended WMS</b>	<b>10,300</b>	<b>15,000</b>	<b>15,000</b>	<b>21,831</b>	<b>21,833</b>	<b>21,833</b>
<b>Management Supplies with Recommended WMS<sup>4</sup></b>	<b>7,118</b>	<b>8,352</b>	<b>5,876</b>	<b>7,361</b>	<b>3,704</b>	<b>0</b>
<b>Alternative WMS<sup>4</sup></b>						
Phase 2 - Carrizo/Wilcox				20,690	20,690	20,690
HCPUA/TWA Joint	15,300	15,300	30,000	40,690	40,690	40,690
HCPUA/TWA/GBRA Shared Facilities Project	15,300	15,300	30,000	40,690	40,690	40,690
<sup>1</sup> Permitted production is 10,300 acft/yr as of March 2013 from Gonzales Co UWCD (Carrizo)						
<sup>2</sup> Assigned by Water User Group (WUG) based on Municipal Conservation WMS recommended by SCTRWPWG.						
<sup>3</sup> 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. SCTRWPWG 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. SCTRWPWG 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, SCTRWPWG may amend this Plan to adjust groundwater supply numbers that are affected by the new MAG amount						
<sup>4</sup> Management Supplies and Alternative WMS are included in the event that Recommended WMS are not fully developed.						

Table 2

<b>San Antonio Water System (SAWS) - With MAG Limitations</b>						
<b>SAWS Projected Demands (acft/yr):</b>						
	<b>Year (acft)</b>					
<b>Water Purchaser</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
Balcones Heights	518	566	612	662	711	758
Castle Hills	395	375	359	351	350	349
China Grove	316	350	381	413	445	474
Elmendorf	311	397	478	556	629	696
Helotes	1,613	1,989	2,340	2,681	2,996	3,286
Hill Country Village	234	230	226	224	224	224
Hollywood Park	949	953	959	969	983	997
Leon Valley	558	579	600	624	652	678
Live Oak	1,803	1,806	1,794	1,787	1,786	1,786
Olmos Park	564	623	678	736	791	843
San Antonio	235,329	258,657	280,788	303,809	326,645	347,873
SAWS (outside of San Antonio)	30,536	34,094	37,530	41,060	44,554	47,826
Somerset	221	240	259	279	300	319
Terrell Hills	1,299	1,276	1,257	1,247	1,245	1,245
East Central WSC	448	448	448	448	448	448
Alamo Heights	796	848	820	807	805	805
Atascosa Rural WSC	1,167	1,446	1,708	1,970	2,218	2,448
Kirby	137	207	181	172	169	169
The Oaks WSC	0	0	1	60	114	165
County-Other (Municipal)	0	0	0	1,898	4,082	6,084
Industrial (Bexar County)	15,076	15,076	15,076	15,076	15,076	15,076
CPS Energy	50,000	50,000	50,000	50,000	50,000	50,000
<b>Total Demand</b>	<b>342,270</b>	<b>370,160</b>	<b>396,495</b>	<b>425,829</b>	<b>455,223</b>	<b>482,549</b>
<b>SAWS Supply:</b>						
	<b>Year (acft)</b>					
<b>Source</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
Edwards Aquifer with EAHCP <sup>1</sup>	172,640	172,640	172,640	172,640	172,640	172,640
Carrizo Aquifer (Bexar County)	9,900	9,900	9,900	9,900	9,900	9,900
Carrizo Aquifer (Gonzales County)	11,688	11,418	11,688	11,688	11,688	11,688
Carrizo Aquifer (Gonzales County) - SSLGC Excess	4,059	2,577	2,732	376	0	0
Gonzales Co WSC	1,000	1,000	1,000	1,000	1,000	1,000
Trinity Aquifer <sup>2</sup>	2,000	2,000	2,000	2,000	2,000	2,000
Direct Reuse <sup>3</sup>	25,000	30,000	35,000	35,000	35,000	35,000
Run-of-River (San Antonio)	5,313	5,313	5,313	5,313	5,313	5,313
CRWA	9,654	9,654	9,654	9,654	9,654	9,654
GBRA (Canyon Reservoir)	4,000	4,000	0	0	0	0
<b>Total Supply</b>	<b>245,254</b>	<b>248,502</b>	<b>249,927</b>	<b>247,571</b>	<b>247,195</b>	<b>247,195</b>
<b>SAWS Projected Needs:</b>						
	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b>Total System Management Supplies/(Needs)</b>	<b>(97,016)</b>	<b>(121,658)</b>	<b>(146,568)</b>	<b>(178,258)</b>	<b>(208,028)</b>	<b>(235,354)</b>
<b>SAWS Water Management Strategies (WMS) with Estimated Firm Yield (acft/yr):</b>						
	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b>Recommended WMS</b>						
Conservation - Based on SAWS system-wide gpcd <sup>4</sup>	15,974	10,704	6,901	7,284	8,004	2,792
EAHCP <sup>5</sup>	0	0	0	0	0	0
Brackish Wilcox Groundwater for SAWS <sup>6</sup>	5,622	5,622	5,622	5,622	5,622	5,622
Expanded Local Carrizo <sup>7</sup>	5,500	5,500	5,500	5,500	5,419	5,419
Vista Ridge Consortium <sup>8</sup>	19,442	24,240	28,711	32,685	34,894	34,894
Expanded Brackish Project <sup>9</sup>	0	0	0	0	0	0
Direct Reuse Expansion	5,000	5,000	5,000	15,000	25,000	40,000
Water Resources Integration Pipeline <sup>6</sup>	0	0	0	0	0	0
Drought Management	14,674	38,517	55,536	59,877	64,184	68,190
Advanced Meter Infrastructure	0	0	0	0	0	0
Seawater Desalination (75 MGD)				84,023	84,023	84,023
CPS Direct Recycle Pipeline	50,000	50,000	50,000	50,000	50,000	50,000
<b>Total Recommended WMS</b>	<b>116,211</b>	<b>139,582</b>	<b>157,269</b>	<b>259,990</b>	<b>277,145</b>	<b>290,940</b>
<b>Management Supplies with Recommended WMS<sup>7</sup></b>	<b>19,195</b>	<b>17,925</b>	<b>10,701</b>	<b>81,732</b>	<b>69,118</b>	<b>55,586</b>
<b>Alternative WMS<sup>7</sup></b>						
Brackish Wilcox Groundwater for SAWS	13,440	33,600	33,600	33,600	33,600	33,600
Expanded Local Carrizo	11,152	30,000	30,000	30,000	30,000	30,000
Vista Ridge Consortium	50,000	50,000	50,000	50,000	50,000	50,000
Expanded Brackish Project	0	50,000	50,000	50,000	50,000	50,000

<sup>1</sup> Includes SAWS permits as presented in EAA's permit files, with full implementation of the EAHCP.

<sup>2</sup> Total permitted volume is 22,660; however, SAWS only considers 2,000 acft/yr to be a firm supply.

<sup>3</sup> Amount excludes commitments to streams and lakes.

<sup>4</sup> Municipal Conservation estimated using SAWS system-wide goal of 135 gpcd.

<sup>5</sup> Includes all elements of the HCP (VISPO, conservation, SAWS ASR & Irrigation Transfers, and Critical Period Stage V).

<sup>6</sup> Systems and pipelines have no associated firm yield, but are necessary to deliver new sources of supply to SAWS customers.

<sup>7</sup> Management Supplies and Alternative WMS are included in the event that Recommended WMS are not fully developed.

<sup>8</sup> 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. SCTRWP 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. SCTRWP 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, SCTRWP may amend this Plan to adjust groundwater supply numbers that are affected by the new MAG amount.

# 10/22/2014 DRAFT

<b>Springs Hill Water Supply Corporation (SHWSC)</b>						
<b>SHWSC Projected Demands (acft/yr):</b>						
	<b>Year (acft)</b>					
<b>Water Purchaser</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
Springs Hill WSC	1,417	1,621	1,845	2,080	2,337	2,594
City of Seguin (served by SH WSC)	481	512	599	788	988	1,190
Guad Co-Other (served by SH WSC)	489	520	609	801	1,004	1,209
Crystal Clear WSC	50	50	50	50	50	50
<b>Total Demand</b>	<b>2,437</b>	<b>2,703</b>	<b>3,102</b>	<b>3,719</b>	<b>4,379</b>	<b>5,043</b>
<b>SHWSC Supply:</b>						
	<b>Year (acft)</b>					
<b>Source</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
CRWA (Canyon Reservoir)	1,925	1,925	1,925	1,925	1,925	1,925
CRWA (Wells Ranch Groundwater)	100	100	100	100	100	100
GBRA (Canyon Reservoir)	2,850	2,850	2,850	2,850	2,850	2,850
Carrizo Aquifer (Guadalupe County)	1,107	1,107	1,107	1,107	1,107	1,107
Carrizo Aquifer (Gonzales County) (SSLGC)	722	722	722	722	722	722
<b>Total Supply</b>	<b>6,704</b>	<b>6,704</b>	<b>6,704</b>	<b>6,704</b>	<b>6,704</b>	<b>6,704</b>
<b>SHWSC Projected Needs:</b>						
	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b>Total System Management Supplies/(Needs)</b>	<b>4,267</b>	<b>4,001</b>	<b>3,602</b>	<b>2,985</b>	<b>2,325</b>	<b>1,661</b>
<b>SHWSC Water Management Strategies (WMS) with Estimated Firm Yield (acft/yr):</b>						
	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b>WMSs</b>						
Conservation						
<b>Total Recommended WMS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Management Supplies with Recommended WMS</b>	<b>4,267</b>	<b>4,001</b>	<b>3,602</b>	<b>2,985</b>	<b>2,325</b>	<b>1,661</b>
<b>Alternative WMS</b>						



<b>Schertz-Seguin Local Government Corporation (SSLGC)</b>						
<b>SSLGC Projected Demands (acft/yr):</b>						
<b>Water Purchaser</b>	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
Schertz	10,835	10,079	9,868	11,583	11,179	10,414
Seguin	3,165	3,921	4,666	5,326	6,028	6,719
Selma	1,050	1,066	1,154	1,241	1,320	1,395
Springs Hill WSC	840	840	840	840	840	840
Converse	500	500	500	500	500	500
Universal City	1,216	1,231	1,172	1,139	1,133	1,132
Cibolo	1,000	2,000	3,000	3,000	3,000	3,000
Garden Ridge	150	150	150	150	150	150
SAWS - Excess Contract	4,059	2,577	2,732	376	0	0
<b>Total Demand</b>	<b>22,815</b>	<b>22,364</b>	<b>24,082</b>	<b>24,155</b>	<b>24,150</b>	<b>24,150</b>
<b>SSLGC Supply:</b>						
<b>Source</b>	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
Carrizo Aquifer (Gonzales County) <sup>1</sup>	17,039	16,644	17,039	17,039	17,039	17,039
<b>Total Supply</b>	<b>17,039</b>	<b>16,644</b>	<b>17,039</b>	<b>17,039</b>	<b>17,039</b>	<b>17,039</b>
<b>SSLGC Projected Needs:</b>						
	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b>Total System Management Supplies/(Needs)</b>	<b>(5,776)</b>	<b>(5,720)</b>	<b>(7,043)</b>	<b>(7,116)</b>	<b>(7,111)</b>	<b>(7,111)</b>
<b>SSLGC Water Management Strategies (WMS) with Estimated Firm Yield (acft/yr):</b>						
	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b>Recommended WMS</b>						
Conservation <sup>2</sup>	0	0	0	0	0	0
Expansion Carrizo Aquifer (Guadalupe County) <sup>1</sup>	5,720	5,720	5,720	5,720	5,720	5,720
Brackish Wilcox (Gonz Co)	56	0	1,323	1,396	1,392	1,392
<b>Total Recommended WMS</b>	<b>5,776</b>	<b>5,720</b>	<b>7,043</b>	<b>7,116</b>	<b>7,112</b>	<b>7,112</b>
<b>Management Supplies with Recommended WMS<sup>4</sup></b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Alternative WMS<sup>4</sup></b>						
Brackish Wilcox (Gonz Co)	5,000	5,000	5,000	5,000	5,000	5,000
<sup>1</sup> Permitted production as of September 2013, less 12% loss rate.						
<sup>2</sup> Assigned by Water User Group (WUG) based on Municipal Conservation WMS recommended by SCTRWPWG.						
<sup>3</sup> 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. SCTRWPWG 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. SCTRWPWG 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, SCTRWPWG may amend this Plan to adjust groundwater supply numbers that are affected by the new MAG amount.						
<sup>4</sup> Management Supplies and Alternative WMS are included in the event that Recommended WMS are not fully developed.						

**Texas Water Alliance (TWA)****TWA Projected Demands (acft/yr):**

<b>Water Purchaser</b>	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
Canyon Lake WSC / SJWTX	0	521	2,210	3,926	5,640	7,291
Comal County Rural Areas	0	0	0	0	0	0
Kendall Co Rural Areas	0	0	0	0	0	0
Wimberley	0	0	410	1,020	1,712	2,502
Woodcreek	0	0	0	0	0	0
Hays County Rural Areas	0	0	0	585	3,357	6,207
Region K	4,000	4,000	4,000	4,000	4,000	4,000
<b>Total Demand</b>	<b>4,000</b>	<b>4,521</b>	<b>6,620</b>	<b>9,531</b>	<b>14,709</b>	<b>20,000</b>

**TWA Supply (acft/yr):**

<b>Source</b>	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
TWA-Carrizo (GMA 13)						
TWA-Trinity (GMA 10)						
TWA-Trinity (GMA 9)						
<b>Total Supply</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**TWA Projected Needs (acft/yr):**

	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b>Total System Management Supplies/(Needs)</b>	<b>(4,000)</b>	<b>(4,521)</b>	<b>(6,620)</b>	<b>(9,531)</b>	<b>(14,709)</b>	<b>(20,000)</b>

**TWA Water Management Strategies (WMS) with Estimated Firm Yield (acft/yr):**

	<b>Year (acft)</b>					
	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
<b><u>Recommended WMS</u></b>						
Conservation <sup>2</sup>						
TWA-Carrizo Well Field <sup>1,3</sup>	5,000	14,680	15,000	15,000	15,000	15,000
TWA-Trinity Well Field		500	500	500	5,000	5,000
<b>Total Recommended WMS</b>	<b>5,000</b>	<b>15,180</b>	<b>15,500</b>	<b>15,500</b>	<b>20,000</b>	<b>20,000</b>
<b>Management Supplies with Recommended WMS<sup>4</sup></b>	<b>1,000</b>	<b>10,659</b>	<b>8,880</b>	<b>5,969</b>	<b>5,291</b>	<b>0</b>
<b><u>Alternative WMS<sup>4</sup></u></b>						
TWA-Carrizo Well Field	5,000	15,000	15,000	15,000	15,000	15,000
HCPUA-TWA Joint Project	5,000	10,000	10,000	10,000	10,000	10,000
HCPUA/TWA/GBRA Shared Facilities Project		86,513	86,513	86,513	86,513	86,513

<sup>1</sup> Permitted production as of March 2013.<sup>2</sup> Assigned by Water User Group (WUG) based on Municipal Conservation WMS recommended by SCTRWPWG.

<sup>3</sup> 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. SCTRWPWG 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. SCTRWPWG 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, SCTRWPWG may amend this Plan to adjust groundwater supply numbers that are affected by the new MAG amount.

<sup>4</sup> Management Supplies and Alternative WMS are included in the event that Recommended WMS are not fully developed.

Atascosa County Needs (Projected Demands less Existing Supplies)

DRAFT (4-2-2015)

WUG	2020	2030	2040	2050	2060	2070	WMS
Benton City	0	0	0	0	0	25	Conservation, Local Carrizo Conversion
Charlotte	0	0	0	0	0	0	Conservation
Jourdanton	0	0	0	0	0	0	Conservation
Lytle	171	257	333	409	484	554	Conservation, Edwards Transfers, Drought Management
McCoy WSC	0	0	0	0	0	0	Conservation
Pleasanton	0	0	0	0	0	0	Conservation
Poteet	0	0	0	0	0	0	Conservation
County-Other	0	0	0	0	0	0	Conservation
Manufacturing	0	0	0	0	0	0	
Mining	0	0	0	0	0	0	
Steam-Electric	0	0	0	0	0	0	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
<b>Total</b>	<b>171</b>	<b>257</b>	<b>333</b>	<b>409</b>	<b>484</b>	<b>579</b>	

WUG	2020	2030	2040	2050	2060	2070	WMS
Alamo Heights	796	848	820	807	805	805	Conservation, Edwards Transfers, Drought Management, Purchase from SAWS
Atascosa Rural WSC	1,167	1,446	1,708	1,970	2,218	2,448	Conservation, Edwards Transfers, Drought Management, Purchase from SAWS
Balcones Heights	0	0	0	0	0	0	Conservation
Castle Hills	0	0	0	0	0	0	Conservation
China Grove	0	0	0	0	0	0	Conservation
Converse	903	1,111	1,297	1,272	1,265	1,264	Conservation, Edwards Transfers, Drought Management, Purchase from CRWA
East Central SUD	0	0	107	312	525	724	Conservation, Purchase from CRWA
Elmendorf	0	0	0	0	0	0	Conservation
Fair Oaks Ranch	0	0	0	0	0	0	Conservation
Helotes	0	0	0	0	0	0	Conservation
Hill Country Village	0	0	0	0	0	0	Conservation
Hollywood Park	0	0	0	0	0	0	Conservation
Kirby	137	207	181	172	169	169	Conservation, Edwards Transfers, Drought Management, Purchase from SAWS
Lackland AFB	0	0	0	0	0	0	Conservation
Leon Valley	97	147	196	254	317	377	Conservation, Purchase from SAWS, Edwards Transfers, Drought Management
Live Oak	0	0	0	0	0	0	Conservation
Olmos Park	0	0	0	0	0	0	Conservation
Randolph AFB	0	0	0	0	0	0	Conservation
San Antonio	60,972	82,339	109,029	132,636	156,055	177,826	See SAWS WWP Table
San Antonio Water System	2,418	5,976	9,412	12,942	16,436	19,708	See SAWS WWP Table
Selma	0	16	104	191	270	345	Conservation, Purchase from SSLGC
Shavano Park	425	555	677	797	909	1,013	Conservation, Edwards Transfers, Drought Management
Somerset	0	0	0	0	0	0	Conservation
St. Hedwig	0	0	0	0	0	0	Conservation
Terrell Hills	0	0	0	0	0	0	Conservation
The Oaks WSC	0	0	1	60	114	165	Conservation, Local GW (Trinity), Purchase from SAWS
Universal City	416	431	372	339	333	332	Conservation, Drought Management, Purchase from SSLGC
Von Ormy	0	0	0	0	0	0	Conservation
Water Services Inc.	0	0	0	0	0	0	Conservation
Windcrest	326	343	361	388	420	451	Conservation, Drought Management, Edwards Transfers
County-Other	0	0	0	1,898	4,082	6,084	Conservation, Purchase from SAWS
Manufacturing	0	0	0	0	1,058	3,680	Purchase from SAWS
Mining	0	0	0	0	0	0	
Steam-Electric	0	0	0	0	0	0	
Irrigation	5,191	4,700	4,229	3,778	3,346	2,966	Unmet
Livestock	0	0	0	0	0	0	
<b>Total</b>	<b>72,848</b>	<b>98,119</b>	<b>128,494</b>	<b>157,816</b>	<b>188,322</b>	<b>218,357</b>	

## Caldwell County Needs (Projected Demands less Existing Supplies)

DRAFT (4-2-2015)

WUG	2020	2030	2040	2050	2060	2070	WMS
Aqua WSC	0	0	0	0	0	0	Conservation
Creedmore-Maha WSC	0	0	0	0	0	0	Conservation
Lockhart	188	613	1,042	1,484	1,947	2,402	Conservation, Drought Management, Purchase from GBRA
Luling	0	41	218	402	596	787	Conservation, Purchase from GBRA
Martindale	0	31	66	102	140	177	Conservation, Purchase from CRWA
Maxwell WSC	0	0	0	0	0	0	Conservation
Mustang Ridge	0	0	0	0	0	0	Conservation
Polonia WSC	0	0	0	146	341	541	Conservation, Local Carrizo Conversions
County-Other	0	0	0	0	0	0	Conservation
Manufacturing	0	0	0	0	0	0	
Mining	0	0	0	0	0	0	
Steam-Electric	0	0	0	0	0	0	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
Total	188	685	1,326	2,134	3,024	3,907	

Calhoun County Needs (Projected Demands less Existing Supplies)

DRAFT (4-2-2015)

WUG	2020	2030	2040	2050	2060	2070	WMS
Calhoun County WS	0	0	0	0	0	0	Conservation
Point Comfort	0	0	0	0	0	0	Conservation
Port Lavaca	0	0	0	0	0	0	Conservation
Port O'Connor MUD	0	0	0	0	0	0	Conservation
Seadrift	0	0	0	0	0	0	Conservation
County-Other	0	0	0	0	0	0	Conservation
Manufacturing	0	0	0	2,113	6,945	11,126	Purchase from LNRA (Lavaca OCR), Purchase from GBRA
Mining	0	0	0	0	0	0	
Steam-Electric	0	0	0	0	0	0	
Irrigation	12,273	10,736	9,695	8,949	8,254	7,527	Unmet
Livestock	0	0	0	0	0	0	
<b>Total</b>	<b>12,273</b>	<b>10,736</b>	<b>9,695</b>	<b>11,062</b>	<b>15,199</b>	<b>18,653</b>	

## Comal County Needs (Projected Demands less Existing Supplies)

DRAFT (4-2-2015)

WUG	2020	2030	2040	2050	2060	2070	WMS
Bulverde	0	0	0	0	0	0	Conservation
Canyon Lake WSC	0	671	2,373	4,095	5,814	7,468	Conservation, Purchase from TWA
Garden Ridge	1,023	1,599	2,188	2,786	3,383	3,957	Conservation, Drought Management, Local GW (Trinity), Purchase from SSLGC (150 acft/yr)
New Braunfels	0	1,407	4,803	8,274	11,791	15,196	Conservation, Drought Management, New Braunfels ASR, New Braunfels Trinity, Reuse, Purchase from GBRA
County-Other	0	0	0	0	0	0	Conservation
Manufacturing	4,130	4,881	5,612	6,239	7,120	8,074	Recyled Water, Purchase from GBRA
Mining	0	0	0	0	0	0	
Steam-Electric	0	0	0	0	0	0	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
<b>Total</b>	<b>5,153</b>	<b>8,558</b>	<b>14,976</b>	<b>21,394</b>	<b>28,108</b>	<b>34,695</b>	

DeWitt County Needs (Projected Demands less Existing Supplies)

DRAFT (4-2-2015)

WUG	2020	2030	2040	2050	2060	2070	WMS
Cuero	0	0	0	0	0	0	Conservation
Yoakum	0	0	0	0	0	0	Conservation
Yorktown	0	0	0	0	0	0	Conservation
County-Other	0	0	0	0	0	0	Conservation
Manufacturing	0	0	0	0	0	0	
Mining	44	38	16	2	0	0	Local GW (Gulf Coast)
Steam-Electric	0	0	0	0	0	0	
Irrigation	74	68	39	6	0	0	Local GW (Gulf Coast)
Livestock	0	0	0	0	0	0	
Total	118	106	55	8	0	0	



Dimmit County Needs (Projected Demands less Existing Supplies)

DRAFT (4-2-2015)

WUG	2020	2030	2040	2050	2060	2070	WMS
Asherton	28	46	61	77	0	0	Conservation, Irr Surface Water Rights Conversion
Big Wells	0	0	0	0	0	0	Conservation
Carrizo Springs	267	399	476	578	0	0	Conservation, Irr Surface Water Rights Conversion
County-Other	297	326	340	362	171	184	Conservation, Irr Surface Water Rights Conversion
Manufacturing	0	0	0	0	0	0	
Mining	4,826	4,908	4,244	2,731	1,222	519	
Steam-Electric	0	0	0	0	0	0	
Irrigation	3,372	3,312	3,082	2,846	2,620	2,466	Increased Unmet Needs (SW Rights)
Livestock	0	0	0	0	0	0	
Total	8,790	8,991	8,203	6,594	4,013	3,169	

Frio County Needs (Projected Demands less Existing Supplies)

DRAFT (4-2-2015)

WUG	2020	2030	2040	2050	2060	2070	WMS
Dilley	0	0	0	0	0	0	Conservation
Pearsall	0	0	0	0	0	19	Conservation, Local Carrizo Conversion
County-Other	0	0	0	0	0	0	Conservation
Manufacturing	0	0	0	0	0	0	
Mining	0	0	0	0	0	0	
Steam-Electric	0	0	0	0	0	0	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
Total	0	0	0	0	0	19	

**Goliad County Needs (Projected Demands less Existing Supplies)**

**DRAFT (4-2-2015)**

<b>WUG</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>WMS</b>
<b>Goliad</b>	0	0	0	0	0	0	Conservation
<b>County-Other</b>	0	0	0	0	0	0	Conservation
<b>Manufacturing</b>	0	0	0	0	0	0	
<b>Mining</b>	0	0	0	0	0	0	
<b>Steam-Electric</b>	0	0	0	0	0	0	
<b>Irrigation</b>	0	0	0	0	0	0	
<b>Livestock</b>	0	0	0	0	0	0	
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

Gonzales County Needs (Projected Demands less Existing Supplies)

DRAFT (4-2-2015)

WUG	2020	2030	2040	2050	2060	2070	WMS
Gonzales	0	0	0	174	92	310	Conservation, Local GW (Carrizo)
Gonzales County WSC	0	0	0	75	0	63	Conservation, Local GW (Carrizo)
Nixon	0	0	0	0	0	0	Conservation
Smiley	0	0	0	0	0	0	Conservation
Waelder	0	0	0	0	0	0	Conservation
County-Other	0	0	0	0	0	0	Conservation
Manufacturing	0	0	0	0	0	0	
Mining	0	0	0	0	0	0	
Steam-Electric	0	0	0	0	0	0	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
Total	0	0	0	249	92	373	

Guadalupe County Needs (Projected Demands less Existing Supplies)

DRAFT (4-2-2015)

WUG	2020	2030	2040	2050	2060	2070	WMS
Cibolo	1,417	3,897	5,222	6,521	7,847	9,149	Conservation, Purchase from CRWA (500), Purchase from CVLGC
Crystal Clear WSC	0	50	482	959	1,481	2,023	Conservation, Purchase from CRWA, Local GW (Wilcox), Local GW (Trinity)
Green Valley SUD	82	297	533	796	1,095	1,391	Conservation, Drought Management, Purchase from CRWA
Marion	0	0	0	0	0	0	Conservation
New Berlin	0	0	0	0	0	0	Conservation
Santa Clara	0	0	0	0	0	0	Conservation
Schertz	0	0	0	0	2,235	4,804	Conservation, Purchase from SSLGC
Seguin	0	0	0	0	0	0	Conservation
Springs Hill WSC	0	0	0	0	0	0	Conservation
County-Other	0	0	0	0	0	0	Conservation
Manufacturing	0	0	0	163	494	854	Purchase from GBRA
Mining	0	0	0	0	0	0	
Steam-Electric	0	0	0	0	0	0	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
<b>Total</b>	<b>1,499</b>	<b>4,244</b>	<b>6,237</b>	<b>8,439</b>	<b>13,152</b>	<b>18,221</b>	

## Hays County Needs (Projected Demands less Existing Supplies)

DRAFT (4-2-2015)

WUG	2020	2030	2040	2050	2060	2070	WMS
Buda	0	0	0	0	0	0	Conservation, Purchase from HCPUA
County Line SUD	0	0	0	0	180	392	Conservation, Purchase from CRWA, Local GW (BS Edwards - Brackish), Reuse
Goforth SUD	0	0	0	0	0	525	Conservation, Purchase from GBRA
Kyle	0	1,348	2,801	2,787	2,776	2,772	Conservation, Purchase from HCPUA, Reuse
Mountain City	11	17	25	35	47	60	Conservation, Drought Management, Local GW (Trinity)
Niederwald	62	81	105	134	166	203	Conservation, Drought Management, Purchase from GBRA
Plum Creek Water Company	0	185	184	185	184	184	Conservation, Local GW (Trinity)
San Marcos	0	0	0	1,965	4,576	7,891	Conservation, Purchase from HCPUA, Reuse
Texas State University - San Marcos	0	140	2,630	3,721	4,831	5,967	Purchase of SM Reuse, Purchase from GBRA
Uhland	0	0	0	0	0	0	Conservation
Wimberley	0	0	174	456	778	1,146	Conservation, Purchase from TWA/HCPUA/GBRA/SAWS, Hays Forestar Project
Wimberley WSC	0	0	236	564	934	1,356	Conservation, Purchase from TWA/HCPUA/GBRA/SAWS, Hays Forestar Project
Woodcreek	0	0	0	0	0	0	Conservation
County-Other	0	0	0	1,169	6,714	12,872	Conservation, Purchase from TWA/HCPUA/GBRA/SAWS, Hays Forestar Project
Manufacturing	0	0	0	0	0	0	
Mining	0	0	0	0	0	0	
Steam-Electric	0	0	0	0	0	0	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
<b>Total</b>	<b>73</b>	<b>1,771</b>	<b>6,155</b>	<b>11,016</b>	<b>21,186</b>	<b>33,368</b>	

Karnes County Needs (Projected Demands less Existing Supplies)

DRAFT (4-2-2015)

WUG	2020	2030	2040	2050	2060	2070	WMS
El Oso WSC	0	0	0	0	0	0	Conservation
Falls City	0	0	0	0	0	0	Conservation
Karnes City	336	322	298	285	249	249	Conservation, Yegua-Jackson Conversion (Mining)
Kenedy	161	189	179	178	151	151	Conservation, Local GW (Gulf Coast)
Runge	0	0	0	0	0	0	Conservation
County-Other	0	0	0	0	0	0	Conservation
Manufacturing	0	0	0	0	0	0	
Mining	1,864	1,292	700	115	0	0	Conservation, Increased Unmet Needs
Steam-Electric	0	0	0	0	0	0	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
Total	2,361	1,803	1,177	578	400	400	

Kendall County Needs (Projected Demands less Existing Supplies)

DRAFT (4-2-2015)

WUG	2020	2030	2040	2050	2060	2070	WMS
Boerne	0	0	337	1,295	2,284	3,258	Conservation, Local GW (Trinity), Western Canyon Expansion
Kendall County WCID #1	0	0	0	0	0	0	Conservation
County-Other	0	0	0	0	0	0	Conservation
Manufacturing	0	0	0	0	0	0	
Mining	0	0	0	0	0	0	
Steam-Electric	0	0	0	0	0	0	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
Total	0	0	337	1,295	2,284	3,258	



La Salle County Needs (Projected Demands less Existing Supplies)

DRAFT (4-2-2015)

WUG	2020	2030	2040	2050	2060	2070	WMS
Cotulla	0	16	155	323	0	0	Conservation, Carrizo Conversion (Mining)
Encinal	0	0	0	0	0	0	Conservation
County-Other	22	56	90	133	0	0	Conservation, Carrizo Conversion (Mining)
Manufacturing	0	0	0	0	0	0	
Mining	4,088	4,243	3,734	2,290	851	147	Conservation, Increased Unmet Needs
Steam-Electric	0	0	0	0	0	0	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
Total	4,110	4,315	3,979	2,746	851	147	

Medina County Needs (Projected Demands less Existing Supplies)

DRAFT (4-2-2015)

WUG	2020	2030	2040	2050	2060	2070	WMS
Castroville	224	217	210	208	211	214	Conservation, Drought Management, Edwards Transfers, Local GW (Leona Gravel)
Devine	0	0	0	0	0	0	Conservation
East Medina SUD	0	0	0	0	11	70	Conservation, Edwards Transfers, Local GW (Leona Gravel)
Hondo	523	680	816	943	1,068	1,180	Conservation, Edwards Transfer
LaCoste	10	20	28	37	47	56	Conservation, Drought Management, Edwards Transfers, Local GW (Leona Gravel)
Natalia	101	129	153	176	199	220	Conservation, Drought Management, Edwards Transfers, Local GW (Leona Gravel)
Yancey WSC	28	95	154	208	261	309	Conservation, Drought Management, Edwards Transfers, Local GW (Leona Gravel)
County-Other	0	0	0	0	0	0	
Manufacturing	0	0	0	0	0	0	
Mining	0	0	0	0	0	0	
Steam-Electric	0	0	0	0	0	0	
Irrigation	31,529	29,144	26,850	24,653	22,547	20,689	Unmet
Livestock	0	0	0	0	0	0	
Total	32,415	30,285	28,211	26,225	24,344	22,738	

Refugio County Needs (Projected Demands less Existing Supplies)

DRAFT (4-2-2015)

WUG	2020	2030	2040	2050	2060	2070	WMS
Refugio	0	0	0	0	0	0	Conservation
Woodsboro	0	0	0	0	0	0	Conservation
County-Other	0	0	0	0	0	0	Conservation
Manufacturing	0	0	0	0	0	0	
Mining	0	0	0	0	0	0	
Steam-Electric	0	0	0	0	0	0	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
Total	0	0	0	0	0	0	

**Uvalde County Needs (Projected Demands less Existing Supplies)**

**DRAFT (4-2-2015)**

<b>WUG</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>WMS</b>
<b>Sabinal</b>	121	153	181	212	245	277	Conservation, Uvalde ASR, Edwards Transfers
<b>Uvalde</b>	943	1,233	1,484	1,772	2,072	2,365	Conservation, Uvalde ASR, Edwards Transfers
<b>County-Other</b>	0	0	0	0	0	0	
<b>Manufacturing</b>	0	0	0	0	0	0	
<b>Mining</b>	0	0	0	0	0	0	
<b>Steam-Electric</b>	0	0	0	0	0	0	
<b>Irrigation</b>	29,683	27,370	24,992	22,831	20,818	19,102	Unmet
<b>Livestock</b>	0	0	0	0	0	0	
<b>Total</b>	<b>30,747</b>	<b>28,756</b>	<b>26,657</b>	<b>24,815</b>	<b>23,135</b>	<b>21,744</b>	

## Victoria County Needs (Projected Demands less Existing Supplies)

DRAFT (4-2-2015)

WUG	2020	2030	2040	2050	2060	2070	WMS
Victoria	2,413	3,269	3,932	4,602	5,233	5,774	Conservation, Drought Management, SW-GW Exchange, Victoria ASR, Surface WRs, Balancing Storage
County-Other	0	0	0	0	0	0	Conservation
Manufacturing	3,215	6,053	8,878	11,403	14,243	17,289	Purchase from GBRA
Mining	0	0	0	0	0	0	
Steam-Electric	4,506	29,778	37,178	53,599	70,696	70,696	Purchase from GBRA
Irrigation	5,265	5,265	5,265	5,265	5,265	5,265	Unmet
Livestock	0	0	0	0	0	0	
Total	15,399	44,365	55,253	74,869	95,437	99,024	

Wison County Needs (Projected Demands less Existing Supplies)

DRAFT (4-2-2015)

WUG	2020	2030	2040	2050	2060	2070	WMS
Floresville	0	8	405	770	1,124	1,445	Conservation, Local Carrizo Conversion
La Vernia	0	0	0	0	0	0	Conservation
Oak Hills WSC	0	0	0	0	0	0	Conservation
Poth	0	0	0	0	0	0	Conservation
SS WSC	0	0	0	0	0	234	Conservation, Brackish Wilcox for SS WSC, Local Carrizo Conversion
Stockdale	0	0	0	0	0	0	Conservation
Sunko WSC	0	0	0	0	0	117	Conservation, Local Carrizo Conversion
County-Other	0	0	0	0	0	0	Conservation
Manufacturing	0	0	0	0	0	0	
Mining	0	0	0	0	0	0	
Steam-Electric	0	0	0	0	0	0	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
Total	0	8	405	770	1,124	1,796	

**Zavala County Needs (Projected Demands less Existing Supplies)**

**DRAFT (4-2-2015)**

<b>WUG</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>WMS</b>
<b>Crystal City</b>	0	0	0	0	0	0	Conservation
<b>Zavala County WCID #1</b>	0	0	0	0	0	0	Conservation
<b>County-Other</b>	0	0	0	0	0	0	Conservation
<b>Manufacturing</b>	0	0	0	0	0	0	
<b>Mining</b>	0	0	0	0	0	0	
<b>Steam-Electric</b>	0	0	0	0	0	0	
<b>Irrigation</b>	18,487	16,805	14,980	13,049	11,193	9,443	Unmet
<b>Livestock</b>	0	0	0	0	0	0	
<b>Total</b>	<b>18,487</b>	<b>16,805</b>	<b>14,980</b>	<b>13,049</b>	<b>11,193</b>	<b>9,443</b>	

## **AGENDA ITEM 14**

Discussion and Appropriate Action Authorizing the San Antonio River Authority (SARA) to Submit the 2016 Initially Prepared Plan on Behalf of the South Central Texas Regional Water Planning Group (Region L) by May 1, 2015

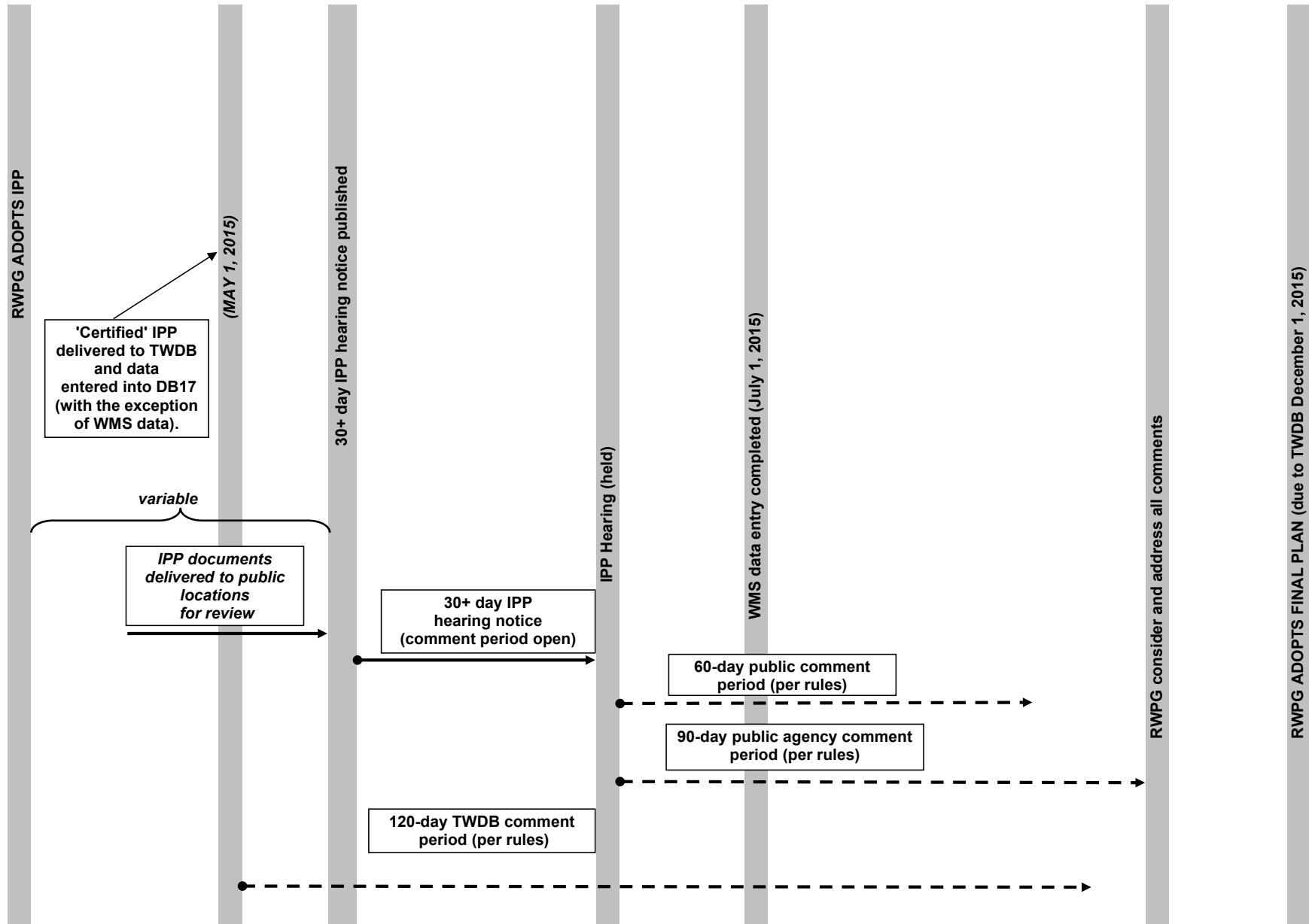


## **AGENDA ITEM 15**

Discussion and Appropriate Action Regarding Initially Prepared Plan (IPP) Public Hearings Schedule and Locations

- A. Number of Public Hearings to be Held
- B. Desired Locations of Public Hearings

# IPP Process Schematic (May vary by Region) (no scale)



# Potential Locations

**\*\*\*All hearings will take place early June. The following are only suggestions/ options. The Planning Group may make other suggestions.**

**Public Hearing 1**

**Central: San Antonio/  
Live Oak/ Schertz**

**Public Hearing 2**

**South: Victoria**

**Public Hearing 3  
(if necessary)**

**North: New Braunfels/  
San Marcos**

**West: Uvalde**

## **AGENDA ITEM 16**

Appropriate Action Regarding the Adoption of Guadalupe-Blanco River Authority's (GBRA) Proposed Substitution of the Lower Basin Storage 500 Acre Site Project for the Lower Basin Storage 100 Acre Site Project in the 2011 Regional Water Plan and Request the Texas Water Development Board (TWDB) to Amend the 2012 State Water Plan

## GBRA Lower Basin Storage Requested Amendment of the 2011 Region L Water Plan

- **2011 Region L Water Plan:**
  - Recommended WMS = “100-acre site” w/ capacity of 2,500 acft and yield of 28,369 acft/yr @ \$104/acft/yr for raw water in the reservoir and/or GBRA Main Canal to meet municipal, industrial, steam-electric, and/or other needs
  - Alternative WMS = “500-acre site” w/ capacity of 12,500 acft and yield of 59,569 acft/yr @ \$109/acft/yr for raw water in the reservoir and/or GBRA Main Canal to meet municipal, industrial, steam-electric, and/or other needs
- **Requested Amendment:**
  - **Substitution** of “500-acre site” as the Recommended WMS as it capable of meeting the same and additional water needs

4/2/2015 SCTRWP Meeting

1

## GBRA Lower Basin Storage Requested Amendment of the 2011 Region L Water Plan (1997 vs 2006 Effluent)

- 2011 SCTRWP based on 2006 Effluent Discharges, less recycled contracts. However, the GBRA Lower Basin Storage WMS was based on 1997 effluent discharges, less recycled contracts (Hydrologic Assumptions consistent with 2006 SCTRWP). On 2/5/15, HDR agreed to update this information.
- Per the 2/5/15 meeting, SAWS’ 2006 reported net discharge was revised to 113,101 acft/yr (WWTP influent of 125,690 acft, less recycled water commitments of 18,412 acft), and adding back SAWS recycled water commitments for stream maintenance of 5,823 acft.

4/2/2015 SCTRWP Meeting

2

## GBRA Lower Basin Storage Requested Amendment of the 2011 Region L Water Plan

	1997 Effluent	2006 Effluent	No Effluent	2011 Effluent
Basin-wide Net Effluent (acft/yr)	177,177	153,567	0	157,159
SAWS Net Effluent (acft/yr)	117,178	113,101	0	114,715
GBRA Lower Basin Water Rights - Firm without Storage (acft/yr)	41,543	41,543	15,044	42,545
GBRA Lower Basin Water Rights - Firm with Storage (acft/yr)	101,112	99,217	66,806	118,001
Firm Yield due to GBRA Lower Basin OCR (acft/yr)	59,569	57,674	51,762	75,456
Unit Cost (\$/acft/yr)	\$109	\$113	\$140	\$96

Notes:

1. 500-acre OCR Site
2. Net Effluent = Actual WWTP Influent, less Recycle Water Consumptive Contractual Commitments
3. Basin-wide Net Effluent includes SAWS Net Effluent
4. 2011 SCTRWP modeling includes Edwards Springflows consistent with SB3, while 2016 SCTRWP modeling includes Edwards Springflows consistent with EAHCP

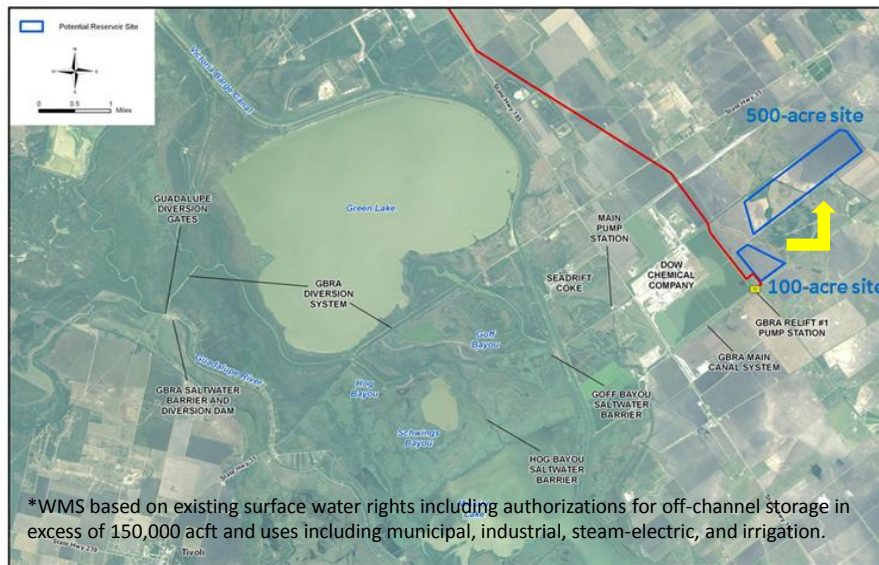
4/2/2015 SCTRWP Meeting

2011 SCTRWP

2016 SCTRWP

3

## GBRA Lower Basin Storage\*



4/2/2015 SCTRWP Meeting

4

## **GBRA Lower Basin Storage Requested Amendment of the 2011 Region L Water Plan**

- **August 7, 2014 SCTRWPG Meeting:**
  - After presentation of the proposed amendment and extended discussion, the SCTRWPG voted 25 – 3 (2 absent) in favor of moving forward with requesting pre-adoption determination from the EA of the TWDB, on whether the proposed amendment classifies as a substitution, a minor amendment, or a major amendment.
- **April 2, 2015 SCTRWPG Meetings:**
  - Discussion and appropriate action regarding GBRA's proposed substitution of the Lower Basin Storage 500-acre site project for the Lower Basin Storage 100-acre site project.

4/2/2015 SCTRWPG Meeting

5

## **AGENDA ITEM 17**

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



## **AGENDA ITEM 18**

Public Comment