

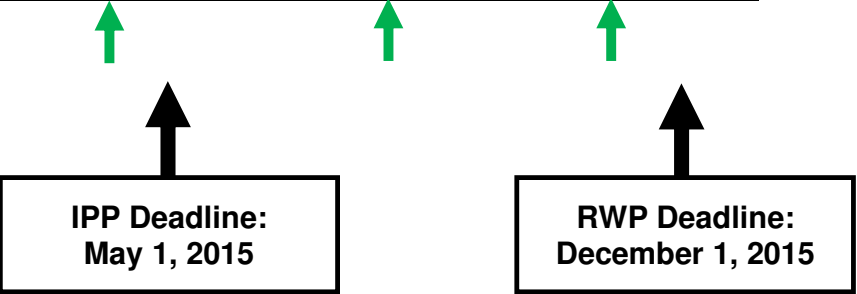
Senate Bill 1  
South Central Texas RWPG  
Staff Workgroup Meeting  
March 16, 2015 at 1:30 pm at  
San Antonio River Authority  
100 East Guenther St.  
San Antonio, TX, 78204

1. Status of Technical Consultants Work and Schedule
  - a. Review of Consultants Work, Schedule, Potential Issues, and Plan Status Update
  - b. Presentation and review of technical evaluations of Water Management Strategies for presentation at April Planning Group Meeting
    - i. Facilities Expansions Update
    - ii. Direct Recycle WMS Update
    - iii. Water Management Strategies for Victoria
  - c. Presentation and review of Chapter 6 Cumulative Effects Procedures
2. Discussion regarding Identification of Potential Interregional Conflicts in the 2016 RWP.
3. Discussion regarding GBRA Lower Basin Project Amendment.
4. Review Draft Agenda for the April 2, 2015 Planning Group Meeting
5. Any Additional Items for Consideration

# **Agenda Item 1**

2016 South Central Texas Regional Water Plan  
Proposed Workplan for Development

Tasks	Description	2014							2015								
		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															★	



**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

# ***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.**

## ***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 3-16-2015)**

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## ***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 3-16-2015)**

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## ***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 3-16-2015)

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## ***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 3-16-2015)

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***City of San Marcos***

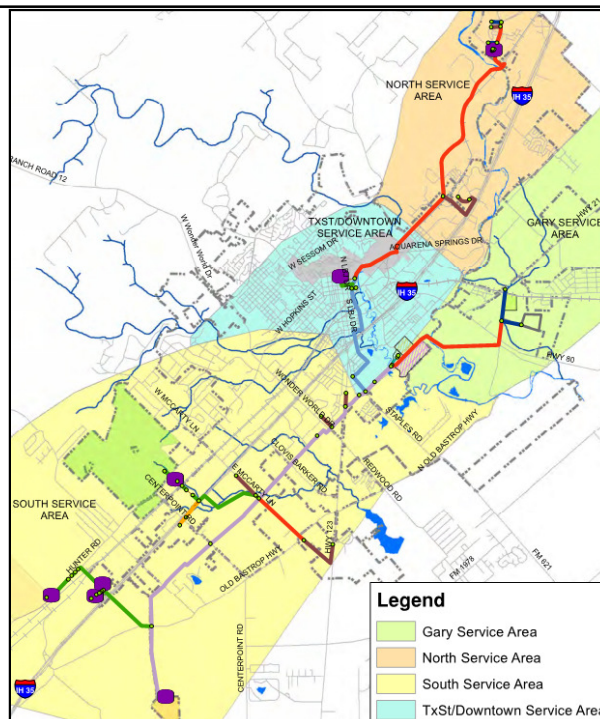
- Existing Recycled Water Program:
  - Existing users include a power generating plant and a cement manufacturing plant (224 acft)
  - Reclaimed water pump station located at the San Marcos WWTP
  - No additional treatment needed (Existing = Type 1)
  - 18-inch pipeline that extends approximately 8.5 miles
- Potential Demand estimated to be ~2,100 acft/yr
- Project costs are approximately \$22.1 million
- Unit Cost = \$1,032/acft/yr
- **Goal to be 0 discharge by 2070**

**DRAFT (Updated 3-16-2015)**

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***City of San  
Marcos***

**DRAFT**  
**(Updated 3-16-2015)**



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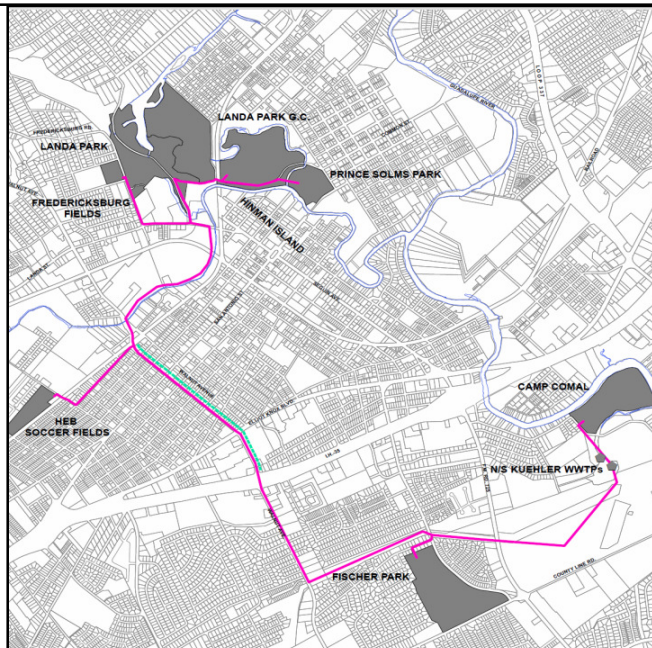
## ***New Braunfels Utilities***

- 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 904 acft/yr
- Potential reduction in potable water use for irrigation
- Project costs are approximately \$5.2 million
- Unit Cost = \$566/acft/yr
- **Goal to be 0 discharge by 2070**

DRAFT (Updated 3-16-2015)

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## ***New Braunfels Utilities***



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(Updated 3-16-2015)

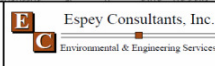


FIGURE 9  
ALTERNATIVE 1  
SOUTH TRIB.-WALNUT AVE.

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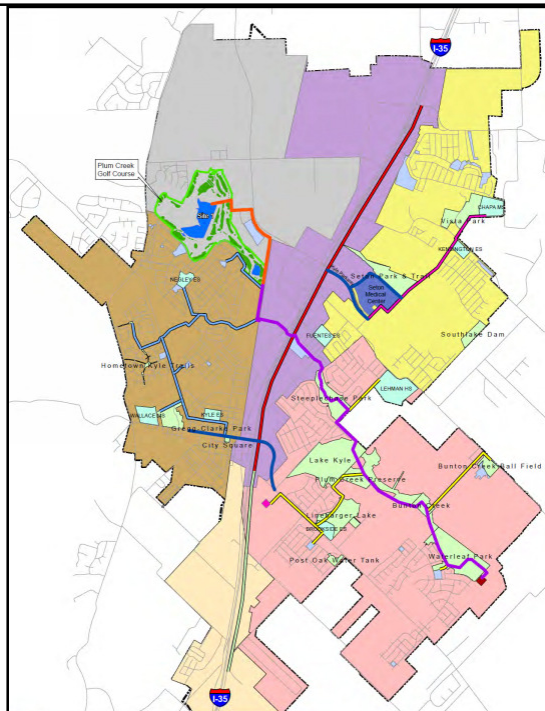
***City of Kyle***

- 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 1,845 acft/yr
- Project costs are approximately \$11.2 million
- Unit Cost = \$632/acft/yr
- **Goal to be 0 discharge by 2070**

**DRAFT (Updated 3-16-2015)**

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***City of Kyle***



**DRAFT (Updated 3-16-2015)**

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### ***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 3-16-2015)

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## **Agenda Item 2**



March 9, 2015

Con Mims  
Chair, Region L  
c/o Nueces River Authority  
200 E. Nopal, Suite 206  
Uvalde, Texas 788020349

Re: Identification of Potential Interregional Conflicts in the 2016 Regional Water Plans

Dear Chairman Mims:

The 2017 regional water planning database application (DB17), currently under development by the Texas Water Development Board (TWDB), will contain the data from the 2016 regional water plans, and be a key tool for identifying potential conflicts, including those associated with over-allocations of sources. When data entry is complete, the TWDB staff will conduct final water source over-allocation analyses as part of the review of the regional water plans.

TWDB rules for regional water planning (31 TAC § 357.50(f)) require that the regional water planning groups (RWPGs) submit, in a timely manner to the Executive Administrator, information on any known interregional conflict between regional water plans. In advance of this TWDB data analysis, we are reminding RWPGs of the rule requirement above and ask that, as soon as possible, RWPGs submit in writing to the Executive Administrator notification of known or potential interregional conflicts identified during the development of their IPP.

In the meantime, I encourage all RWPGs to communicate, share information, and work together to identify and, when possible, resolve potential conflicts when they are identified. My staff and I are available upon request to provide information, technical support, facilitation and, if necessary, to assist in negotiations or to provide other support. Please notify your regional project manager if you need or think you may require such TWDB assistance.

Recently, the Board directed the Executive Administrator to conduct a review of current rules and guidance pertaining to the development of regional water plans as well as an evaluation of Board Staff's review process, and to identify any opportunities for completing a more substantive review of the plans ensuring that future regional and state water planning efforts include all statutorily-required analyses.

**Our Mission**

To provide leadership, information, education, and support for planning, financial assistance, and outreach for the conservation and responsible development of water for Texas

**Board Members**

Carlos Rubinstein, Chairman | Bech Bruun, Member | Kathleen Jackson, Member

Kevin Patteson, Executive Administrator

Initially, there are a few simple opportunities for improving regional water planning documents that would not require any new information, data, or analyses. I encourage regional water planning groups that haven't already done so, to consider tabulating quantified information associated with evaluations of feasible (including recommended) water management strategies which is required under current rules (e.g., related to 31 TAC §357.34(d)(3)), in one place within the regional water plan. Although aggregating all this information is not mandatory under the current rules and planning grant contracts, I would prefer that, to the extent practicable, regional water planning groups gather and summarize such data in a single location in the plan to aid regional water planning group members, the public, and TWDB staff in understanding and reviewing regional water plans.

I welcome your input as our staff continues to review rules and guidance in order to improve the processes and quality of Water for Texas.

If you have any questions, please do not hesitate to contact your regional water planning project manager David Meesey at 512-936-0852.

Sincerely,



Kevin Patteson  
Executive Administrator

cc: Mr. Cole Ruiz, San Antonio River Authority, 100 E. Guenther Street, San Antonio,  
Texas 78283-0027

# **Agenda Item 3**



# **Agenda Item 4**

**DRAFT**

**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. Discussion and Appropriate Action Regarding Initially Prepared Plan Public Hearings Schedule and Locations
7. Chair's Report
8. Texas Water Development Board (TWDB) Communications
9. Discussion and Appropriate Action Regarding Consultants Work and Schedule
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 Regional Water Plan
11. Discussion and Appropriate Action Regarding the Evaluation and Recommendation of Water Management Strategies (Task 4D)

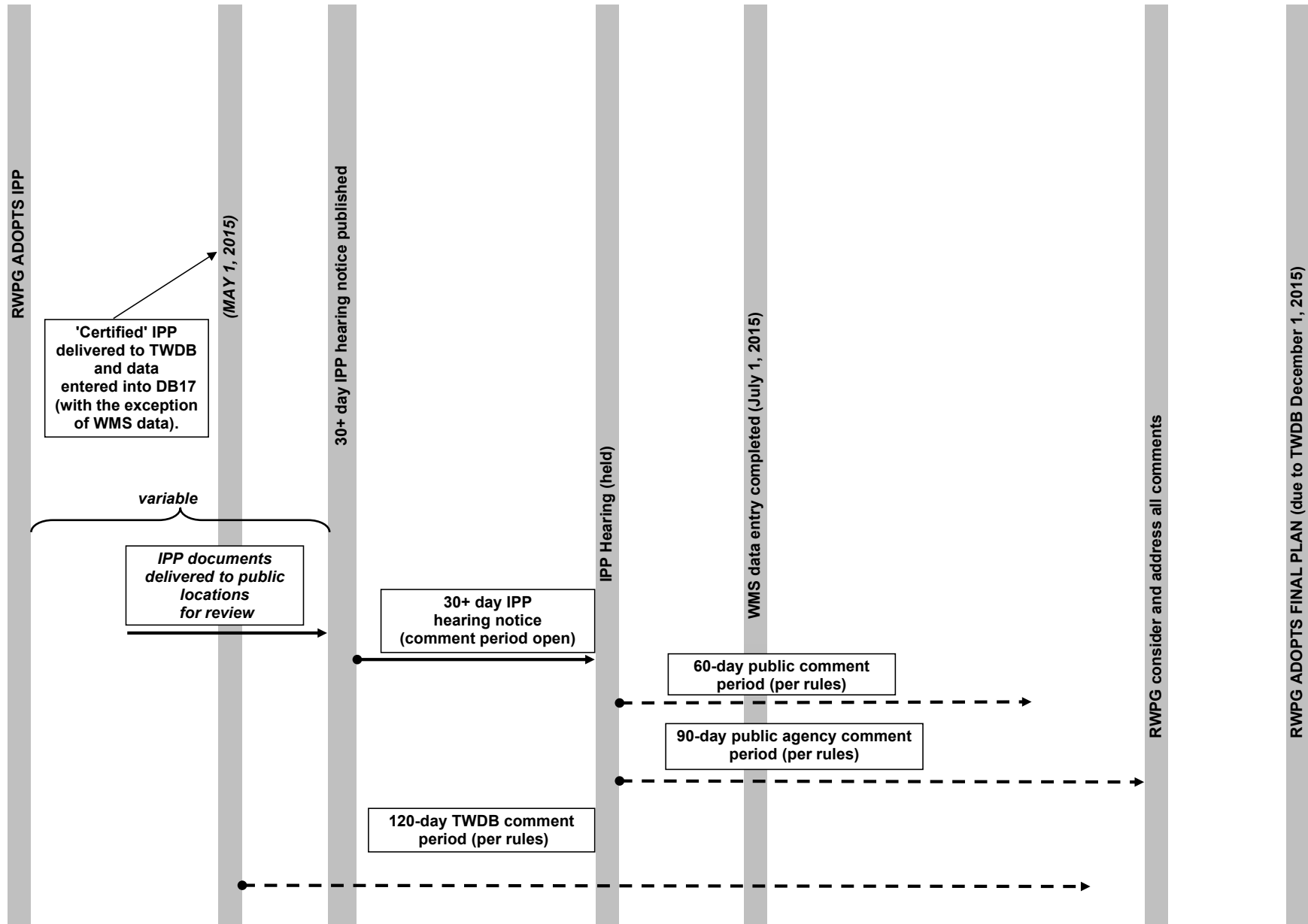
12. Discussion and Appropriate Action Regarding the Recommendations of Potentially Feasible Water Management Strategies for Inclusion into the 2016 Initially Prepared Regional Water Plan
13. Discussion and Appropriate Action Regarding Chapter 6 Cumulative Effects
14. Discussion and Appropriate Action Authorizing the San Antonio River Authority (SARA) to Submit the Initially Prepared Plan Pursuant to the 2016 Regional Water Plan on Behalf of the South Central Texas Regional Water Planning Group (Region L) by May 1, 2015
15. 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 (pending – may be removed)
16. Possible Agenda Items for the Next South Central Texas Regional Water Planning Group Meeting
17. 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

# IPP Process Schematic (May vary by Region)

(no scale)



# **Agenda Item 5**